Public Comments on the 2030 Massachusetts Solid Waste Master Plan

MassDep has redacted information that may be personal information of individual commenters as required by MassDEP's website policies and state law and guidance

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Aaron Johnson

Oral comment

Good morning. My name is Aaron Johnson I'm here as a private citizen of [redacted]. I do some volunteer work as an attorney with some of the organizations in this room, but I'm here representing my myself today. And my one-year old son and my wife. I'll do this in less than four minutes. We really appreciate as a family the work that DEP does in this state. We know that without your work already that we'd be in much worse position, so I'll frame my comments from that perspective.

The 2010 to 2020 plan had a 30% reduction, down to 4.55 million tons by 2020. Only half of this was achieved, and the 2030 plan cites various reasons for that including economic growth. However, the new plan aims for another 30% reduction to 4 million, which is only 550,000 tons less than the previous plan. The DEP has raised its own alarm about capacity issues in the state, and globally there has been an awakening of the damage that garbage does to oceans and rivers. I think we have achieved a momentum globally and also in Massachusetts where the citizens are demanding further, ambitious action. And we've seen a major shift and recycling also globally, with China no longer taking our recyclables. Yes this plan does not really reflect any of this global awareness, any of this ambition, it's a 30% reduction like has been done before. It doesn't really show that the bold vision that I think we can have and it won't be controversial this time. So, my first ask is that the DEP show leadership and some bold vision to get serious towards zero waste.

Number two: waste bans. The DEP said both in the previous plan and this current proposal that waste bans are a key component to its waste reduction targets. Yet, one in four loads fails at either the facility or the hauler. And this number has not changed. We have 20% of loads failing. And yet, you mentioned in that the 2030 plan is just meant to be a general overview, so you're not necessarily going to provide details on how to address the one in four failed loads numbers yet. This plan is full of numbers: it says 30% reduction, it highlights how many inspections have been done in the past and how many compliance penalties have been issued, yet there's no specifics on how many inspections you're going to do, what you're going to aim for, or how many people you want to be doing these inspections full time. So, if it's been one in four loads that have failed, and that number has not changed and there's only been 30 penalties issued since 2013, I think we can put in some more specific numbers for inspections and enforcement going forward. One idea I have for us to increase our compliance with waste bans would be to allow notices of non-compliance to be issued by the DEP based on third party inspections that you receive from haulers and facilities. Number two, I would ask that you publish all the violations that have occurred on your website, so that the public can know when companies that they're using have committed a violation, which would allow us to change our shopping habits and to call for action there.

Lastly, the plan sites that 26% of all of waste in Massachusetts is food waste. An ambitious, but also doable goal because we've seen it elsewhere in the world, would be to include in your waste bans all organics from commercial and residential waste streams. If you did this, you would single handedly handle all of your capacity issues in the state. So I ask that you set a timeline to have an all organics waste ban by 2026 which will have us actually take composting seriously in the state. That will increase jobs, increase revenue, and create a new industry for composting in this state. I do have some written testimony: my coffee cup saying, zero waste now, please. Thank you very much.

ABC Disposal, Mike Camara

Written comment

The Mass DEP Master Plans have had a negative effect on Massachusetts residents and businesses. These policies have eliminated reasonably priced disposal options and now Massachusetts has some the highest disposal costs in the United States. This has an adverse effect on everyone that generates waste in our state. Guess what – this is just the beginning when it comes to expensive disposal costs. As we continue to lose disposal capacity we can

expect disposal costs to go up even higher. We are at the point where in many areas the cost of disposal in Massachusetts is over $100.00/ton. It already exceeds $100.00/ton at transfer stations.

The Mass DEP 2000 Master Plan had a goal of a 46% recycling rate by 2010. Here we are 20 years later and the recycling rate is only half of the 2000 Master Plan goal. That Master Plan and the poor decision to implement a moratorium on Waste to Energy facilities has seriously affected in-state disposal capacity and the crisis we are experiencing today. So now were exporting more waste volumes to out of state disposal facilities. It does not seem just that due to the lack of future planning and the inaccurate Massachusetts policies of the past that we now rely on these out of state facilities to dump our solid waste.

Here is the biggest question of the day – what is the impact to the environment shipping Massachusetts waste hundreds of miles to out of state disposal facilities. Now that public officials have caused this issue of very limited in-state disposal options it means much of the waste generated in our State will need to move many more miles to be properly disposed. What is the short and long term impact on our Carbon Footprint? What is the impact to the Massachusetts infrastructure in the future with the movement of much of this waste by truck? How can any of this be environmentally friendly!

Massachusetts has seven Waste to Energy facilities that are all well over 35 years old. In the past when one of these facilities has an outage or a breakdown we had many landfills (safety valve) that could absorb the diversion of the waste. Unfortunately all these landfills are now all closed. That safety valve is gone forever! Where will the trash go when one these aging plants is down for several weeks? We know what is going to happen but are afraid to admit that the trash is going to be left at the curb because there will be nowhere else to go. How can that be fair to the residents in our State! Please keep in mind that when our transfer stations fill up and there is no access to adequate emergency end disposal they will be forced to close. Trash trucks will not be able to empty and complete then their daily routes. What's will Massachusetts do if it gets slammed with a powerful hurricane and there are several hundred thousands of tons of debris to get rid of? Where will all of this debris end up when there is no capacity? What is the state's emergency action plan when there is a disaster that creates large amounts of debris?

2.) Why is it so important to remove food waste from the waste stream with Food Waste Bans? Food Waste makes up about 20% to 30% of the overall waste stream. We need to implement a 100% commercial food waste ban within the next two years. Then one year later expand the food waste ban too all residential locations. With that commitment the entrepreneurs that would be interested in constructing these food waste processing facilities will invest in Massachusetts and build them. The state could help incentivize these companies with low interest loans, grants and anything else that would help them build here. Keep in mind that we have a disposal crisis and need to remove as much food waste out of the waste stream as possible.

The 2020 Master Plan has again set high expectations with its recycling rates. Are we supposed to believe that the new rates are achievable? In reality it's a false promise & I personally do not believe that it can happen! In the past Master Plans none of the recycling rates have been achieved. As a business man that operates a recycling facility and has firsthand experience on the difficulty marketing commodities I know the rate will be extremely difficult to achieve. We struggle every day to find domestic & international markets for commodities. If we struggle now to find commodity markets how will we be able to market more commodities.

The only way to improve the recycling rate is to create local markets for commodities! Massachusetts needs to create an economic incentive package to attract manufacturing facilities that would take the commodities that we prepare for market. We need Massachusetts manufacturing facilities that could take the plastics, paper, cardboard, metals and glass and make new products. Look at all the local jobs that would be created. The tax dollars that would help the local host communities and the State. Maybe Massachusetts could collaborate with other States in New England on bringing in manufacturing facilities that would utilize these commodities as a feed stock.

I have attended meetings recently and heard that the Mass DEP is relying heavily on Waste by Rail to help with the Disposal Crisis! It has been stated that there will be 10,000 tons per day of rail transfer capacity. I'm not so sure that is a viable solution because I heard recently that CSX Railroad Company does not allow MSW to be shipped

out in open top gondolas. The majority of rail facilities in Massachusetts are only equipped to handle open top gondolas. The Draft Master Plan lists several rail transfer stations that are not built or permitted so there is no guarantee that those facilities ever come on line. We currently use several rail facilities and they are not reliable. If they do get their railcars back in time they close. We have experienced this many times!

In closing the Mass DEP needs to work towards lifting the Moratorium on Waste to Energy Plants and consider building a State operated landfill similar to the one in Rhode Island. We also need help with markets for recyclables as it is been very difficult finding homes for commodities. Several of the commodities we struggle to market or have no market include #3, #4, #6 & #7 plastics, rigid plastics and glass.

3.) Another important issue to think about is the lack of outlets for C & D wood. The legislative changes in New Hampshire eliminating Renewable Energy Credits for Biomass (biomass plants in New Hampshire are closing) has pushed a substantial amount of wood into the marketplace. This has made it very difficult to market C&D wood waste. We definitely need help in identifying new outlets for C&D wood waste.

Sincerely,

Michael A. Camara, CEO
ABC Disposal Service, Inc.
New Bedford Waste Services, LLC
ZERO Waste Solutions, LLC

Adams Board of Health, Dave Rhodes

Oral comment

I'm on the Board of Health of Adams in Berkshire County and the currently dormant Solid Waste Advisory Committee. We have moved to a transfer station and it's really tough. People are spread out and running a transfer station for small communities is very difficult. So compliance is really huge and just trying to get people to recycle. And then, of course, the quality of the recycling has become more contaminated. We've already put in our organics to be recycled for the commercial enterprises, and moving to the households is going to be very, very difficult. Just finding the resources to help people do it is hard because it takes time and most people don't have that kind of time.

We have a lot of brush, and DEP actually forbid our transfer station from burning brush. Burning it is the only way we have to get rid of it. They had a chipper, but it breaks down and you can't just let the stuff build up.

Also, we just passed regulations for our private haulers that they have to participate in the recycling program. We passed that regulation because DEP wanted us to put out the actual forms to assist the haulers. If Adams recycles, then our haulers, who run up through several towns, won't have to go out of their way for each town's recyclables. Small towns have extra issues because we can't consolidate easily. Thank you.

Agawam Zero Waste, Nancy Bobskill

Oral comment

Hello my name is Nancy Bobskill. I'm from [redacted]. I'm also president of the Agawam Zero Waste Club. First of all, thank you for all your efforts to reduce waste in Massachusetts, I think it's awesome. I read through the draft; and order for this to be effective it needs to be culturally normal for us to reduce waste, and it's not always culturally normal. And I think one of the ways that can be is if we look at our school systems. For example, in school, it's normal if you eat lunch there to throw out your fork and to throw out your plate. And if we can have a way where we normalize kids reusing stuff, starting at a very young age, it can be an excellent thing.

And I also am happy to hear about the extended producer responsibility stuff that you're working on. And that's it. Thank you. Thank you.

American Chemistry Council, Adam Peer

Written comment

Dear Mr. Fischer,

On behalf of the American Chemistry Council (ACC), thank you for this opportunity to comment on the Massachusetts 2030 Solid Waste Master Plan and other steps the Commonwealth of Massachusetts may take to may consider to bolster recycling. Members of ACC's Plastics Division manufacture the basic material building blocks used to create a wide range of plastic products.

Summary
Consider public policies that encourage:
• Investment in recycling technology; and

• Residential and commercial recycling, including steps to increase awareness and engagement, proper recycling practices, and recycled content demand.

Background
Industry efforts to control litter, enhance recycling, reduce waste, and conserve resources. The industry continues to be a champion of litter education and prevention, waste minimization and recycling programs nationwide and appreciates the opportunity to provide input to the Working Group.

ACC and its members have a long history of investing in and supporting recycling. Through its Flexible Film Recycling Group (FFRG), ACC began the Wrap Recycling Action Program (WRAP) a partnership with US EPA, the Sustainable Packaging Coalition and several states. This initiative aims to increase opportunities for residents and businesses to recycle flexible plastic film including consumer and commercial product wrap; bags for groceries, produce and bread; and other common items like food storage bags and shipping pillows. Recycled film can be used to manufacture products such as durable outdoor lumber for decks and fences, and new packaging materials.

ACC also has sponsored several projects in the Northeast including Save the Bay Narragansett Clean Up Day and litter reduction program; Green Up Day in Vermont; and Northeast Recycling Council (NERC) conferences.

Our membership increasingly embraces sustainability and recognizes consumers' desire to recycle, and we welcome additional opportunities to pursue recycling and recovery initiatives. In recent years, ACC has ramped up engagement and leadership in national and international programs with these goals. For example, ACC participates in the following:

- Co-Leader of Operation Clean Sweep, which helps makers, shippers and users of plastic pellets to contain and prevent them from entering the ocean and waterways
- Founding partner of The Recycling Partnership,
- Founding partner and sponsor of Keep America Beautiful "I Want to Be Recycled" campaign to increase consumer awareness and participation in recycling
- Supporter of Closed Loop Ocean, designed to fund waste infrastructure solutions in Southeast Asia
- Member of Ocean Conservancy's Trash Free Seas Alliance with the goal of advancing scientific rigor on marine debris, exploring solutions and increasing public understanding

In addition to these efforts, ACC and its members helped launch the Alliance to End Plastic Waste. This new nonprofit organization is committing $1.5 billion over five years to help end plastic waste in the environment and is focusing on providing solutions to the largest sources of plastic in our ocean.

Plastics. Chemistry and plastics are an important and growing part of our state and national economy. Plastic materials manufacturers directly employ approximately 57,600 people in the US. These employees earned on

average $93,600 which is more than 44 percent higher than the average wage for all industries. Including product manufacturing, the plastics industry employs nearly 1 million people nationwide.

Plastics also provide important *benefits* to society. For example, the use of plastics helps reduce the weight of our cars saving fuel and greenhouse gas (GHG) emissions. Plastics also help keep our food fresh and clean reducing food waste. For example, the use of 1.5 grams of plastic wrap can extend the freshness of cucumbers for 14 days, compared to 3 days without, and packaging for grapes can reduce spoilage by 20 percent. Reducing food waste is important because US Environmental Protection Agency (EPA) estimates that more food reaches landfills and incinerators than any other single material in our everyday trash, constituting 22 percent of discarded municipal solid waste[1]. And the United Nations Food and Agricuture Organization reports that food waste is the third largest source of greenhouse gas emissions.[2]

Additionally, producing our food uses 10 times more energy than producing the packaging to protect it. An important study looking at the environmental costs of plastics across 18 sectors of our economy found alternatives would increase environmental impacts by nearly 4 times[3]. And a separate study analyzing alternatives to plastic packaging in food applications concluded that use of the alternatives would double greenhouse gas emissions[4]. Thus when we consider the role of plastics in society, we must undertake a more comprehensive analysis and also consider food waste and the impacts of alternatives to plastics.

Market disruption. As the Chinese economy grew, China's industrial consumption for scrap materials, like plastics, increased 50 and 70 percent over the last decade. In fact, by 2017 Chinese buyers were importing almost a third of US scrap and similar volumes from Europe. However, over the past several years, China began to enact policies that banned Chinese buyers from importing scrap plastics and other materials.

The most recent policy, known as China Sword, requires such low contamination rate that it is effectively a ban on recycling imports to China of mixed paper and plastics.

This fundamental market shift has created a need to develop domestic demand for these valuable resources. While temporarily disruptive, current conditions do create an opportunity for lawmakers to examine public policies and programs to ensure we make the most out of our resources by making a fuller commitment to recovery and recycling in the US.

Circular economy. In May 2018, ACC's Plastics Division announced its goals that crystalize US plastics resin producers' commitment to the circular economy:

- 100 percent of plastics packaging is re-used, recycled or recovered by 2040; and
- 100 percent of plastics packaging is recyclable or recoverable by 2030.

ACC supports the pursuit of a more circular economy, one that prioritizes resource conservation and efficiency, design innovations that enable longer product lifespans, and reuse, recycling and recovery technologies that allow us to capture the greatest value from materials that have traditionally been discarded.

Public Policy Consideration

Below are recommendations to help bolster Massachutees's recycling system. Some of these suggestions may require public policy directives, others may be best implemented by creating incentives or creating guidelines.

Economic development. Reframe recycled items as valuable feedstock that create jobs. Work with commerce and economic development departments to develop markets for feedstock. Consider the South Carolina Commerce Department approach[5].

Recycling center. Washington State created a "recycling center"[6]. The center facilitates research, but also contracts with the third parties to provide direct "market-maker" activities and directly support the private and public sector. It also has a special focus developing markets[7]. Also consider partnering with organizations like The Recycing Partership to bolster local recycling programs[8].

Return to retailer programs[9]. Consider partnering with ACC to implement a return to retail program like WRAP[10]. This program encourages residents to return film to participating retailers. In Connecticut, WRAP is helping the state meet its 2024 goal of diverting 60 percent of material from landfilling. A public education and consumer outreach program in Greater Hartford resulted in a 11 percent increase in bags brought to store collection and 7 percent of other plastic films (e.g. bread bags, dry cleaning bags, etc.) Contamination of items collected decreased by 23 percent and public awareness about what to take back to retailers grew. There was a 10 percent increase in the number retail customers that reported that they "always" or "most of the time" take film back to retail collection to be recycled.

Recycling technology investment. Consider if the commonwealth could eliminate barriers or create incentive investment in recycling technology. This might include:

- *Infrastructure investment.* Work with industry, state and local government sources, etc. on directly funding infrastructure build-out and development.
- *Foam grant.* Consider seeking a grant from the[11] Foam Recycling Coalition (FRC). Launched in 2014, FRC was created to support increased recycling of foodservice packaging made from foam polystyrene. In order to meet this objective, the FRC shares general information on foam recycling, provides technical resources and offers funding assistance to programs ready to start or strengthen post-consumer foam recycling.
- *Demonstration projects.* Based on studies or belief where recycling infrastructure could be improved, fund demonstration projects or proof of concepts to confirm feasibility. For example, ACC is a sponsor of a Secondary Sorting Pilot project in the Pacific Northwest[12].

Recognition. Recognize public and private purchase of recycled content through programs sponsored by state and local governments and other nonprofit organizations. EPA assists organizations developing programs based on EPAs existing programs and guidelines.

Procurement. Consider adopting guidelines to encourage public and private procurement of sustainable products and products with recycled content.

Waste audits and policy. State sponsorship of waste audits to better understand and publish the state's waste stream. Studies and ensuing policy should be both material neutral and consider the full environmental impact of items to avoid regrettable substitutions. Washington State recently created the Recycling Center within the Ecology Department to improve markets and better educate residents.

Industry engagement. Continue industry engagement and engagement with other parts of the value chain. Consider hosting regular meetings and publishing discussion drafts for public comments.

Uniform recycling guidelines. Urge the adoption of uniform recycling guidelines in order to maximize communications, education, and economies of scale for recyclers. This could also be a platform to encourage best practices such as appropriate moisture reduction or making deposits that recycling bin size appropriate.

Again, thank you for this opportunity to provide this information to the committees. If you have any questions or if I may be of further service, please feel free to contact me at [redacted] or Adam_Peer@AmericanChemistry.com.
Best regards,

Adam S. Peer
Senior Director, Plastics Division
American Chemistry Council

Banas Insurance, Mike Banas

Hello John Fischer,

You and your colleagues are working on the *MOST* important item in the State of MA and maybe the world right now; from our perspective and my six year old daughter's future life on this planet.

What you enact now and enforce in the very near future and future years is so SUPER imperative.
In The 9/28/19 Cape Cod Times; I saw the article about the state's general outline to reduce waste by 2030 and then net zero after 2050.

Can we as humans who expect to inhabit this earth - really wait until 2030 to really get serious about reductions and until after 2050 for net zero?
We all need a serious crash course in reducing waste ASAP.

A few ideas to review, if not already on the board;

1.) So you know; we live full time in the "Pioneer Valley" in farm country in Hampshire County, MA. We are blessed here with the incredible country side, farms and its people. There is a farm store in Deerfield, MA – Atlas Farm; who is very progressive; they only offer **wooden** fork and spoons and NO plastic for any of their food items. I do not know of one store or restaurant on the Cape who does ***NOT*** use plastic forks, spoons, packages, etc. - ***Why?*** There are *very* few stores and restaurants doing the wood and paper for takeout food – Why? If Atlas Farm can make it work; anyone can and the State of MA should be mandating to do such ASAP, and waiting much longer only adds to the destruction and mess to clean up years down the road. Not to mention the air/soil/water pollution caused by the plastic manufacturing process of this unnecessary junk!

2.) To single out a few companies that need a big wakeup call; Dunkin Donuts is still dispensing their coffee in Styrofoam, as well as Cumberland Farms, as many others too. Can we enact a MA State law banning all Styrofoam cups and food containers now???

3.) Ban the plastic wrapper/bottles for consumer products in MA; years ago we got by without it – let's get back to it, very soon! Yes; it will be a little more costly and different to shop – what real choice do we have?

4.) Ban pesticides from store shelves in MA now; only allow professionals to administer. Even then limit usage. We do not need amateurs going to Lowes or Home Depot and buying any amount Roundup or any other chemicals to apply to the earth.

5.) Our family has a house on the Nantucket Sound in Dennis Port on the Cape and last year and this year we have been finding a few fairly large amounts of latex gloves partially dissolved washing up onto our private beach.....this has never happened before.

Of course we always comb the beach for junk and dispose of as best that we have available to us. Is there a way to reduce and prevent the trash washing up on Cape beaches or any other beach? Who is dumping this rubbish into everyone's ocean?

Talk to and encourage every state in the union to start working on the same Master Plan idea; without cooperation with all states; we are in bigger trouble. We have enough issues already; let's not let it continue any longer than necessary.

6.) Once we as a nation get a Master Plan; get other countries to join, some are way ahead of us already, others are way behind. Perhaps we can help the ones that are behind catch up or surpass us.

We all need to get very real, very fast about trash, REAL recycling and the environment in order to sustain life on this planet.

Thank you for your consideration and we are expecting very strong action by the State of MA in your Solid Waste Master Plan.

The State can be "The tail that wags the dog" very easily on this topic.....let's *please* make it happen, it is imperative.

Best Regards,

Michael R. Banas
[redacted], Fax: 413-527-0849
Monday – Friday, 9:00am – 5:00pm
Email: mb@banasinsurance.com

Barstow's Longview Farm, Denise Barstow

Written comment

Dear Mr. Cooper,

My name is Denise Barstow and my family's dairy farm has an anaerobic digester, which is operated by Vanguard Renewables. The possibility of reducing the Commercial Food Waste Ban from one ton per week to half a ton, as noted in the draft Massachusetts 2030 Solid Waste Master Plan, is an exciting prospect. Our digester produces 2,100 Mwh of electrical energy, 7,040 MMBTUs of thermal energy, and 30,000 tons of odor-free, organic, liquid fertilizer - and it has the capacity to create more, diverting more food waste from the waste stream and creating extraordinary benefits for our farm and community.

However, our dairy farm is limited in our anaerobic digestion production by how much land we own and rent. We have only 450 acres on which to spread the liquid fertilizer. We cannot spread more without the threat of runoff..... Because of this limitation, we are capped by how much waste we can put through our digester.

We would like to share this liquid fertilizer (digestate) with other dairy farms as it is a terrific soil amendment. Since installation of our digester in 2013, we have seen improved soil health, experienced higher crop yields, and have significantly reduced the amount of chemical fertilizers purchased. To spread this digestate, we hire a trucking company specialized in manure application to land. We have prioritized soil health and renewable energy on our farm. However, dairy farms across the state are struggling. Transporting the heavy liquid fertilizer to their farms is too costly for dairy farms to afford.

A state funded grant opportunity for farmers without access to manure would enable the farms to purchase digestate from our farm (and other AD farms) and secure trucking from a contractor to apply fertilizer to their land. This would increase the soil health on those farms and enable our farm to convert more food waste into energy and fertilizer in our digester. A program like this would make Massachusetts a leader in connecting food waste planning, soil health, renewable energy, and farm viability.

Please let me know if you have any questions about this idea or our digester. Thank you for your time and consideration.

Denise Barstow

Barstow's Longview Farm
[redacted]

Bedford Mothers Out Front, Frances Bigda-Peyton

Written comment

To whom it may concern,

We whole heartedly support your comprehensive plan. Thank you for this extensive, well considered report.

We would like the report to highlight more the importance of large-scale advocacy campaigns to raise awareness and educate consumers about ways to save money and prevent wasted food. Further, consumers need to be educated about accurate expiration dates. Efforts should also be undertaken to standardize food label dates, including eliminating visible "sell by" dates, to reduce consumer confusion. As you well know, there is no comprehensive national policy that regulates food date labeling, leaving consumers confused and sometimes even throwing away food that is still fresh. To quote, REFED, "Confusion over the meaning of date labels is estimated to account for 20% of consumer waste of safe, edible food. This equates to approximately $29 billion of wasted consumer spending each year — 5% to 10% of this is expected to be impacted by standardized date labels."

We hope you can add this emphasis to your plan.

Respectfully submitted,

Frances Bigda-Peyton
Bedford Mothers Out Front

Bill Emerson Food Donation Act Awareness Campaign, Mary Bell

Written comment

Dear Director Cooper, I am writing as the Coordinator of the Bill Emerson Food Donation Act Awareness Campaign to urge and support the lowering of the threshold of the Commercial Food Waste Ban from one ton per week to half a ton per week with an additional commitment to prohibit the disposal of all food waste from commercial sources.

I began the Bill Emerson Food Donation Act Awareness Campaign in 2014 after completing a research project surveying over 200 consumers, producers, and distributors in Franklin County, Massachusetts regarding their food waste and recovery habits and knowledge of legislation regarding donation. Due to the lack of knowledge on protective legislation, expiration dates, and myths regarding food safety, mountains of food that is safe for consumption is being discarded; wasted food not only means wasted resources such as water, labor, fuel, but also leaves many of our neighbors hungry. Lowering the Commercial Food Waste Ban to a half a ton per week AND in time prohibiting the disposal of food waste from commercial sources will help us to be more mindful with our excess, be an opportunity to discover food habits that prevent waste and protect our environment.

In addition to being the Coordinator of the Bill Emerson Food Donation Act Awareness Campaign, I am a Board Member for Franklin County Community Meals (FCCMP) Program. FCCMP has seen an increase in use of our two pantries, as well as our meal sites in Greenfield, Orange, and Turners Falls. Our Western Mass communities are in dire need of healthy food that is currently being commercially discarded because it is easier than donating it to feed one's hungry neighbors. I want to thank you for your work in bringing these issues to the forefront, and urge you to work with the grassroots efforts to demonstrate that EPA Food Recovery Hierarchy when followed eliminates the need for a Commercial Food Waste Ban of one ton per week.

Sincerely,
Mary E.L. Bell [redacted]

Cape Cod Commission, Michele White

Written comment

See Appendix A.

Carton Council of North America, Scott Byrne

Written comment

Dear John,

Thank you for the opportunity to comment on the Draft 2030 Massachusetts Solid Waste Master Plan. Our comments herein address the contents of the Plan followed by a description of Carton Council services available to help Massachusetts communities improve cartons capture, recycling, and resultant waste reduction in Massachusetts. But first, as a way of introduction for any readers who may not be familiar with us, here is a little background on the Carton Council:

The Carton Council is a nonprofit industry organization formed in 2009 for the sole purpose of growing carton recycling in the US. By promoting both recycling technology and local collection programs, as well as building awareness that cartons are recyclable, we work to limit the number of cartons that become waste. We've had significant success in the past seven years, helping to bring carton recycling to over 64 million households or more than 60% of them in the United States. Members of the Carton Council are four leading carton manufacturers: Elopak, Evergreen Packaging, SIG Combibloc, and Tetra Pak.

The Carton Council team has reviewed the draft 2030 Solid Waste Master Plan. We would like to convey our appreciation for Massachusetts's ongoing focus on solid waste reduction and establishment of solid waste reduction targets as opposed to tonnage-based recycling goals. Waste reduction targets better capture progress made in cutting waste through measures such as packaging lightweighting and reducing food waste through packaging design and selection.

We particularly appreciate the Commonwealth's investment in food waste reduction initiatives. Our carton packaging products also help reduce food waste by protecting the food and beverages they contain and are a sustainable package choice made largely from renewable fiber. Such important attributes of packaging should be taken into consideration when evaluating policy mechanisms aimed at reducing single use packaging and incentivizing use of better packaging – two initiatives mentioned in the Plan.

We also appreciate the Commonwealth's ongoing promotion and support for Pay-As-You-Throw (PAYT) programs – something that the Carton Council has also promoted, through development of PAYT briefing documents and sponsorship of numerous PAYT workshops and webinars. We regard PAYT, when implemented in a best practices fashion, as an effective tool for incentivizing recycling while providing an adjustable revenue source, which improves the financial sustainability of local recycling programs.

We applaud MA DEP for its targeted use of grant funds and technical assistance to strengthen community recycling programs and support recycling market development. We regard MA DEP's programs to be among the strongest state programs in the country, and we support continued state investment in this regard as reflected in the Plan. We are happy to see in the Plan that preparation of a recycling market development plan has been proposed. We see a vital role for states in aiding the transition to a circular economy through a strategic approach to recycling market development.

The Carton Council supports provision of universal recycling access and was pleased to see in the Plan the proposal to implement service hauler requirements to provide recycling access to all Massachusetts residents and businesses. The Carton Council has recognized that cartons recycling is substantially limited by gaps in available recycling infrastructure – something the Carton Council cannot address singlehandedly and that affects recovery of all types of recyclables.

Through a united effort, the Carton Council is committed to building a sustainable infrastructure for carton recycling nationwide and works toward the continued goal of adding access to carton recycling throughout the U.S.

Services that the Carton Council provides to improve carton recycling in communities and at materials recovery facilities (MRFs) include:

- MRF equipment grants
- Technical assistance
- Best practices guidance for efficiently sorting cartons at MRFs
- Best practices guidance for increasing volume
- Examples of North American and export markets for carton bales
- Lists of brokers who specialize in cartons
- Consumer/resident education

Cartons Sorting Equipment Grants

The Carton Council has an ongoing MRF equipment grant program to fund equipment such as

optical sorters and robots that are used for sorting cartons. These grants are tailored to individual facility needs and focus on ensuring the effective and efficient sorting of cartons.

Markets

The Carton Council can provide an up-to-date global market list of carton recyclers and brokers to any interested party. Cartons collected in Massachusetts are transported to one of five North American end markets or exported to Asia through one of New England's container ports.

The Carton Council also maintains relationships with recyclers that are expanding and plan to begin recycling cartons in the future. Ecomelida Inc. has announced its intention to recycle cartons at a new mill it is constructing in Orangeburg, S.C., where cartons recycling is scheduled to begin by the spring of 2022. Continuus Materials (formerly known as ReWall) has one Northeast processing location and is investigating locations for additional plants.

Other Assistance to MRFs and Communities

The Carton Council is available to provide assessments of cartons collection rates, capture rates, and grant funding for messaging to residents to support the increased collection of cartons for recycling. We have tools to support carton recycling in schools and institutional environments. We also conduct research to support greater levels of collection and more cost-effective sorting of cartons into their own grade at MRFs, or at secondary materials recovery facilities that may further sort containers not sorted by a local MRF.

We welcome opportunities to partner with MA DEP to increase diversion of cartons from disposal and strengthen associated recycling programs.

Feel free to contact me at [redacted] or scotta.byrne@tetrapak.com if you have any questions or comments about what is provided in this submission.

Sincerely,

Scott Byrne Director of Government Affairs

Casella Waste Systems, Liza Casella

Written comment

Summary of Draft SWMP Comments

We understand the aspirational nature of the 2030 Solid Waste Master Plan and agree that the Commonwealth needs to have long-range goals that provide healthy tension to the system to enable advancement. However, we believe in order to actually meet these goals, the Commonwealth needs to develop incremental goals that enable forward progress and that are nimble enough to react to unexpected and uncontrollable dynamics (natural disasters, global crises, market dynamics, etc.) that may seriously test the resiliency of the solid waste and recycling infrastructure. We say this because, as we stand in December 2019, the Commonwealth has yet to meet its 2020 plans and won't likely meet these goals until we're a third of the way into our 2030 plan.

Enabling an Innovative and Resilient Resource Management System in the Commonwealth

Casella is the largest recycling processor in the Commonwealth, processing nearly 300,000 tons annually, and continues to make significant investments in these facilities to ensure they are operating at the highest standard while meeting the challenges of an everchanging market – both locally and globally. We will continue to invest in these facilities and other recovery operations where we feel we can successfully divert materials from disposal. But we also need to have a safe, reliable disposal system for the nearly 5.7 million tons of waste generated each year in the Commonwealth.

In the current state, we believe the Commonwealth is at a crossroads – the aspirational goals set in the draft Plan are in direct conflict with a broken materials management system. To enable innovation, diversion and best practices, the Commonwealth should consider the following:

1. **Incremental goal setting:** couple the aspirational, long-range goals with practical near-term (1-year) goals that allow the Commonwealth to manage infrastructure, innovation, and other market developments in a nimble and achievable manner.

2. **In-state disposal capacity**: development of a public-private partnership with industry to create capacity and lessen risk, cost and environmental impact related to reliance on export. We saw the impact China had on recycling; on a smaller scale the Commonwealth faces these same risks when relying on export markets for over 1/3 of its waste. Facility development can be contingent on sustainability, innovation, and other key performance indicators as directed by the Commonwealth.

3. **Regional disposal capacity:** as noted in the Plan, New England is generally constrained when it comes to disposal capacity. If the Commonwealth isn't interested in creating in-state disposal, it should consider partnering with neighboring states to solve collective capacity issues.

4. **Practical policy-making:** resilient systems are backed by practical policy-making. Over the last several years, thousands of environmental bills have been filed and not much has been enacted into law. The approach, naturally, is very disparate. The Commonwealth should consider a comprehensive materials management bill which incorporates realistic and achievable metrics and standards, infrastructure development and funding.

5. **Market development and innovation:** the Commonwealth must play a significant role in materials market development in order to be a leader in sustainability. As part of this, the Commonwealth should continue creating funding to support new technologies and markets as this function has successfully enable innovation in the past. Sustainable materials management goals are meaningless without viable outlets for our materials (both recovery and disposal outlets). Bans should be contingent on the existence of viable and cost-effective markets.

6. **Continued investment and focus on education:** as noted throughout the Plan and in our comments, the Commonwealth needs to continue investing in education, comprehensively for the entire materials management system. Great work has been done for recycling; this model needs to be replicated and enhanced for all aspects of the system (waste, recycling, organics, C&D, waste bans, difficult to manage materials, etc.)

7. **Advisory board:** implementing this Plan effectively will be a significant lift but creates great opportunity for the Commonwealth to be a leader in an economically and environmentally responsible manner. As distinguished from and over and above the SWAC scope of The Governor should create a Task Force with key leaders from across the Commonwealth with diverse backgrounds – industry, government, business, education, social – whose mission is to provide public policy advice to ensure the Commonwealth has a resilient materials management system well

into the future. The Task Force could encompass broader, related issues such as Climate Change. This group would be separate and apart from the Solid Waste Advisory Committee as administered by DEP which primarily consists of industry professionals and advocates.

Draft Solid Waste Master Plan – Comments

In order to provide DEP with comprehensive comments and in an organized manner, we have provided comments on key points made throughout the plan. Each comment is listed by page and item.

Page 1

- **"The Draft 2020-2030 Plan proposes a broad vision for and strategies for how the Commonwealth will seek to manage our waste over the next decade and beyond."** – *we propose the Commonwealth put in place tangible goals and milestones to meet in a short period of time, working up to 2030. The Plan needs to be nimble in how the Commonwealth approaches its resource management infrastructure, goals, policies and regulations to actually make advancements. From our perspective, past Plans are antiquated the day they are released and become a stagnant document.*

Page 2

- **"Through 2018, total disposal was at 5.66M tons, a decrease of 890k tons, or 14%"** – *the Commonwealth is still short capacity to handle waste generation at current levels: Page 21 continues on to discuss the Commonwealth's plan to manage capacity issues but there still isn't an actual plan to address the issue. Industry wants to be part of the resolution, but we need the Commonwealth to recognize that this is actually an issue and embrace the opportunity to invest in in-state capacity. Consistent with growth in exports over the last several years, is DEP advocating to export waste as the primary solution?*

Page 3

- **"While Massachusetts has fairly extensive waste transfer capacity, most of these facilities do not effectively increase overall capacity, as most are not able to deliver waste beyond Massachusetts and our neighboring states, where disposal capacity is also limited."** – *there is enough transfer station capacity, however clearly there isn't enough disposal capacity to handle the material flowing through the transfer stations. With limited in-state disposal capacity, transportation is taking longer and costing more. Is it DEP's intention to encourage transfer stations to export waste?*
- **"Massachusetts also has very tight capacity at MRFs, as these facilities are practically operating at 100% of their capacity right now."** – *Between DEP developed capacity and MRF retrofits made by industry, capacity issues have been alleviated. Reducing contamination needs to remain a key goal for the Commonwealth. While some towns have made significant improvements in recycling quality by leveraging state and locally funded resources, this number is limited, and quality remains the biggest challenge for industry. We do not expect this to change given the dwindling and ever-tightening markets coupled with increased regulatory compliance and enforcement.*

Page 4

- **"Between AD and composting, Massachusetts has several hundred thousand tons of available capacity for food materials."** – *we generally agree with this statement but DEP's own report (issued February 11, 2019) shows that some of this capacity is estimated or potential so its not completely clear if this statement is truly accurate. Like recycling, in order to create the highest value product, the food scrap stream needs to be free of contamination for recovery of materials to be truly sustainable. The Commonwealth can play a significant role in enabling market development for products made from food scraps. For instance, mandating that DOT jobs use compost as a % of the job (the only way this works is if the quality is there, and contamination drives down quality.)*
- **"Massachusetts has excess processing capacity for C&D materials that can divert more material from disposal."** – *C&D recycling facilities are likely processing and recycling as much material as is feasible/practical. They can only extract what recyclable materials arrive in a given load. With LEED programs and transfer stations picking out recyclables, less recyclables are ending up at the processing facilities all together.*

Page 6

- **"There are significant environmental and economic arguments for why we should continue to set aggressive waste reduction goals and to strive towards a zero-waste future in Massachusetts."** – *we agree, but as stated above, we urge the Commonwealth to balance aspiration with a practical plan and approach to achieving such a future. Additionally, there are environmental and economic arguments against long-haul exporting of the Commonwealth's waste, which suggests a greater focus on developing in-state disposal. By developing such capacity, the Commonwealth isn't beholden to it – parameters for diversion can still be in place while enabling a resilient system for the Commonwealth's materials. Exporting all of the Commonwealth's waste, doesn't make it a zero-waste state.*
    - *Even when executing a zero-waste strategy, disposal capacity is needed in the event of natural disaster to ensure the state can activate an emergency management clean-up plan effectively and immediately.*

Page 7

- **"At the same time, solid waste disposal options and capacity in Massachusetts and throughout the northeast...we will have a more difficult time shipping trash for disposal and solid waste management costs will likely continue to rise. Reducing the amount of waste...also helps us to achieve a more robust, diverse and cost-effective materials management system."** – *we agree with the recognition of disposal capacity constraints in the Commonwealth and the northeast at-large. What is being done to improve this situation? How does disposal capacity constraints create robust and cost-effective materials management systems? Costs for all materials are rising at rates significantly above standard inflation due to the lack of a robust system.*
- **"2030 Goals" – "MassDEP proposed waste reduction goal for 2030 is to reduce disposal by 1.7M tons annually"** – *as stated previously, we understand the desire to set aspirational goals; but they need to be coupled with realistic, achievable goals to enable progress. We believe this approach will enable more accountability in executing the Plan while balancing aspirational goals.*

Page 8

- **"2050 Goals"** *It's great to have goals into 2050 but as noted on the previous page and at the onset of the draft comments, we are not meeting 2020 goals, DEP has conveyed that 2030 goals are aspirational and they don't believe they are attainable, and now we are setting 2050 goals? Would DEP consider creating long-range goals as a vision but with tactical annual goals to incrementally improve as well as pressure test system when performance isn't happening? This would be a better approach than an across the board 90% reduction goal for all materials targeted (see appendix B).*
- **"Envisioning a Zero Waste Future for Massachusetts"**- *the Plan talks about addressing packaging that are not reusable or recyclable as a way to solve the capacity issues. What about materials that can be recycled and can have reuse homes but are still not being sustainably recovered? For example, MRF glass. The Commonwealth has MRF glass byproducts but there is no regulatory expectation that businesses use recycled glass in their building specs therefore industry is limited to beneficiary or processing plants. MRFs will produce a spec that builders want if they can get the spec.*
- **"The building blocks for a zero-waste future are in our hands today."** - *Can DEP outline what these building blocks are and what the capacity is within each of these systems today that can reach the targets outlined in the Plan? If this is listed in another report, you can simply point us to that report.*

Page 10

- **"MassDEP expects to develop and periodically update separate Action Plans for key program areas of focus."** – *does DEP have a sense of what this process looks like? We have not seen this take place to date and agree this kind of process would be extremely helpful in the creation of a "nimble" plan that takes incremental action to get to long-term goals. Is this intended to be covered by the SWAC in the future?*
- **"Increase the amount and frequency of waste ban inspections on haulers and generators of waste."** – *page 5 references the number of inspections completed by DEP. We agree that the frequency of inspections should increase as a way to continue educating and holding stakeholders accountable. However, too often industry (haulers, recyclers, disposal facilities) is asked to act as the "inspectors" by sending "failed load" letters and charging for banned items pulled from the loads. We believe this process is not only flawed, but unsafe. Many generators and smaller haulers do not even understand what is banned and why. DEP needs to focus on the education aspect of the ban, first, and inspection/fines*

second. Industry can support DEP in this effort but cannot and should not not act in an enforcement capacity – the onus needs to be on the generator.

- **"Allow permitting of up to 350,000 tons of additional annual management capacity in the form of innovative waste to energy or other integrated waste management technologies..."** *– this additional capacity should be for any disposal form that meets DEP's emissions and operating standards; not just waste-to-energy. The first bullet on Page 22 suggests DEP is particularly interested in gasification and pyrolysis.*

Page 11

- **"Source Reduction and Reuse"** *– in order to successfully and sustainably reduce and reuse materials, the Commonwealth needs to create robust educational programs to support clean recyclables and the diversion of materials that already have recovery outlets. Currently recoverable materials are still being thrown away – i.e. plastic bags/film, glass, cardboard, food waste, various plastics. Where there is an infrastructure breakdown, lack of capacity, or some other limitation in effectively recovering these already recoverable materials, DEP should work with industry to solve this issue. DEP can help in the further reduction and reuse of myriad materials by supporting market development opportunities. • The Commonwealth should work with industry to establish programs to help manufacturers make packaging more recyclable and sustainable.*

Page 12

- ***"Policy"** – could DEP establish goals by sector based on known material characterization to assist in reduction strategies?*
- ***"Policy"** – would DEP consider establishing recycling expectations for commercial properties and public/open spaces where recycling isn't happening today? In order for this to be successful, funding will need to be created for education to enable clean and effective recycling. Such funding is available through a variety of sources in the Commonwealth today; such as the Municipal Recycling Challenge through the Massachusetts Beverage Association.*

Page 13

- How does DEP define "large", "medium", "small" generators?
- **"Develop a comprehensive strategy to support reducing the threshold for commercial organics waste disposal ban to ½ ton per week by 2022."** *– does the Commonwealth have enough viable capacity and markets to handle this change? If not, DEP should work to create the requisite capacity and markets prior to implementing the new threshold. This policy could help create greater density on existing routes but in areas where food scrap collection services are not provided but where generators would fall into the ban, collection cost could make it hard to do efficiently and cost effectively. As a result, we would recommend DEP consider density thresholds to ensure a cost-effective and environmentally sound system*
- **"Develop efficient models for curbside food waste collection"** *– DEP should work hand in hand with industry to address this opportunity. The system needs to be sustainable – both from an environmental and economic perspective. Participation rates, contamination and overall cost of service remain a significant hurdle in rolling curbside collection out more broadly. Like recycling, aggressive education campaigns will be required to get quality materials. In order to gain participation by commercial properties/large apartment buildings perhaps the DEP considers forming a partnership with in-sink food processors and create subsidies or incentives to participate (space being a big factor).*

Page 14

- "Increase quality of and reduce contamination in residential recycling streams." – we agree that this should be a key area of focus for both DEP and industry. The Recycling IQ Kit and associated recycling funding has been a successful tool and resource to date.

Page 15

- **"Propose new waste bans on textiles and mattresses with grant and assistance programs to support and drive this infrastructure."** *– does the Commonwealth have viable outlets to handle this material today? If not, DEP should plan to develop this capacity before implementing a policy; organizations like Goodwill should be involved in this process.*
- **"Support the development of a hauler recycling requirements that ensure a level playing field and consistent access to recycling, especially for residents not served by municipal programs."** *– What does this mean, is the proposal similar to VT's ACT148? We agree that consistent access to recycling should be*

provided to all stakeholders in the Commonwealth but do not agree with bundled service whereby the cost of recycling is hidden.

Page 17

- **"Implement new waste bans for food materials, mattresses and textile."** – *before instituting these bans, DEP needs to ensure there are sustainable (environmental and economic) markets for these materials to ensure compliance and success.*
- **"Continue to assist schools and deliver recycling and composting education to schools through the Green Team program."** – *we support this effort and would participate in helping to develop curriculum content to ensure information presented in the schools is technically correct.*

Page 18

- *The Commonwealth has made some good progress with some C&D materials but has struggled with others. In addition to items targeted on Page 20, DEP should consider a greater effort on Gypsum Wallboard and Rechargeable Batteries. The color-coding of Appendix B seems like it is backwards, red should be problem areas and green should be considered a success.*

Page 19

- **"Leverage additional financing through MOU with the Closed Loop Fund."** – *what does this funding entail? Can we see the MOU or be provided a description of the opportunity? There could be further collaboration that can take place with support of industry and other stakeholders.*

Page 21

- **"Continue to consider applications received for permitting of solid waste facilities consistent with statute, regulation and this Master Plan Update."** – *As defined by the EPA Waste Hierarchy, landfills with gas-to-energy recovery are treat equal from an environmental perspective as a waste-to-energy facility. How will DEP take an objective look at permits?*
- *Figure 10.1 shows that disposal rates outpace disposal capacity between 2017 and 2030 "even if the state achieves its 2030 goal." What is the cumulative capacity shortfall between 2017 and 2030 if the state achieves its goals? What will the shortfall be if the state does not achieve its goal (assuming current diversion rates for example)?*

Page 22

- **"Conduct ongoing permitting, inspections, and enforcement of all active facilities."** – *DEP needs to develop and consistently utilize tools to provide feedback and suggest improvement at facilities other than legal-driven enforcement actions. The lack of enforcement tools beyond monetary fines and consent order prevents constructive dialog between regulators and the regulated community.*
- **"Address emerging contaminants and chemicals of concern in solid waste facility oversight."** – *DEP should follow the guidelines and standards being released by the USEPA and not create separate standards for the Commonwealth. We recommend DEP conduct risk assessments and cost benefit analyses related to contaminants and chemicals of concern to assure that the benefits achieved by "addressing" the contaminants are worth the cost. There are often hidden cost or other environmental/human health impacts of "addressing" to a zero risk at a solid waste facility. There are examples where attempts to alleviate one concern creates another that could be more threatening to human health and the environment. For these reasons, we recommend DEP rely upon science and not be influenced by societal or political pressure. Emerging contaminant regulation should focus first on the industrial/commercial/residential sources of the contamination, and secondarily on the sinks, such as solid waste management facilities. How the contaminants are regulated at solid waste facilities should also be consistent with regulation at other sinks such as wastewater treatment facilities.*
- **"Develop regulation changes to provide clarification and improve implementation of existing solid waste regulations."** – *Can DEP outline specifically what regulations they intend to change and the process by which they will do this?*
- **"Discuss and develop policy for post 30-year monitoring and financial assurance requirements at landfills"** – *In lieu of developing mandatory frameworks beyond 30 years, DEP should consider functional stability models (used in other states) that allow site-specific evaluations of threats to human health and the environment. Some landfills can reach functional stability in less than 30 years, and some will require greater than 30 years.*

Center for EcoTechnology, Khrysti Smyth Barry

Oral comment

I'm with the Center for Eco Technology, and we actually administer the recycling program for the SEC, but I want to be very clear I'm not speaking on behalf of those programs, just me as a resident. But I want to just put a point on the books for advocacy for reuse, which could support incentives for companies to gain technology and machinery to rewash their jars and bottles, like I know it used to be a much more common thing. So I work with companies all the time who have lots of products going out, and it would be great to support that source production aspect of having companies able to logistically and operationally bring those containers back and reuse them multiple times, rather than just having them go through a recycling stream. So I see that as a huge part of the solution. That's all. Thanks.

Center for EcoTechnology, Lorenzo Macaluso

Written comment

The Center for EcoTechnology is pleased to offer these comments regarding the MassDEP Draft 2030 Solid Waste Master Plan. CET is a 43-year-old non-profit organization that promotes practical solutions to environmental problems that benefit our community, economy, and environment. We help people and businesses save energy and reduce waste.

For many decades, we have been working to help individuals, businesses and institutions reduce and divert waste from disposal. We have had a long partnership with MassDEP and other state and federal agencies to implement effective diversion programs and jointly overcome barriers to recycling, reuse and waste prevention in Massachusetts and beyond. CET currently operates both the RecyclingWorks in Massachusetts program and the Green Team program as a contractor to MassDEP.

There have been significant changes in the solid waste industry over the past ten years, and we believe that this pace of change will continue and even accelerate in the coming decade. Massachusetts has been a national leader in policy and programming to address the modern challenges in dealing with solid waste under the leadership of MassDEP, industry, municipalities, businesses and other stakeholders. This Solid Waste Master Plan will span a critical time in our collective efforts to address the issue and impacts of climate change, and CET believes a bold vision for our solid waste management system can make a positive impact.

For example, over the last ten years there were unanticipated innovations in the food waste space, especially in the upstream areas of prevention and donation. If these technology innovations and public-private investments are any indication of what is possible in the next ten years, technology and industry will play a critical role in advancing our solid waste systems overall.

MassDEP has a longstanding history of successful collaboration with all stakeholders to develop and implement innovation and improvements in the waste management system while ensuring that today's needs are met. We encourage MassDEP to think big about the transformative system-level changes possible with its stakeholder partners, and to fully explore areas like adaptation to changing waste streams, the role of technology in waste management, extended producer responsibility, and bio-based materials as it finalizes and implements this plan.

Introduction and Background (pp. 1-9)

- *The Commonwealth has implemented a nation-leading strategy to reduce food waste, highlighted by a commercial organics disposal ban for facilities generating a ton or more of organic material a week in 2014.*
    - **Comment:** Can MassDEP clarify if it intends to use quantities of food waste "generated" as opposed to "disposed of", to determine which entities are subject to the commercial organics waste ban?

- Envisioning a Zero Waste Future for Massachusetts o
    - **Comment:** We recommend that MassDEP consider studying and making plans to address the effect of e-commerce home delivery on waste production, and opportunities for waste reduction and recycling.
    - **Comment:** There are a number of businesses and institutions in the state that have zero waste or other robust waste reduction goals and MassDEP should take advantage of their leadership and expertise.

Source Reduction and Reuse (pp. 11-12)

- Reuse Stores in Massachusetts
    - **Comment:** Please note that Eco-Building Bargains on p. 18 should be changed to omit the hyphen (EcoBuilding Bargains).
- *Provide grants for market development to drive better utilization of reused materials in value added applications.*
    - **Comment:** We strongly support this and believe that additional marketplace development is needed to drive reuse activity a larger scale.
    - **Comment:** We encourage MassDEP to consider efforts to promote reuse and repair similar to Buy Recycled initiatives.
- *Foster increased use of dishwashers and beverage dispensers to switch from disposable to reusable food service ware in school, institutional and corporate cafeterias.*
    - **Comment:** We support this and, in our experience, dishwasher access is especially key for reducing the disposal of single use materials in school cafeterias, fast casual restaurants, offices, and assisted living facilities.
- *Support & promote initiatives to test reusable shipping containers or materials and promote successes.*
    - **Comment:** We support this and, in our experience, many businesses receive shipments in containers made of waxed cardboard, rigid plastic, and other materials that cannot be reused and have limited viable alternatives to disposal. There are examples of businesses successfully accepting inventory in totes or other reusable containers that are unloaded and returned to the distributor for reuse and this practice could be more widely adopted. Plans to promote the strategy should include input from industry leaders in this area.
- *Address reuse, repair, and product durability in state contracts, such as for refurbished furniture vendors.*
    - **Comment:** In our experience, representatives of public facilities have expressed that this would be beneficial.
- *Use tracking and data to increase efficiency and reduce waste in business operations, such as food service, packaging and distribution, and contracting incentive systems like resource management contracting.*
    - **Comment:** We strongly support this initiative.
- *Create an online calculator to quantify the environmental, social and economic benefits of choosing reuse/repair/share over purchase and disposal to help Massachusetts residents, businesses and municipalities better understand the benefits of reuse options.*
    - **Comment:** We strongly support this and recognize that, without this tool, it is difficult to illustrate the benefits of choosing reuse/repair/share options over purchase and disposal.
- *Develop model state or local policies that advance source reduction, reuse, and repair such as deconstruction and reuse in building codes, conversion to water coolers from single use water bottles in government buildings.*
    - **Comment:** We strongly support this and recommend that MassDEP work with interested municipalities and building trade professionals to develop and pilot test deconstruction incentives and requirements, building upon examples from other jurisdictions, such as Portland, OR.

Organics Waste Reduction (p. 13)

- *Work with stakeholders to implement an Action Plan targeting different sectors, including large commercial and institutional generators, medium business and institutional generators, and small businesses and residents.*
    - **Comment:** In this section, we believe it would be beneficial to define small, medium, and large food waste generators in terms of tonnage. The RecyclingWorks MA Food Waste Estimation Guide is a relevant resource to include.

- For large generators: *Develop initiative/systems to track and reduce food waste generation at the source.*
    - **Comment:** We strongly support tracking food waste in order to reduce generation at the source. This practice can help motivate businesses to reduce food waste.
- For large generators*: Drive increased food waste reduction through continued waste ban inspections and enforcement, sending formal information requests to businesses that generate food scraps, technical assistance through RecyclingWorks in Massachusetts, and education and outreach.*
    - **Comment:** We strongly support these strategies.

Residential Waste Reduction (pp. 14-16)

- *Promote and provide financial and technical assistance to municipalities to implement Pay-As-You-Throw programs.*
    - **Comment:** We strongly support this initiative and recommend implementing this in conjunction with RecycleSmart MA and the Recycling IQ Kit to maximize effectiveness.
- *Implement broader adoption and increase program partners for the Recycle Smart MA program to raise awareness about what materials should and should not be placed in recycling bins.*
    - **Comment:** We strongly support this - Recycle Smart MA has proven to be a fantastic resource for not only individuals, but also businesses, institutions, and municipalities.
- *Continue to work with recycling facilities, haulers, and municipalities to ensure that materials collected can be handled through our recycling infrastructure.*
    - **Comment:** We strongly support this, including clear and timely communication of changing market conditions and requirements.

Commercial Waste Reduction (pp. 17)

- Create and distribute outreach materials to raise awareness about waste bans.
    - **Comment:** We strongly support this initiative.
- *Increase use of direct business information requests to gather more information on waste ban compliance status.*
    - **Comment:** We strongly support this initiative.
- *Support waste ban compliance through RecyclingWorks MA technical assistance. Increase assistance for targeted sectors and materials, such as businesses subject to newly developed waste bans.*
    - **Comment:** We strongly support this initiative.
- *Develop guidance and tools to improve business waste, recycling, and organics contracting practices.*
    - **Comment:** We strongly support this initiative. The RecyclingWorks Guidance for Businesses Contracting for Trash, Recycling, and Organics Hauling Services is an existing resource that can be updated as needed.
- *Continue to assist schools and deliver recycling and composting education to schools through the Green Team program.*
    - **Comment:** We strongly support this initiative and recognize the need to provide schools periodic support and assistance in order to ensure sustained and improved program performance.

C&D Waste Reduction (pp. 18-19)

- *Encourage use of C&D Materials Re-use stores (e.g. EcoBuilding Bargains, ReStores by Habitat for Humanity, etc.)*
    - **Comment:** We strongly support this initiative.

- *Promote source separated diversion programs such as ceiling tiles and other alternative collection systems.*
    - **Comment:** We recommend adding gypsum to this material list.
- Develop end markets.
    - **Comment:** We recommend the MassDEP support development of local markets for clean gypsum.
- Promote interagency cooperation to advance C&D waste reduction.
    - **Comment:** We recommend MassDEP work with appropriate agencies to support the development and implementation of standards and practices to include asphalt shingles in pavement applications.
- *Work with municipalities and other stakeholders to explore models and pilots for local ordinances to require C&D recycling management and diversion, and deconstruction as part of local building permits.*
    - **Comment:** We strongly support this initiative.

Market Development (p. 20)

- Utilize state purchasing power to foster and improve markets for recovered materials.
    - **Comment:** We strongly support this initiative.
- Provide targeted business development assistance
    - **Comment:** We strongly support each initiative included in this section.

Solid Waste Facility Oversight and Capacity Management (pp. 21-22)

- *Oversee active solid waste, recycling and composting facilities*
    - **Comment:** We strongly support these initiatives and recommend that MassDEP continue supporting technical assistance for compost site operators.
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Thank you for the opportunity to offer comments on the proposed 2030 Solid Waste

Clean Water Action, Alex Papali

Written comment

Dear Mr. Fischer,

On behalf of our more than 40,000 members across the Commonwealth, below are CWA's suggestions for improvement to the current draft of MassDEP's 2020-30 Solid Waste Master Plan. We are encouraged by our recent meeting with you and other MassDEP staff, and look forward to hearing your response to our team's ask in particular for further comment opportunity on a revised draft.

1. The draft SWMP's plan is to reach 90% diversion by 2050 in 30% tranches over consecutive 10-year periods beginning in 2020. This seems short-sighted and arbitrary: other jurisdictions have successfully front-loaded waste reductions from 'lower-hanging fruit' in earlier years, leaving only the smaller portions of stubbornly complex and expensive reductions until later periods. For example, Boston's recent ZW planning process, led by nationally-recognized experts with decades of ZW planning experience, also set a target of 90% diversion by 2050... however, it began with a target of 80% reduction by 2035 (first 15 years), based on technical assessments of waste reduction and diversion potential, and takes the remaining 15 years to reach the remaining 10% and the ultimate 90% diversion target, which may involve larger policy fixes or coordinating upstream agreements and mandates.

A major benefit of this approach is encouraging the achievement of as much waste diversion from disposal as possible in as short a time as possible. It allows reasonable time to develop policies and infrastructure that can address the most difficult remaining waste streams. Based on what we know about the composition of current waste streams and the proportion of those materials on the existing waste ban list, as well as the proportion of the waste stream that includes readily recyclable materials, we recommend setting a target of 70%

reduction/diversion by 2030. While statewide waste reduction and diversion is more complicated and involves coordination with many more stakeholders, this timeline should allow for ramping up enforcement and putting in place policies that prioritize reduction- with reuse and recycling a secondary priority. If MassDEP believes this target is not feasible, we ask for an explanation in a revised draft, and the opportunity for further public response to an evolving draft Plan through public meetings, especially in disposal host communities.

Adopting this approach is both logistically prudent and in the best interests of the Commonwealth with regard to its climate and toxics burden, as it undertakes what is essentially Zero Waste planning via the SWMP. We recommend setting 10-year targets of 70% diversion by 2030, 80% by 2040 and 90+% by 2050. This schedule may require creating a policy infrastructure that reduces the Commonwealth's dependency on disposal, particularly combustion with its myriad ills.

2. It is well documented that the negative consequences of our current linear, disposal-oriented waste systems have been borne unfairly by communities with comparatively less economic, and consequently political, power. This means that the massive public health burdens and many lesser nuisances from landfills and incinerators fall disproportionately on communities of color and working-class communities, creating serious inequities in health costs, educational achievement, home values, general quality of life, etc, not to mention larger-scale impacts like climate and chemical pollution. Creating a road map to zero waste is an opportunity to tackle these serious discrepancies, and we have before us the opportunity to upgrade the SWMP into a Zero Waste Master Plan- but that requires a concerted focus on equitable economic development that appears to be completely absent from the current draft of the 2020-30 SWMP. We recommend revising the current underdeveloped market development section with an eye to economic development in working-class communities and communities of color classified as EJ communities, in ways aligned with these communities' interests. This will mean working closely with both municipalities and grassroots organizations that can credibly represent the communities' goals to identify needs and target policies in ways that are reparative. In addition, we recommend adding a focus on coordinating municipal purchasing policies, alongside using state agency purchasing power, as an engine for market development, because when aggregated, municipalities can reach significant scale.

3. Exporting waste out-of-state for disposal via trucking may provide short-term relief to immediate congestion or capacity problems, but must not be relied on as a long-term solution. Export creates an entire sector in whose interest it is to promote continued disposal. Accordingly, we recommend affirmatively stating the intention to drastically reduce or completely eliminate waste export by 2030, and building in a pathway towards that goal via the SWMP. This goal would be closely linked to the ideas laid out in Item 1 above, planning for which should be aligned with this item.

4. The state has an important role to play in assisting municipalities with less capacity, resources, information and experience to reach for zero waste. As it did in Boston during the lead-up to its successful ZW planning process, MassDEP can and should assist municipalities with funding for ZW planning, which will provide far-reaching returns that reduce costs and make higher diversion targets feasible. In addition, while developing model local policies for municipal benefit, the SWMP should envision ways to incentivize or even mandate local reductions and zero waste planning, as California did in their famed AB 939, which will go a long way towards making state-level goals more realistic.

5. The current SWMP draft assumes a disposal capacity shortfall of 700,000 tons by 2030, while allowing 350k additional tons of disposal capacity and replacement of existing facilities with 'cleaner' facilities. This represents a significant new burden for host communities- and the language regarding this and replacement of existing capacity in the SWMP is extremely vague: it lists no standards or emissions thresholds, other than 'innovative WTE or other integrated WM tech' (for the 350k additional) and 'more advanced technologies that reduce emissions and increase separation' for replacement. This is unacceptable in any plan responsive to the urgent needs of environmental justice communities and/or aiming at zero waste; we recommend eliminating provisions for any new capacity, and developing stringent climate and toxicity standards for any replacement of capacity.
Thank you for your attention to these comments, and please do not hesitate to reach me with any further questions or thoughts regarding these matters.

Sincerely,
Alex Papali

Clean Water Action, Alex Papali

Oral comment

My name is Alex Papali with Clean Water Action, which is a national nonprofit. We have about 40,000 members across the state. I'm speaking on their behalf today. We're also part of the Zero Waste Boston coalition, which has been going on for about 10 years. We helped to drive the process towards a zero waste planning process in the city of Boston, which was completed last year, and came up with a pretty decent set of policy recommendations, getting us to zero waste by 2050 which is the same timeframe that DEP is proposing in the Master Plan. I served on that, that committee that came up with the plan.

I'd like to make five points today regarding the draft. First, the draft proposes getting to 90% reduction to approximate zero waste by 2015 and 30% tranches over the next three decades. It seems short-sighted and very much out of line with what other jurisdictions did. The Boston process, for example, proposed an 80% reduction by 2035, using the remaining 15 years of the time span to get the very hard to reach 10%. So, we would recommend as minimum that the Solid Waste Master Plan of sets a target of 70% diversion by 2030, 80% by 2040, and the remaining 10% to get to 90% plus by 2050. At a minimum, it seems quite possible that with the assistance of zero waste practitioners who've got decades of experience–consultants and so on–we could reach these targets even sooner.

Second point is economic development. If memory serves, there's about a page in the draft focusing on market development. We would suggest rewriting the entire section. It's just woefully underdeveloped, and we would suggest focusing on prioritizing the needs and interests of environmental justice communities. These are communities that have borne public health and other burdens from the existing disposal-oriented system. And many have faced economic disenfranchisement over the decades. This, plan is a way to get to zero waste and is an opportunity for those communities to get a leg up in ways that they've been neglected in previous economic development initiatives.

The third point is about out of state trucking. It seems that with an increasing reliance on exporting our ways to other communities, it's reflective of past trends that the waste is going to poor communities, perhaps communities of color, and it's not in their interest to accept our trash that we're generating. We're also creating an industry who has an economic interested to promote more disposal, and they're going to be vocal in protecting their economic interests going forward as that sector develops. So it's important to state clearly that we're working towards ending out of state trucking and disposal.

The fourth point is that the state can provide a lot of assistance to municipalities in their Zero Waste planning and coordination on a statewide basis. Smaller municipalities in particular don't have the resources to undertake the planning and don't have access to the expertise that the state does or large municipalities do, but together they can reach scale. You put these all these municipalities together and it can really help to boost the statewide diversion numbers. Yes, there was a provision for using the state purchasing as a way for developing markets. We just also think about using municipal purchasing power as a way to develop those markets further, and the state can play a role in helping to coordinate that.

The last point I'd like to make is that it is outrageous that we're talking about new capacity, you know, it's just, it's mind boggling. These, communities have suffered tremendously over many decades, and the idea that we're going to allow this to continue is a travesty. This disposal and poisoning of communities and their children, land, and water is unconscionable. There's so much more to say about it, and people have said it, and it seems that those words have fallen on deaf ears in this agency. Maybe there are political considerations, but we cannot allow a master plan that's aiming for zero waste to allow for 350,000 new tons of disposable capacity. It's just doesn't make any sense. It's zero waste as a goal. Let's say that that's the goal and we're going to end disposal and set a

timeline and get to work. Failing to do so is choosing to prioritize profits of small, disposable companies and failing to protect public health. The stated goal of this agency is environmental protection. So we urge you not to include that provision in the plan to the extent possible.

Clean Water Action, Elijah Romulus

Written comment

Dear Mr. John Fischer, Massachusetts Department of Environmental Protection

As an Advisory Board member of Clean Water Action, I am concerned that the draft 2020-30 Solid Waste Master Plan does not come close to reaching its potential as a Zero Waste Master Plan. I ask that you make the changes below and set our commonwealth on a path to sustainability and environmental justice as soon as possible.

1. An enforceable pathway to closing the state's remaining 7 incinerators and 20 landfills
    - Phase out all high heat combustion of municipal solid waste
    - Phase out traditional landfills
2. Waste facilities in Environmental Justice communities should be the first closed, and those communities should be the first to benefit from the Zero Waste economy
    - Six out of seven of Massachusetts' incinerators are in EJ communities; the plan should specifically aim to close these incinerators and implement a just transition to the Zero Waste economy for those host communities and workers
    - Direct state resources towards hiring/assisting municipal staff to build Zero Waste programs and a circular economy that benefits especially EJ communities
3. Enforceable reduction first
    - Prioritize programs and policies that reduce waste over recycling, composting, and particularly disposal
    - MassDEP should advocate for a state-wide policy banning all single-use plastics (except compostable bioplastics), beginning with bags, straws, and polystyrene containers
4. Reuse second
    - Adopt and support reuse policies and programs for textiles and bulky waste
    - Adopt and dedicate funds for support Right to Repair reforms that make repair more available and affordable
5. Recycle & Compost third
    - Mass DEP should expand Deposit Return and adopt Producer Responsibility systems
    - Ban all food scraps from disposal.

This will help us meet our climate obligations, prevent toxic emissions that harm our neighbors and create a virtuous economic cycle that will provide a model for the rest of the country.

Sincerely, Elijah Romulus
Advisory Board Member, Clean Water Action, Massachusetts Chapter

Clean Water Action, Vick Mohanka

Oral comment

I'm Vick Mohanka. I work for Clean Water Action Massachusetts, and I'm a [redacted] resident. And, you know, [redacted] has faced some recent challenges regarding our waste plans and recycling programs. So this is very salient at this moment.

I'm just going to move through a couple of points. Clean Water Action is a member of Zero Waste Boston and Zero Waste Massachusetts Coalition as well. Our first point is that the plan to reach 90% diversion by 2050 through 30% trunks over a 10-year period seems short sighted. Other jurisdictions have front-loaded waste reductions with lower hanging fruit in earlier years, leaving smaller portions of complex and expensive reductions for later periods. Boston's recent Zero Waste planning process was led by nationally recognized experts with decades of zero waste planning experience. They started with a target of 90% diversion by 2050, but it began with a target of 80% reduction by 2035, and then took 15 years after that to reach 90% diversion or zero waste. That structure will allow reasonable time to develop policies and infrastructure to address the most difficult remaining waste streams, while encouraging the achievement of as much waste diversion from disposal as possible right now. We recommend setting 10-year targets of 60% diversion by 2030, 80% by 2040, and then 90% or more by 2050.

Our second point is that the current waste disposal-oriented systems have created negative consequences which have been unfairly borne by communities with comparatively less economic and political power. This means that massive public health burdens and nuisances from landfills and incinerators fall disproportionately on communities of color and working class communities, creating inequities in health costs, educational achievement, home values, and quality of life. And that doesn't talk about larger scale impacts of our system, such as climate and chemical pollution. So creating a roadmap to zero waste is an opportunity to tackle these discrepancies. But it requires a concerted focus on equitable economic development that appears to be absent from the current 2020-2030 Solid Waste Master Plan. So we recommend revising the market development section with an eye to economic development in working class communities and communities of color, or communities classified as environmental justice communities, and we strongly encourage working closely with municipalities and grassroots organizations that can represent these communities.

Our third point is that exporting waste out of state for disposal may provide short term relief for immediate congestion or capacity problems, but it can't be relied on as a long term solution. Export creates an entire business sector, whose interests are to promote continued disposal. So we recommend stating the intention to drastically reduce or eliminate export by 2030 and building in a pathway towards that in the plan.

Our fourth point is that the state has an important role to play in assisting municipalities with less capacity. This happened in Boston during the lead up to zero waste planning process, and DEP can assist with funding for zero waste planning. That was in your presentation as well. I think we just want to see more specific plans around that how the technical assistance would work and the development of model local policies for municipal benefit.

And then our fifth point. The current plan assumes the disposal capacity shortfall of 700,000 tons by 2030 and allows 350,000 additional tons of disposal capacity and replacement of existing facilities with cleaner facilities. So this represents a significant new burden for host communities, and the language regarding this provision and the replacement of existing capacity is extremely vague. There are no standards or emissions thresholds, other than saying "innovative waste energy" or "other integrated waste management technology." I think the other thing it says is more advanced technologies that reduce emissions and increase separation for replacement. So, we recommend, eliminating provisions for new capacity, developing stringent climate and toxicity standards for any replacement capacity, and being really specific in the plan about what types of technologies and facilities the state is planning on including.

And that is also related to our last point, which is that the Draft Plan creates a loophole in the 30-year-old moratorium for building incinerators since 1989. There's a moratorium on building waste incinerators because they're dirty dangerous and expensive. The health hazards from incinerators fall disproportionately on

communities of color and low income communities. And we are concerned that the additional capacity for "innovative waste to energy" is nothing more than the exact same incineration by a different name. Thank you.

Clean Water Action Email

Written comment

Dear John Fischer,

As a member of Clean Water Action, I am concerned that the draft 2020-30 Solid Waste Master Plan does not come close to reaching its potential as a Zero Waste Master Plan.

I ask that you make the changes below, and set our commonwealth on a path to sustainability and environmental justice as soon as possible. This will help us meet our climate obligations, prevent toxic emissions that harm our neighbors and create a virtuous economic cycle that will provide a model for the rest of the country.

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* Phase out all high heat combustion of municipal solid waste
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3. Enforceable reduction first
* Prioritize programs and policies that reduce waste over recycling, composting, and particularly disposal
* MassDEP should advocate for a state-wide policy banning all single-use plastics (except compostable bioplastics), beginning with bags, straws, and polystyrene containers

4. Reuse second
* Adopt and support reuse policies and programs for textiles and bulky waste
* Adopt and dedicate funds for support Right to Repair reforms that make repair more available and affordable

5. Recycle & Compost third
* Mass DEP should expand Deposit Return and adopt Producer Responsibility systems
* Ban all food scraps from disposal

Received from:

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Alyssa Lovell
Amy Armitage
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Barbara Tinker
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Susan Lemont
Susan McGurk
Suzanne Young
Tanja Ryden
Teresa Sophia Barut
Thomas Wolselgel
Tony Sigel
Valerie Wey
Will Corrdin
Wojciech Rowinski

Coalition for Social Justice, Sabrina Davis

Oral comment

I organize for the Coalition for Social Justice on their environmental campaign, and I've been working with South Coast Neighbors United. My specific concern is as we come off of fossil fuels that we don't move on to other forms of waste. Human waste is not a green solution to fossil fuels, and that's part of the reasons why we were taking a look at it, because in the plans they want to gasify that waste to provide energy. It's dirty. We're trying to move away from that here in Massachusetts, and it's a large part of the reason why CSJ is opposed. Not to mention that New Bedford is already overburdened by pollution. It really doesn't need another facility like this. We've heard that at other locations, this company has been a nuisance neighbor. We really wouldn't like it to be there. They've already been found in violation of their contract for the recycling they're supposed to have collected but didn't. They asked for extensions, and they are given ample time. Right out of the gate they've proven to be untrustworthy in their practices, so I'd like you to keep that in mind. I know they say they got all their permits, but they don't.

And another part of our concern is that they might be building, when they shouldn't be building yet. I know they have several stages, but it's easier if that part is just not built to begin with because I think we'd all be a little less opposed to it all if it was just going to be the recycling center that they had made it out to be at the hearing. At the first public meeting they said it's going to be this recycling center, and oh by the way there's this little part of it that's going to be taking care of waste, when in reality it's totally misrepresented. It is primarily for the disposal of bio waste and the gasification of that waste. So, just try to keep that in mind.

Connecticut River Conservancy, Andrea Donlon

Written comment

Dear Mr. Fischer,

The Connecticut River Watershed Council, Inc. (CRWC), doing business as the Connecticut River Conservancy (CRC), is a nonprofit citizen group established in 1952 to advocate for the protection, restoration, and sustainable use of the Connecticut River and its four-state watershed. On September 27 and 28, 2019, CRC hosted our 23rd annual Connecticut River watershed Source to Sea Cleanup. In Massachusetts alone, we had 1,200 volunteers clean up at over 50 different locations along and in our waterways. Below are some key accomplishments of the groups that participated in this year's event *from the Massachusetts part of our watershed*:

- 95,547 lbs of trash found and properly recycled or disposed of, including those listed below
- 967 tires (600 from a tire dump site in Greenfield)
- 22 mattresses
- 32 paint cans
- 1,100 single use plastic bags
- 20,000 beverage containers of all types, including 4,900 plastic water bottles and 4,481 nip
- bottles
- approximately 145 gallons-worth of Styrofoam particles
- 150 batteries
- 37 pieces of furniture
- 93 automotive-related items
- 94 clothing items
- 253 pharmaceuticals/syringes
- 59 toys/balloons

These items are typical of what we find every year, although our volunteer numbers in 2019 were an all-time high. The trash we find in our cleanups represents a combination of single use trash items and things that are difficult to dispose of, such as mattresses, electronics, furniture, and tires. In the past couple of years, we have also noted an uptick in homeless encampments near our rivers. As part of our mission to advocate for clean rivers, we have been actively working on trash reduction efforts that we see are contributing to the trash we find in our rivers. As such, we have reviewed the draft Massachusetts 2030 Solid Waste Master Plan (SWMP) with interest, and we offer thoughts outlined below.

Overall comments

<u>SWMP needs to tie into international trash issues</u>

There are two very large global environmental issues that relate to solid waste at the moment: climate change/carbon emissions and plastic in our oceans. The draft SWMP speaks to neither of these issues. CRC recommends that MassDEP tie these into the SWMP and develop concrete steps for contributing positively to both of these problems.

DEP should consider climate impacts on all decisions, and attempt to quantify carbon savings through plastics use reductions and reductions from burning plastics and tires, whether in state or out of state. DEP should include in the SWMP an analysis how waste management ties into the Global Warming Solutions Act.

Massachusetts should develop a Marine Debris Reduction Plan (as Virginia has done – see https://www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/MarineDebris.aspx). This would involve 1) identifying the items Massachusetts is contributing to in the marine environment (these would be items found in Massachusetts coastal areas as well as Massachusetts rivers that flow into coastal areas of Rhode Island, Connecticut, and New York) and 2) prioritizing actions to reduce those items. Massachusetts

could participate on the national level as well. We recommend that DEP also look to the European Union's plastic strategy as a possible way to move forward.

SWMP needs more specifics on how goals will be met

In 2000, MassDEP reported that we were disposing of 6.5 million tons of trash annually. In 2010, statewise trash generation was reduced to 5.43 million tons. Further reductions stalled and in 2018, we were at 5.5 million tons. Over the past decade we have not achieved the 30% reduction goal from the 2020 SWMP for various reasons. The current SWMP does not identify why we have not met our goals, and it's not clear from the draft 2030 SWMP how we will magically meet our new goals. Overall, the plan needs to be more aggressive and concrete.

The plan needs to have more opportunities for measuring progress, and also allow for adaptive management. MassDEP has stopped reporting diversion through recycling and composting, apparently because it is impossible to account for all ways of diversion. We acknowledge the difficulty. We note that is undoubtedly the case with all estimations, even the ones that MassDEP has reported on for the draft SWMP. However, MassDEP should still create a way to track trends, understand what is happening, and provide that information to the public (good and bad). All accounting will be imperfect; that doesn't mean it should be altogether abandoned. MA residents and businesses need the data to push for change where it is most needed.

Circular Economy

Perhaps the concept of zero waste does not seem attainable. We suggest that the concept of a circular economy could be beneficial as a way of looking at it. There could be ways of businesses and the economy working at every step of the way. The current system in which companies make an enormous profit selling products that then the public and government need to spend money to dispose of does not make sense. MassDEP needs to be a key player in shifting the costs away from municipalities, the state, and individuals. Even if DEP cannot pass legislation, it can provide the public better justification and incentives to create extended producer responsibility (EPR) programs, and it can incentivize recycling as DEP has done for mattresses. Where single use plastics can't be eliminated, recycling should be increased. The European Union has a list of companies voluntarily pledging to increase their use of recycled plastics in Europe, and many of these companies sell products in the U.S. also (https://ec.europa.eu/growth/content/european-strategy-plastics-voluntary-pledges_en). These companies would be an obvious partner for U.S. states, regions, or the federal government to work with.

The SWMP should identify a goal of equal access to trash reduction and disposal.

The increase in homelessness over the last several years means also increase in trash in the environment, because disposal options for homeless encampments are minimal. In 2018, it was estimated that there were 20,000 homeless people in Massachusetts. When we conduct our Source to Sea Cleanup every year, we clean areas where homeless people live or lived, being careful not to dismantle existing homes. People with no access to kitchens and homes for storage are forced to use predominantly single use items. Towns with significant homeless populations should be supported and given an incentive to offer disposal options to all.

Specific comments

Priority categories for trash reduction should take into account environmental impact as well as volume

Appendix B of the draft SWMP includes a large table with detailed material categories and 2018 disposal rates vs. 2030 disposal goals. The SWMP goals focus on the largest volumes that could be diverted from the trash – cardboard, compostables, construction & demolition debris, and textiles. We think composting as much as possible is very important to do. On the other hand, food waste is not going to last for thousands of years the way plastics will. DEP should also take into account toxicity and impact on the environment when prioritizing, not just volume. Our cleanup groups consistently find tires in our rivers and over 50% of them are tires that have been dumped since 2000. Appendix B indicates that only 30,947 tons of tires are disposed of in MA, and the table indicates that tires are banned from combustion in Massachusetts. It's estimated states generate approximately one passenger tire per person per year (https://www.ct.gov/deep/cwp/view.asp?A=2714&Q=324902), and the population of MA was 6.9 million people in 2018. It's not explained in the SWMP, but the vast majority of tires in MA are being burned as tire derived fuel at paper mills in Maine. Why is it okay to burn them out of state but not in state? It appears we don't mind foisting the toxic emissions off on another state. We encourage MA to put tires at a higher

priority level than medium-low, and to work with other New England states to put together an extended producer responsibility program together for tires.

Reducing items that are hard to recycle

Page 9 shows that one of the state's top priorities is to "reduce or phase out materials that are difficult to recycle." This is fine, and we support it. The document highlights "target single use packaging" and "encourage better packaging and purchasing habits to reduce waste" as actions to address this priority. The document is not aggressive enough in documenting specific ways that single use packaging will be reduced. It should not be left to the consumer to make purchasing choices, such as stop purchasing chips in non-recyclable bags, when there is no alternative. This isn't going to work. We need the document to commit to working regionally or nationally to create incentives for different packaging. DEP can put together a program to evaluate banning items or promoting EPR. We recommend the MA SWMP add a strategy table such as that articulated by the European Union on page 4 of the following pdf file (labeled page 3 in the publication):
https://ec.europa.eu/environment/circulareconomy/pdf/single-use_plastics_proposal.pdf.

Residential Waste Reduction

We support a waste ban for mattresses and textiles. Textiles are already easy to donate through other organizations. DEP has done a great job putting together a mattress recycling program. Mattress recycling options should be made available to all. MassDEP should analyze single stream vs. multi- or dual-stream recycling. We suspect that single stream has not been the panacea it was described to be. It has led to increased contamination of recyclable materials – in fact, Figure 2.1 in the SWMP indicates that paper and cardboard are still 18% of the waste stream. Also, it seems to be contrary to our carbon reduction goals to truck all of Springfield's recyclables to a single stream recycling facility in eastern MA when there is a dual stream Materials Reduction Facility right in Springfield. DEP's support and preference for single stream recycling should be seriously re-examined.

Commercial Waste Reduction

The draft SWMP outlines two strategies, and there is no mention of plastics as a priority material. This is unfortunate. We have hosted a series of "trash talks" to discuss actions we can take to reduce waste in our rivers, and many people have expressed worry about plastics in general, and the high plastic use in the health care industry. There is also much plastics waste in agriculture. The SWMP should target certain industries and develop waste reduction options.

Also, most of what is now considered consumer waste should be dealt with at the commercial waste level. This is true for the beverage industry, the snack industry, and the electronics industry. EPR programs could put the responsibility of disposal or recycling back to the producer.

Sludge Crisis in Massachusetts

Page 7 of the 2020 SWMP discussed sludge from wastewater treatment plants, yet there is no mention of it in the 2030 SWMP. Wastewater treatment sludge is not "solid waste" per se, but the limited places communities can send this sludge is getting very challenging and should certainly be on DEP's radar as a problem that needs attention at the state level.

Thank you for the opportunity to review and comment on the draft 2030 SWMP. I can be reached at adonlon@ctriver.org or [redacted].

Sincerely,
Andrea F. Donlon
River Steward

Connecticut River Conservancy, Andrea Donlon

Oral comment

My name is Andrea Donlon. I work for the Connecticut River Conservancy, a nonprofit organization based in Greenfield, Mass, but we operate in four different states. And we host a "source to sea" clean up every year to clear our waterways of trash. So that allows us to see some of the items that people have a hard time disposing of because there's a lot of illegal dumping and littering. I also live in Buckland, which is a rural town, and I'm the Buckland representative on the solid waste district for Franklin County. I'm not speaking on behalf of them, but I do go to the meetings and sort of understand some of the issues that the small towns are grappling with. I will be submitting comments in writing, but I don't have them ready today so these are sort of the thoughts that I'm thinking so far

In reading the plan, I'm really concerned that you're stopped reporting the total amount of trash and stopped separating it out by how much you recycle versus how much you dispose. You're only reporting what you're disposing, and I think we're missing a key part of data in terms of how much stuff are we generating over time. And then we used to focus on the recycling rate and that's fine too. You're not focusing on that anymore. But, at this time that China's stopped accepting our plastics, we're not seeing any of that data or how we are struggling with that. But it's missing, and just because we're not collecting the data doesn't mean the product alone has miraculously gone away, so I think it's really important to keep collecting and reporting on that information. Similarly, where are recycling items going? Someone mentioned the bottle plant that closed down. What's happening with paper? What's happening with these markets? It's really important that people know what's happening, other than just how much room we have in our landfills. The plan does have a lot of information that's outside of my area of expertise, but we see a lot of single use plastics beverage containers, plastic and Styrofoam beverage cups, and tires. I'm glad you're working on mattresses, and we'd really like to see extended producer responsibility for tires. Glad you're working on textiles, and Massachusetts should make them a waste ban item.

I would like to see the plan broken down to some sectors of businesses. Franklin Solid Waste District for a while was offering a collection for agricultural crop plastic, but they had to stop the program because there was no place to bring it. If DEP could work on something like that, that would be great, because even organically grown crops really rely on a lot of plastic. We host these forums called "trash talks" where people who've participated in our cleanup can come and talk about ways to reduce the amount of stuff we find in our rivers because we really would like to not have to clean out trash in our rivers every year. People are also concerned about medical waste and how much trash is generated by either home care or just when you go to the doctor and there's tons of plastic. It's understandable why that's the case, but there are organizations that are working to reduce the amount of waste that medical institutions generate. So I think the Master Plan could maybe do a better job about targeting some industries and working on that. The other thing that seems to be missing from this plan that was in the last one is the issue of sludge from wastewater treatment plants. My understanding of the issue is that it's really getting harder and harder to bring the sludge someplace, and I think that should be part of the plan, even if I don't know whether it's technically considered solid waste or not.

The other thing is, we've seen a lot more trash from homeless encampments, and there has been an increase in recent years in homelessness. I looked it up, and at the end of 2018 it was estimated that there are 20,000 people in Massachusetts who are homeless, many of them have no access to trash disposal. And it seems sort of like a social equity thing, even if it's not a top waste generator MassDEP should think about environmental justice and equal access to trash and recycling disposal.

And I think the other thing missing from this plan is tying into two really big global issues. One is the amount of plastic in our oceans. There's an estimate that there's going to be more plastic than fish by 2040 or 2050, and we really need to do our part. Massachusetts is a costal state. We really need to work on reducing the amount of plastic in our oceans. And then of course climate change. The Global Warming Solutions Act's 10 year progress

report did have a paragraph on increasing recycling rates in Massachusetts and how that would decrease greenhouse gas emissions. If we're not even tracking recycling rates, how are we going to be able to track whether we're meeting that and we are just drowning in plastic? It seems as though this plan is not inspirational or specific enough to really accomplish reductions. And our goal in 2010 was to reduce disposal 30% by 2020, and we're not meeting that. And so, the plan for the next decade doesn't speak to me on how we're really going to specifically accomplish our goals. So I think the DEP really needs to step back and work on fixing the problem with more specific things. And I know some of its outside of your control, but I do feel like communities and people were paying for disposal of this stuff that is being sold to us. Companies are profiting off of it. They can help pay for this.

Conservation Law Foundation, John Hite

Oral comment

Good evening; Thanks John, Thanks, Allie. Hi everyone, my name is John Hite, and I work with the zero-waste project at Conservation Law Foundation. To spare you all in the interest of time, I won't go into a deeper dive into the recent changes in recycling markets, but to me there have been three main takeaways.

The first is that we need to solve our recycling problem at home. China's 2017 decision and then 2018 move to ban recycled product imports really showed us how non-recyclable a lot of our material is. We were sending them loads of mixed plastic and paper contaminated with plastic and glass, and they pull out what had value and the rest would go into a Chinese landfill and into Chinese incinerators, so they said no more. And now that has kicked back to us here in the US. This has actually raised recycling costs for municipalities throughout Europe and Canada and the US, and here in Massachusetts.

And that's my second point that municipalities are really unable to handle the magnitude of our waste problem. When municipalities and towns and cities throughout Massachusetts are operating on fine budgets, they are not able to deal with the seismic global shifts that can happen in our recycling markets to make sure that our waste is managed well and effectively. Boston saw their recycling contract this past summer rise from a cap of $35 a ton to $150 a ton. That's over 400% increase. Worcester is paying 600,000 and contamination fees. This is not small money; this is big, big money.

And the third thing that we've learned from China's decision is that a lot of the products and packaging that are coming into our communities are not actually recyclable. That's the reason why the Chinese were sending them to landfills and incinerators, and why they're not taking them anymore. So the state has diversion goals: 30% diversion by 2030. We'd like to hopefully see that be a little higher. And, you know, companies like Procter and Gamble and Unilever have set voluntary commitments to use recycled content in their containers and packaging, up to 100% recyclable and 30% recycled content by 2030. However, these goals and DEP's goals of diversion and reduction won't be met with the status quo, and we really need some sort of dramatic meaningful change if we're going to get there. And John, you mentioned in your presentation at the beginning, extended producer responsibility for a couple different products: paint mattresses and carpets or paint electronics and carpets. And EPR (extended producer responsibility), which I can get into briefly in a second, is a way to lift some of that cost off of municipalities. I think that DEP really needs to be stronger in the Solid Waste Master Plan around extended producer responsibility and make clear the benefits that it could have for the towns and cities and taxpayers of Massachusetts. Briefly put, extended producer responsibility requires that the producers of a product–packaging, electronics, or mattresses–pay not only for the production and the sale but also pay for the disposal, or recycling of that product. These programs are already happening throughout the country. Massachusetts only has one extended producer responsibility program, just one for mercury thermostats. Any producer of mercury thermostats, way back when those were in houses, now has to pay to have those collected. It's a toxic material that towns and cities shouldn't have to figure out what to do with, and the producers of mercury thermostats now have to manage that. There are 31 states throughout the country and 118 different programs for paint, mattresses, pharmaceuticals, etc. We really need those programs here in Massachusetts. They'll help lift the cost of product management off of towns and cities. We could have extended producer responsibility for our

packaging. We can make sure that all of that packaging and recycling that's going into our recycling bins is actually recycled, and that that's not done at the cost of us the taxpayers.

And lastly, we could help reduce the toxicity of products. I know that DEP can't draft legislation and can't pass legislation, and that is what would be required to have extended producer responsibility systems and put the management of our recycling back on to producers, but there are things that DEP can do. We believe that the Solid Waste Master Plan is an important tool and important vessel for moving this stuff forward in Massachusetts. We would like to see more clear analysis on the cost effect that recycling is having on municipalities. There's precious little financial analysis throughout the Solid Waste Master Plan. And we think that it is vital and important that the Master Plan make it very clear how much municipalities, like Lakeville, are paying for their recycling and how much that's affecting the taxpayers. We would like to see more detailed analysis of extended producer responsibility systems including for packaging and the effect that that could have on the financial situation municipalities are facing. And lastly, we would like to see MassDEP put together a clear path for how MassDEP intends to make sure that the legislature ultimately will have to make these decisions and understands not only the need for extended producer responsibility from the municipal perspective, but the urgency of taking action on these policies. Thank you very much. Thank you.

Conservation Law Foundation, Kirstie Pecci

Oral comment

So thank you very much for holding this hearing tonight. I know it's tough to give up your evenings, and I appreciate all the hard work done. Conservation Law Foundation, where I'm from, works throughout New England to promote Zero Waste programs and to push back against polluting landfills and incinerators. I would like to commend the DEP. I know that I'm often very tough on all of you, but I do truly appreciate how hard your department works on these waste issues, especially as compared to many agencies and individuals I've come into contact with on this. You all put a lot of work into this, and it really shows. We just got –not to be mean–but we just got the New Hampshire plan, a biennial report, and we hadn't seen one for 10 years. I really appreciate how much work DEP manages to do with the limited staff that you have.

That being said, I think that this plan is excellent and has a lot of really excellent principles in it, especially around bulky waste, textiles, mattresses, and food. I think all the targets that you've put are very sensible, and it really made sense to look at the big tonnage items as you did, and cardboard which I know was another one on that list. That's fantastic. I do think that the plan can go further, and there are a couple specific things I will reference now, and we will go into greater length and detail in the written comments.

I agree with Vick from Clean Water Action's point earlier that 30%, 30%, 30% isn't how waste reduction disposal reduction tends to work in places where we've actually reduced waste. It is very important to target the low-handing fruit first, as Vic pointed out. We've also seen some great strides in the last 10 years, as I've complimented you on many times, around food waste, which was one of the best pieces of the last plan, and you really did a fantastic job with it. We're definitely front runners in the country on that issue, with the commercial food waste ban. However, a lot of the great ideas that were in the last plan didn't happen. And I think one of the reasons for that is that there's an idea that we're going to do them over the next 10 years, 20 years, or 30 years. So, to echo Nick's point, we should set a bigger, but tighter, goal: in other words, a 60 or 70% reduction over the next 10 years.

I would also argue that MassDEP has more power than you realize. Sometimes, under the Global Warming Solutions Act, for instance, if some of these goals aren't met, we will not be able to hit our global resolution goals either. So, I would say, for instance, pay-as-you-throw was just mentioned, and I'm a huge admirer of the pay-as-you-throw programs. MassDEP, in my opinion, has the authority to require pay-as-you-throw reporting and programs across the state for both residential and the commercial sector. The industrial, commercial, and

institutional sector as you know is probably responsible for 60% of the waste created in the state. We're not going to hit that until we start doing things like having sensors on dumpsters, so that that when the pickups happen and people will know what's being picked up and how much waste they are generating. At Boston University, one of the folks in charge over there told me they don't know how much waste they generate each year. That means that things need to change. So that would be the first thing, please institute pay-as-you-throw across the board. As you know, there are lots of different ways to do that, whether you call it SMART or PAYT, but there are a lot of good ways to make happen.

I would also say we should plan to phase out food from disposal entirely. I know it's a big push and maybe not all of it will actually be diverted, but considering the rural areas of the state and the different programs that we're seeing in suburban areas and in cities, I think that we really have a chance to push food out entirely. You've done a lot in that direction and I'm very heartened by what you're planning to do in that direction, but I think we can go even further and by 2030 not have food scraps in the waste in the waste system at all.

I would also argue very strongly, and will put this in detailed comments, the mixing of food scraps and sewer sludge–co-digestion–that we're seeing at wastewater treatment plants is sending us down the wrong path. If we're not careful, we'll end up with a system where we're processing our food with the toxic sewer sludge that has so many contaminants of emerging concern, such as PFAS. When you are working on the regulatory piece of that, I'm sure I'll be making comments at that point too, but I think that's an important regulatory change to be targeting as soon as possible. We want our food to be made into soil that can then be land applied and actually continue to be clean and have a sustainable circular system.

Ariela from MMA already mentioned the plastic single use piece of this, and CLF has been working very hard on this throughout the region, with different success in different states. Of course you've already seen the municipal successes that have happened, which we're also trying to be helpful on. I would love to see greater coordination between MassDEP and the legislature. There's been a lot of finger pointing from the legislature and we're not sure what to do, and you know we followed up on this, I know there's also a staffing problem. I recognize that there's a lot we can do on the plastic ban and regulation piece of this that is going to be absolutely crucial, once again, not only because we can't our food scraps clean if they've got plastic, you know straws and other food and other things in them, but then also on the climate issue. If the plastics industry were a country, it would be the fifth worst offender of GHG emissions, so unless we tell the mark on plastics, we're not going to be able to solve any of those problems.

Three points to finish up with. One, as you know John since you raised it in Boston, is that enforceability continues to be a problem with the plans. I think the environmental community would be delighted to try and help with that. We have been working to try and get more investment in MassDEP and the other EEA agencies, and the waste bans are not going to be enforced, obviously, unless there's adequate staffing. I would love to see triggers in the plan that speak specifically to getting at waste ban compliance. One in four loads fails, as you said, and it is reprehensible that 40% of our waste ban items recyclable. So, I'd love to help with that, and we'd love to hear ideas for ways to put triggers in the plan and maybe make that so that we're not saying the same thing we said 10 years ago in 10 years from now on enforceability issues.

I would also like to echo Vic's point regarding high heat technology. The EU bank just came out saying that they would not fund a new incinerator, I think it was in Hungary, because as soon as you build incinerators or any high heat technologies or chemical recycling or any of these false solutions such as pyrolysis or gasification, then zero waste programs go by the wayside and never become fully realized or realized at all many times. I think that the Tellus report that MassDEP commissioned in 2009 fantastically laid out why high heat technologies are more

polluting, wasteful, don't create as many jobs, and are inferior in every way to good zero waste solutions. I would lean on that document again. And similarly, the dirty MRFs and other "bring all your MSW to the floor and then they sort it out" solutions like Fiber Right and New Bedford. But if parallel products were able to move forward with a technology that would separate upfront or an AI technology, a system that would require separation at front of it, then the value of those goods could be optimized. That's something that I think the environmental community and CLF are very much behind. But once you break that egg and mix it up, you can't separate it out again. And the cardboard and all the other pieces of it lose their values, so I would think that, as Vic said, the definitions that the plan includes are very important. And the idea that we've seen through the duel/single stream battles and everything that's gone on with China is that separation is going to be key, if we want these materials to have value and have a sustainable, local, economically-sound system. We'll go into more detail in the comments, but I think that's very important.

Lastly, because I know that everybody wants to go home, the incineration piece is also a problem because as you know, DOER has proposed regulations that would allow greater subsidizing of the biomass, as well as incineration technologies. This is an exactly wrong direction to be going in, as I've already said high hear is always a bad idea. The facilities that they would be providing those extra funds to are some of the oldest and worst incinerators in the country as well. I know that the DOER is going to be looking specifically at the MassDEP solid waste master plan on this issue. So I would urge you to take a much stronger stand on incineration. We need to be phasing these facilities out, or capacity problem is not going to be solved. As was already said, it's not going to be solved by shipping these materials out or building landfills or incinerators; our capacity problem is going to be solved by us actually reducing how much waste we're producing and finding good circular systems.

And just so you know, on the same issue regarding incineration, Wheelabrator Saugus is now telling local elected officials in Revere and in Saugus that they're going to shut down that incinerator and build a new incinerator and provide host fees to Saugus and Revere as well. So they're saying yes this is an old incinerator, but let us keep running it, and that this is what's going to happen. That's not going to happen. With the Global Warming Solution Act and other pieces that are in place, the idea that new incinerators should be built is highly unlikely. And so I think that it's very important that MassDEP take a very strong stance on this issue, because local folks who aren't paying attention to the statewide or regional problem or technologies, would turn to this language and say "oh incineration is still on the table," and I think we need to be clear that it's really not going to be on the table, due to what's going on with greenhouse gases in general in our communities but also due to the Global Warming Solution Act and laws that we have in place, as well as the unification of the regional and national environmental communities on these issues.

That is all, but thank you so much for your time and for all your hard work, and again, lots of great stuff in the plan, I just would like to see a little more enforceability and some triggers so that if something can happen at DEP, there's somebody to help or hired immediately to help you out with it. Thank you.

Conservation Law Foundation, Kirstie Pecci and John Hite

Written comment

Dear Mr. Fischer,

Conservation Law Foundation ("CLF") is a nonprofit, member-supported, regional environmental organization working to conserve natural resources, protect public health, and promote thriving communities in the New England region. Through the Zero Waste Project, CLF aims to protect New England communities from the dangers

posed by unsustainable waste management practices by promoting policies and programs that reduce waste disposal in all forms. The Draft 2020-2030 Solid Waste Master Plan sets out steps taken by the Massachusetts Department of Environmental Protection ("MassDEP") over the past decade to reduce waste and paint the path to 90% reduction by 2050. While the Draft 2020-2030 Solid Waste Master Plan explains what MassDEP has done over the past decade and intends to do over the next, the plan does not go nearly far enough.

Reducing waste disposal is urgent and necessary. Waste disposal is expensive, harms human health, and releases climate damaging emissions. Single use and poorly designed products are filling our oceans, communities, and disposal facilities. Meanwhile, the current recycling system has proven woefully incapable of reducing our waste. Cities and states around the U.S. and countries around the world have begun to face our waste disposal problem and make meaningful changes to reduce it. Massachusetts should join them. Through careful planning, investment, and oversight, MassDEP can lead the Commonwealth towards a timely goal of Zero Waste through a stronger 2020-2030 Solid Waste Master Plan.

CLF requests that MassDEP include the following in the 2020-2030 Solid Waste Master Plan ("SWMP"):

1. A title changed to "2020-2030 Zero Waste Master Plan";

2. Comprehensive fiscal analysis of municipal recycling costs;

3. Clear and consistent metrics to be used by MassDEP in the coming decade;

4. A requirement that all the Commonwealth's municipalities adopt bag based PAYT or SMART programs within the next 5 years;

5. Aggressive EPR goals, and a clear explanation of extended producer responsibility, possible programs, and the benefits of EPR to municipal governments and taxpayers;

6. Outline the process by which the MassDEP will educate the Massachusetts Legislature on the need for EPR;

7. Opposition to food waste processing in anaerobic digestion at wastewater treatment plants as a viable form of food waste diversion;

8. Establish specific minimum benchmarks in the Master Plan for the number of inspectors needed by MassDEP to enforce waste bans. Establish specific monthly and yearly benchmarks for inspections MassDEP must conduct so that there is public and internal agency accountability to assist MassDEP develop a waste ban compliance regime;

9. A commitment in the Master Plan to disclose waste ban violators publicly and in prominent locations to create a deterrent for generators, haulers and facilities;

10. Concrete steps in the Master Plan to (1) strengthen the third-party inspection regime and; (2) issue Notices of Non-Compliance (NONs) for generators, haulers and facilities when a third-party inspection reveals banned substances at landfills and facilities;

11. A specific commitment in the Master Plan to hold haulers and facilities equally accountable for the pickup, transfer and disposal of banned substances.

I. The 2020-2030 SWMP should be renamed the 2020-2030 *Zero* Waste Master Plan

The 2010-2020 SWMP was subtitled, "A Pathway to Zero Waste." While MassDEP did not achieve many of the goals outlined in the 2010-2020 SWMP, the Plan was predicated on the elimination of solid waste disposal in the Commonwealth. Not only is the goal of Zero Waste absent from the 2020-2030 SWMP, but that goal is both more

urgent and possible than in the previous decade. MassDEP should set the tone for the next decade of waste management by renaming the 2020-2030 SWMP the *Zero* Waste Master Plan.

ANALYSIS

II. The 2030 SWMP should include comprehensive fiscal analysis of municipal recycling costs.

The financial burden for managing solid waste is primarily on municipalities throughout New England manage waste and recycling, not state governments. In Massachusetts, residential waste is handled via one of three options: the municipality operates a transfer station, the municipality hauls residential trash and recycling from curbside, or the municipality or homeowner hires a private hauler to collect curbside trash and recycling. Most multi-family buildings, and almost all commercial waste, is managed by a private hauler. Regardless, in Massachusetts municipalities spend millions of taxpayer dollars each year to ensure that trash and recycling are handled appropriately.

While cities and towns can save money when they implement programs that reduce, compost, or recycle waste, many do not have the experience, resources, and staff to launch them. MassDEP grants help offset program costs but are not enough to encourage widespread municipal adoption. Furthermore, most cities and towns receive information about their solid waste costs from waste companies who lose profit if municipalities generate less waste.

Municipalities have little control over what happens to recyclables even as they take on responsibility for the cost or collection of recycling. A larger percentage of products and packaging are made from plastic or multi-material that make them difficult to recycle. Single-stream curbside recycling collection, widely adopted over the last decade, makes sorting difficult-to-recycle packaging even harder. China's 2018 National Sword exposed the many flaws in our recycling system and the damages done to public health and the environment in Southeastern Asia.1 Of utmost importance, it is now clear that much of our packaging waste is either not recyclable or it is prohibitively expensive to do so.

The cascading failures of the recycling system, from terrible product and packaging design to ineffectual single-stream collection, have fallen almost entirely on towns and cities.2 In response to the problem, municipalities are told by haulers and recycling processors to clean up their recycling through intensive education. Local governments can take some action to reduce especially disruptive materials by passing plastic bag and polystyrene bans, but bans are not a systemic solution. Larger scale solutions that address the whole waste stream are needed to improve recycling and lift the burdens of a stumbling recycling system from towns and cities.
Please note that new landfills and incinerators will not solve the financial problem faced by municipalities, but instead perpetuate it. For example, a proposed incinerator in Connecticut would drive disposal costs up to at least $140 dollars a ton immediately.3 The long-term answer to the cost crisis is not more solid waste facilities, but zero waste programs.

CLF recognizes that MassDEP cannot pass legislation. However, more in-depth research and analysis into the fiscal impacts of municipal recycling is needed to explicate the current and future impacts of recycling on municipalities. MassDEP should include a fiscal analysis in the 2030 Solid Waste Master Plan itself and set out an action plan to further develop analysis of municipal costs over the next decade.

III. The 2030 SWMP should outline clear and consistent metrics to be used by MassDEP in the coming decade.
Historically, MassDEP has used a variety of different metrics to measure waste, and due to staffing constraints, the Department has stopped tracking certain elements. This is unacceptable. The Department did not release any data for 2013, and reports have sometimes been delayed from publication for years. The 2010-2020 SWMP included certain metrics like the percentage of C&D recycled. However, that data is no longer published, making it impossible to measure progress towards reduction goals. Similarly, data from nearly 100 cities and towns, including disposal tonnages, are not collected or reported.

The lack of clear information has hampered progress towards tackling our solid waste problem. CLF recommends MassDEP commit to the following in the 2020-2030 SWMP, at a minimum:

1. Track pounds per person per year of municipal solid waste disposed of for the residents of Massachusetts, both including C&D and excluding C&D every year. This is the best measure of progress toward a circular economy, is easy to track and communicate to the public, and incorporates waste reduction, reuse, and consumption activities;4

2. Require all municipalities to report their waste totals to MassDEP, as most already do, per the survey on the MassDEP website below5;

3. Require that large institutional, commercial, and industrial sector to report disposal totals to MassDEP;

4. Require Material Recycling Facilities, transfer stations, composting, anaerobic digestion, and other recycling facilities to track the amount of material diverted to their facilities, and the percentage of that total that actually gets processed for recycling or in an anaerobic digester/composted;

5. MassDEP will publish data and a report documenting developments by June 30th of the following year (for example, the 2020 report would be due by June 30, 2021); and,

6. MassDEP must commit to continuing to collect and process this information through 2030. While it may determine that other data should be collected as well, MassDEP cannot abandon any metrics, or its goals will be impossible to achieve or even track.

REDUCTION

IV. MassDEP should include in the SWMP a requirement that all the Commonwealth's municipalities adopt bag based PAYT or SMART programs within the next 5 years.

Unit-based or variable-rate pricing systems charge residents for MSW collection based on the amount they throw away, a.k.a. Pay As You Throw ("PAYT"), or Save Money and Reduce Trash ("SMART") programs.6 The term PAYT broadly captures a variety of approaches for implementing unit-based pricing, and communities seeking to enact such programs should tailor their design to the needs of that community. Well-designed PAYT programs should incentivize waste reduction and increase recycling rates within residential communities. A recent University of New Hampshire study found that New Hampshire communities with PAYT programs experienced reductions in their household solid waste disposal ranging from 42-54%.7 MassDEP calculates that in 2015, the average solid waste generated per household in PAYT communities within Massachusetts was 36% less than in non-PAYT communities.8 While that figure is substantial, only about 29% of residents currently live in communities with PAYT programs.9 Common Options for PAYT Programs:

1. *Overflow*: A resident's solid waste disposal fee covers everything that can fit into their trash bin, but they have to pay extra to dispose of anything that cannot fit into that bin. This system targets residents who chronically dispose of large amounts of waste. Ensuring the success of this program requires that the default bin size advance the communities waste reduction objectives. If the bin is too large, the program does not incentivize waste reduction, because residents will not overflow their bins. Example: Chicopee, MA (called "First Barrel/Bag Free")

2. *Variable Rate Carts*: Residents select their bins from a range of sizes, with the larger bins carrying higher disposal costs. This program style can have comparatively higher startup costs because many (if not all) residents receive new bins, and the agency/department in charge will have to manage the ongoing operational costs of the variable bin system. These programs are also susceptible to residents purchasing smaller bins, and then stuffing them to the point of overflow to avoid the cost increase of utilizing a larger bin. Example: Amherst, MA

3. *Special Tags*: These programs measure waste by the bag and utilize special tags, stickers, or twist ties to track the amount of waste residents dispose. These programs encourage waste reduction, but they can be difficult to monitor requiring that waste collectors be much thorough throughout the collection process (i.e. stickers get placed on the wrong bags). Example: Milton, MA

4. *Special Bags:* Residents dispose of their waste is bags specially selected by and purchased the city/jurisdiction. This system does not require any major changes to the waste collection infrastructure/process, and the bags can be sold locally at stores or municipal facilities. Example: Worcester, MA

Three options for PAYT program financing are utilized in Massachusetts:

1. *Bag Based*: Waste disposal is partially financed through the purchase by residents of official PAYT disposal bags. Jurisdictions can eliminate or reduce existing flat fees for waste disposal or lower property taxes to compensate.

2. *Tag/Sticker System*: Like bag-based systems, residents can purchase stickers from retail stores or municipalities. Resident can then utilize whichever bags they prefer.

3. *Variable Rate Carts*: Residents pay a fixed fee based on the size of their bin.

Some empirical studies, along with anecdotal evidence, suggest that PAYT can increase illegal dumping, especially in communities with large portions of transient populations like college or vacation towns.10 Different PAYT regimes are more susceptible to certain types of illegal dumping as indicated above. However, substantially more industry research 11 on this topic strongly suggests that PAYT does not exacerbate illegal dumping, especially when paired with adequate education and enforcement efforts. Accordingly, both the EPA12 and New England Waste Management Officials Association (NEWMOA)13 support PAYT as a means of reducing waste without increasing illegal dumping over the long-term. Research conducted by the Institute for Local Self Reliance and by Waste Zero (see graphs below) indicate that Bag-Based PAYT systems have historically yielded the best results. **CLF recommends MassDEP encourage Bag-Based programs in their new regulations**.

Further, CLF also provides links to more information, a summary of other recommended best practices, and a summary of EPA's recommended PAYT elements in Exhibit A, attached hereto.

IMPROVED RECYCLING

V. The 2030 SWMP should include aggressive EPR goals, and a clear explanation of extended producer responsibility, possible programs, and the benefits of EPR to municipal governments and taxpayers.

CLF strongly urges MassDEP to extensively expand the 2030 goal of extended producer responsibility ("EPR") program implementation in the 2030 Solid Waste Master Plan. EPR programs are a proven and effective way to lift waste management costs from taxpayers, ensure waste is managed well, and push producers to improve the design of what they place on the market. The Commonwealth must take meaningful steps to adopt well-designed EPR programs, and MassDEP has an important role to play in moving the Legislature towards the goal of passing EPR legislation. CLF asks that at minimum MassDEP include in the 2030 Solid Waste Master Plan:

> *Extended producer responsibility ("EPR") programs shift the burden of collection and cost from taxpayers and municipalities to the producers of products. Requiring producers to manage the end-of-life collection of their products and requiring that they recycle or sustainably care for what they put on the market incentivizes producers to redesign their products to be safer and more recyclable, leading to higher recycling rates. EPR programs already exist throughout New England for paint, batteries, mattresses, electronics, pharmaceuticals, and products containing mercury. Vermont, Maine, Connecticut, and Rhode Island each have several programs, while Massachusetts only has three – pharmaceuticals, mercury thermometers, and beverage containers through the deposit return program. These programs not only*

efficiently ensure that electronics, paint, mattresses, and batteries, are recycled, they are also saving taxpayers millions of dollars each year. New programs for packaging waste are under consideration in Maine. If Massachusetts wishes to remain a leader on the environment and move towards a circular economy, adoption of additional EPR programs must be a central goal.

To ensure that effective EPR programs are developed, CLF requests that MassDEP recommend to the Legislature the policies listed in Exhibit B, attached hereto.

VI. The 2030 SWMP should clearly outline the process by which the MassDEP will educate the Massachusetts Legislature on the need for EPR.

MassDEP cannot pass legislation, but MassDEP can play an important role in elevating the urgent need for systemic changes like EPR programs through the 2030 Solid Waste Master Plan. CLF strongly urges the MassDEP to take the lead on EPR and play on an active role in explaining the function, value, and need for EPR programs for various products. Ensuring that legislators and the public understand municipal costs and solutions like EPR is vital to successful passage of laws.

VI. The 2030 SWMP should clearly outline the process by which the MassDEP will educate the Massachusetts Legislature on the need for EPR.

MassDEP cannot pass legislation, but MassDEP can play an important role in elevating the urgent need for systemic changes like EPR programs through the 2030 Solid Waste Master Plan. CLF strongly urges the MassDEP to take the lead on EPR and play on an active role in explaining the function, value, and need for EPR programs for various products. Ensuring that legislators and the public understand municipal costs and solutions like EPR is vital to successful passage of laws.

VII. The 2030 SWMP should not promote food waste processing in anaerobic digestion at wastewater treatment plants as a viable form of food waste diversion.

The co-digestion of food waste with sewage sludge at wastewater treatment plants ("WWTP") throughout the Commonwealth presents a growing and urgent threat to waste reduction in Massachusetts. Whether sourced from household disposal units, "Insinkerators," or Waste Management's Commingled Organics Recycling ("CORe") facility, co-digestion with sewage sludge destroys the value of clean food scraps. Promoted as a source of renewable energy and a beneficial end-use of food waste, the result is a resource intensive process that expands the volume of an already toxic material. WWTPs filter many of the chemicals that are dumped into sewer systems but trap those chemicals in the solid output from anaerobic digestion. The so-called 'biosolids', or sludge, are then land-applied, spreading the toxic chemicals and pollutants found in sewage sludge onto our fields and into our food.

The regulations overseeing WWTPs are designed to mask the danger of sewage sludge. Massachusetts WWTPs follow EPA guidelines for Class 'A' biosolids and the Massachusetts code on residuals and biosolids (310 CMR 32.00). Both restrictions require land applied sewage sludge to be free from elevated levels of 10 heavy metals, dangerous pathogens, and in Massachusetts, no more than 10 parts per million of polychlorinated biphenyls (PCBs). But thousands of other chemicals can exist in sewage sludge that are not tested for, and subsequently are spread on our fields.14 Sewage sludge - whether digested or not - can contain any of the 80,000 synthetic chemicals used by industries; bacteria and viruses; pharmaceuticals; detergents; and household chemicals put down an industrial, commercial, or residential drain.15 They include steroids and antidepressants, detergents, flame-retardants, and the disinfectant chemical triclosan, some of which are connected to cancer, developmental harms, and endocrine disruption.

The primary benefit ascribed to processing food waste in WWTPs is the energy produced in the form of biogas. For this reason, anaerobic digestion is one step higher on the EPA's hierarchy of disposal. But while processing food waste at WWTPs does generate biogas, the entire operation is an energy sink. Energy is needed to slurry food waste by a processor like the CORe facility, transport it to the WWTP, heat the anaerobic digesters, and lastly, dry

the high-liquid digestate. The digestate is then transported to a facility where it is dried into pellets. Food waste processed at WWTPs generates biogas, but only to offset the tremendous energy needs of the wastewater treatment system.

Treating wastewater through anaerobic digestion is an expensive process, and often at or near the top of municipal expenses.16 Compared with traditional composting, food waste processed at WWTPs is incredibly expensive. Compost tipping fees are generally below $40/ton, while Waste Management charges communities like Cambridge $65/ton to tip food waste at the CORe facility. The tipping fee would be much higher, but state and federal energy grants combined with municipal funding from taxpayers hides the true cost of processing sewage sludge.17 Sending food waste to WWTPs adds a financial burden to communities sending food waste to WWTPs and to the taxpayers of Massachusetts.

Recent reporting by the Boston Globe highlights another area of concern for WWTPs – chemicals in the PFOA/PFAS family.18 Not surprisingly, the fertilizer sold by Massachusetts Water Resources Authority contains high levels of PFAS. This is not the exception, but the rule. Many WWTPs accept landfill leachate, another concentrated source of PFAS, as also reported recently by the Boston Globe.19 This problem underscores the need to keep food separate from sludge and phase out municipal solid waste landfills.

The MassDEP should not promote food waste processing in WWTPs as a viable form of food waste diversion. Instead, the 2030 Solid Waste Master Plan should include a goal in which only separated anaerobic digestion and composting operations that are free from pollutants are considered "diversion."

BETTER WASTE BAN ENFORCEMENT

The Draft Plan acknowledges a serious problem of compliance with waste bans: one in four or 26% of trash loads at waste facilities contains banned substances. The 2013 Solid Waste Master Plan identified one in five loads containing banned substances. This shows that **there has been no reduction in the illegal disposal of banned substances in 7 years. A major strategy shift is needed.** The Draft Plans states on pg. 17 that MassDEP will vaguely "increase the amount and frequency of inspections". CLF requests the following changes:

VIII. The 2030 SWMP should establish specific minimum benchmarks in the Master Plan for the number of inspectors needed by MassDEP to enforce waste bans. It should also establish specific monthly and yearly benchmarks for inspections MassDEP must conduct so that there is public and internal agency accountability to assist MassDEP develop a waste ban compliance regime.

Many commercial waste generators do not even know waste bans exist. Many companies do not even know when they are violating a waste ban. When generators are warned or fined, their biggest concern is public perception of the violation. Publicly disclosing violators may be one of the simplest and most effective strategies to increase waste ban compliance by not only creating a meaningful deterrent, but simultaneously raising awareness of waste bans. This should not only be applicable to generators, but haulers and facilities that do not do their part to prevent banned substances from reaching the landfill.

IX. The 2030 SWMP should include a commitment in the Master Plan to disclose waste ban violators publicly and in prominent locations to create a deterrent for generators, haulers and facilities.

Third party inspections of landfills and facilities are mandated and regulated by 310 CMR 19.018. These inspections provide crucial information to MassDEP and are regular eyes on the ground to monitor and report compliance with waste bans. The Draft Plan references a continued use of these third-party inspections to inform MassDEP's own inspections yet says nothing else. We urge MassDEP to develop new and concrete ways to strengthen third party inspections and leverage the work they are already doing in order to reverse the very low compliance with waste bans. When a third-party inspection reveals a clear record of banned substances being disposed, this should be sufficient to issue a Notice of Non-Compliance.

X. MassDEP should include concrete steps in the Master Plan to (1) strengthen the third-party inspection regime and; (2) issue Notices of Non-Compliance (NONs) for generators, haulers and facilities when a third-party inspection reveals banned substances at landfills and facilities.

Waste bans are not just the responsibility of generators who dispose of banned substances in their bins. Haulers who collect the banned substances and facilities that receive them are equally responsible under 310 CMR 19.081. MassDEP has focused the majority of its efforts on generators on the basis that enforcement should be at the source. However, the legislation intended a three-prong approach against generators, haulers, and facilities. Issuing fines to haulers and facilities will create incentive to be vigilant and properly train their staff. We urge MassDEP to enforce the existing legislation and directly hold haulers and facilities responsible when they allow a generator's banned waste to reach the end of the line.

XI. MassDEP should include a specific commitment in the Master Plan to hold haulers and facilities equally accountable for the pickup, transfer and disposal of banned substances.

We believe the above additions to the Master Plan will enable a dramatic increase in state-wide awareness and compliance with waste bans. The current egregious number of 26% of loads containing banned substances is unacceptable. The Draft Plan's goal of decreasing this rate to 10% looks to be a desire for improvement, but not a strong enough commitment.

If the Master Plan identifies clear minimum benchmarks for inspections, a commitment to disclose violations publicly, a better use of third-party boots on the ground, and establishes a true shared responsibility amongst haulers and facilities, a strong culture of waste ban compliance in Massachusetts will happen. Waste bans are a key tool to not only build a strong recycling and composting industry in Massachusetts, but also to eliminate waste at our over-capacity landfills and facilities.

We urge that MassDEP strengthen the Master plan show a much greater use of, and commitment to this key tool of enforcing waste bans.

CONCLUSION

The 2020-2030 Solid Waste Master Plan is an opportunity for MassDEP to detail the viable and needed path to Zero Waste in Massachusetts. Some of the tools necessary to achieve a goal of Zero Waste are already in place, and existing policies and programs around the world set an example for the Commonwealth. The Draft Plan currently does not meet the standard needed to move Massachusetts towards a Zero Waste future. However, adopting CLF's recommendations included in this letter will help transform the 2020-2030 Solid Waste Master Plan into a *Zero* Waste Master Plan.

CLF appreciates the opportunity to submit public comments and stands ready to answer any questions MassDEP may have.

Very truly yours,
Kirstie L. Pecci
Director, Zero Waste Project, CLF
John I. Hite
Policy Analyst, Zero Waste Project, CLF

Conservation Law Foundation Email

Written comment

Dear DEP,

Massachusetts is at a crossroads: We bury, burn, or export 5.6 million tons of trash each year which threatens the health of our communities, is a waste of resources, and costs taxpayers money. The Baker Administration's draft

Solid Waste Master Plan for the next decade largely stays the course. The Plan is weak, slow, and leaves room for bigger landfills or new incinerators. Instead, I urge you to create a path to Zero Waste for Massachusetts by adopting regulations, laws, and programs to reduce, reuse, redesign, recycle, and compost our waste. We ask that the Administration divert the vast majority (over 75%) of our state's trash - which is recyclable or compostable - by 2030. We can and must achieve Zero Waste.

Received from:

Alan Emmet
Alan Papscun
Albert Tahhan
Alexander Dugan
Amy Armitage
Amy Henry
Amy McCoy
Amy Scheuerman
Amy Shroff
Andrei Smarandoiu
Anton McInerney
Azin Nezami
Barry Nelson
Betsy Sowers
Bill Sloan
Bruce Russell
C Mellor
Carole Smudin
Cheryl Snyder
Christin Walth
Christine Roane
Christine Smith
Claudia Garcia
Constance Graham
Cynthia Snow
Deborah Barolsky
Deborah Reiter
Denise Kong
Diana Abrashkin
Donna Austin
Dylan Jones
Edith Griffin
Edward Souza
Eileen Craffey
Elaine de Reyna
Elizabeth Gifford
Ellen Curren
Erin Malloy
Fanny Whitman
Frank Smith
Frederick Hewett
Fronà Vicksell
Gabriel Robinson
George Gordon
Gordon Fellman
Gordon Hall
Gretel Clark
Jack Beusmans
James Vander Poel
Janey Kolodner
Jay Caplain
Jennifer Thornton
Jessica Berger
Jessica McGeary
Jim Strickland
Joan Clark
Joel Peterson
John Kelly
Judith Crowley
Judith Embry
Judith Fitzpatrick
Judith Fitzpatrick
Judith Thibeau
Julie Breskin
Julie Garland
Karen Grossman
Karen Rapallo
Karen Slote
Kari Vann
Kathleen Byrnes
Kathleen McHendry
Kathleen Reine
Kenneth Kavanagh
Kevin Chen
Kirk Hesemeyer
Laney Goodman
Laurie Gates
Laurie Toner
Laurie Zastrow
Leonard Sorrell
Louise Quigley
Margaret Ris
Margot Lenhart
Marie Lefton
Martha Nathan
Mary Kay Elloian
McKenzie Blair
Melinda Armistead
Melissa Dorval
Melissa Eusden
Melissa Gardel
Michael Deangelis
Nancy Burger
Nancy Mulrey
Neal Watson
Noreen Michaud
Pat Fuller
Paul and Cynthia Phillips
Peggy Kocoras
Peter Haroutian
Peter Kahigian
Peter Smith
Peter Townsend
Priscilla Guiney
Randy Marchand
Rebecca Backman
Rebecca Evans
Rebecca Rose-Langston

Resa Blatman
Richard Edelman
Ricky Stern
Robert Saunders
Rosemary Hewett
Russell Hawkins
Ruth Stankiewicz
Ryan Keane
Sam Scoppettone
Samuel Toothaker
Sara Sezun
Sarah McKee
Sarah Wolff
Shela Hadley
Shelley Hartz
Spyros Braoudakis
Stephen Metcalf
Steven Kennie
Susan Ellis
Suzanne Englot
Teresia LaFleur
Thomas Desellier
Thomas Miller
Tiffany Haverfield
Todd Atkins
Tracy Jones
Vincent Da Forna
Wendi Quest
Wendy Roberts
William Kadish
William Parr
Wolfgang Burger
Andrew Fischer
Betsy Taylor-Kennedy
Carol Tinkham
Carolyn Britt
Catherin Farrell
Christina Gregg
Colleen Casey
Daniel Belachew
Peter Pease
Tania Castro-Daunais
Chris Mahan

Dennis Rogers
Diana Keohane
Don Mallinson
Elaine Fischer
Elizabeth Antanavica
Elizabeth Newton
Eric Fisher
Franca Curry
Gail Fleischaker
Gary Thaler
Gwyneth Loud
Jahlina Carter
James Hadscroft
James Humphreys
Javier Garcia Raya
Jeanne Gallahue
Jenny Dunning
John Craig
John Reinhardt
Joshua Mahoney
June Davenport
Karen Kennedy
Kenneth Walker
Kristen Gallant
Laura Graye
Lauren Abraham
Laurie Toner
Leda Zimmerman
Lee Caras
Leyla Schimmel
Liam Rimas
Linda Cutts
Lorraine Gray
Margaret Russell
Marilyn Conrad
Marjorie Greville
Mary Blake
Mary Fitzsimmons
Mary Gard
Maureen Hagan
JoAnne Larsen
Regina Galat-Skey
Sue Klem

Mike McCool
Mindy Maxwell
Nancy Hammond
Nancy McRae
Nancy Woolley
P Jacquelyn Schmidt
Peter Smith
Rebecca Bennett
Richard Vincent
Robert MacDonald
Robert Sargent
Scott Carlisle
Walter North
Chris Lynch
David Dow
Deborah Coviello
Dorothy Anderson
Ernesta Kraczkiewicz
Heather Tausig
Jeremy Duffield
Marc Hoffman
Marcia Hart
Marshall Carpenter
Martha Auerbach
Mary Stucklen
Michael Miller
Michael Stone
Priscilla Smith
Timothy Van Egmond
Tina McBride
Annette Klein
Betty Cawley
Beverly Feldman
Brock Cordeiro
Donna Englander
Gregory Caplan
Jennifer Brehob
Karen Chin
Karen Gravina
Loraine Ferrara
Tracy Wallace
Chelsea Peoples
Denise Lytle

Karen Chin Marie-Laurie Grimaldi-Marvel

Container Recycling Institute, Susan Collins

Written comment

See Appendix A.

Covanta, Scott Henderson

Written comment

Dear Commissioner Suuberg;

Thank you for the opportunity to provide comments to the Solid Waste Master Plan. We appreciate the Department engaging stakeholders on the important issues related to solid waste management and recycling.

As you know, the solid waste system in the Commonwealth is under considerable pressure from recycling markets disappearing, due in large part to actions in recycling markets overseas, to ever shrinking disposal capacity in the Commonwealth and the broader northeast region. Without action, the long-term stability and sustainability of the system is in question.

While Massachusetts has one of the highest recycling rates in the country, China's decision to limit the material that they are accepting is having a significant impact on cities and towns across the Commonwealth. The enforcement of these limitations by China referred to as "National Sword", bans a large number of recyclables, including various plastics and unsorted mixed papers, and sets a much tougher standard for contamination levels on separated recycled materials. This has resulted in recycled materials piling up because there is nowhere to economically send these materials.

In addition, Massachusetts has lost 1,377,000 tons of in-state disposal capacity because landfills have filled up and closed. This loss has occurred in just the past couple of years. Looking ahead, more landfills closures are expected and by 2024 there will be almost no landfill capacity for municipal solid waste remaining in Massachusetts. The chart below shows the ever reducing in-state disposal capacity.

Waste-to-energy (WTE) facilities in Massachusetts are the backbone of the disposal options, handling approximately 70% of the in-state disposal capacity. With the landfill capacity diminishing, WTE facilities are become even more crucial. Unlike landfills, WTE facilities do not fill up and close, however waste-to energy facilities have also faced a number of challenges. Some of these facilities are likely to close because of the economic challenges that have been mounting in recent years. The loss of an existing WTE facility will have a number of negative effects, including dramatically increasing waste disposal costs to local governments and businesses, an increase in emissions from the waste sector, and a reduction of in-state renewable energy generation.

The collapse of the wholesale price of electricity, because of low natural gas prices, has negatively affected all renewables including Waste-to-Energy facilities in Massachusetts and around New England.

Currently, the seven Waste-to-Energy (WTE) facilities in Massachusetts process 3,250,000 million tons of waste per year to produce enough renewable energy to power 212,000 homes. WTE facilities employ 489 people directly and support 1,441 jobs in the Commonwealth for a total economic output of $591,600,000 a year, while reducing greenhouse gas emissions by more than 2.2 million tons of CO2 equivalent.

Recognition of WTE as a source of GHG mitigation and inclusion of WTE as an eligible source of carbon offsets, follows the long established recognition of the Intergovernmental Panel on Climate Change (IPCC)1, the Clean Development Mechanism (CDM) of the Kyoto Protocol, the California Department of Resources Recycling and Recovery2 and the European Union3. The World Economic Forum has identified WTE as one of 8 technologies likely to make a significant contribution for a future low carbon global energy future.

While the Massachusetts waste sector is facing a number of challenges that need to be addressed, there are also a lot of great opportunities that can come out of this situation. We believe with the right policies and reinvestments, Massachusetts can take a giant step forward in the next decade to increase recycling and reduce overall emissions impacts from solid waste management.

Thank you again for allowing stakeholders to participate fully in the process of developing the Solid Waste Master Plan. We would welcome a meeting to discuss with you or your staff the current situation on any of these matters in greater depth.

Sincerely,
Scott Henderson
Senior Director, Government Relations
Covanta

Darby Marketing, Debra Darby

Written comment

Dear Deputy Division Director Fischer,

Thank you for this opportunity to provide public comment to the Massachusetts Department of Environmental Protection (MassDEP) Draft 2030 Solid Waste Master Plan. I support the draft Solid Waste Master Plan policy framework for reducing and managing solid waste in Massachusetts.

The Solid Waste Master Plan is intended to be a strategic 10-year plan with the objective to look out to 2050. I'm aware that the action plans from the Solid Waste Planning Committee and the Organics Sub-Committee will continue to develop these working documents.

• *Recommend for the Committee members to generate in-depth strategic plans including mission statements and actionable goals. The goals should include specific pilots and projects that utilize the existing infrastructure and encourage the private and public sectors to work together to solve problems, demonstrate that the goals can be achieved, collect data and develop case studies. We need to work together to solve the state's waste capacity shortage.*

I. Food Waste and Compostable Papers are 32% of the Municipal Solid Waste Stream.

The state policy should improve current waste management practices by classifying organics (all food waste and compostable papers) as a recyclable material to reduce pollution, protect our land, air and water, and human health. Massachusetts should lead the way in ensuring that organics be classified as a recyclable with the perspective around organics as not something to be diverted, but something to be recycled.

This brings the discussion and thinking around organics as not simply diverting the material from incineration or landfill, but to a higher-value use. Classifying organics as a recyclable material provides a flexible and responsive state policy that allows for innovation at state and local levels involving infrastructure challenges and costs.

Massachusetts should continue the process of educating both public and private sectors about the value of organics diversion from incineration or landfill, and encourage them to provide the incentive to stakeholders to place organic waste as high as possible on the waste hierarchy.

Key challenges to Source Separated Organics (SSO) collection:

- Designing a program that is affordable, repeatable and convenient for the end-user
- Haulers are under pressure to provide organics collection; costs including equipment, labor and fuel
- Educating both the end-user and haulers on the cost/benefit of organics recycling; being clear that the goal, regardless of modest cost, is worth the effort

Over-emphasis on diversion rate or quantity can negatively impact the quality (i.e. contamination) of source separated organics. The real emphasis should be on the opportunity to balance both by raising the educational level of all parties involved. This involves a paradigm shift in the current behavior of all parties.

Diversion goals can best be reached by clear legislative leadership that acknowledges these challenges and encourages creative solutions to achieving them, including the Organix Co-Collection™ method that continues to develop in Minnesota as a regional solution for Ramsey Washington Counties[1].

• *Recommend and encourage municipalities to develop regional initiatives to share, learn and build out programs focused on organics diversion/source separation of organics for recycling, climate resiliency and carbon reduction plans.*

• *Recommend to create a satellite office of RecyclingWorks in Essex County or in the North of Boston area to support the foreseeable growth in organics diversion and recycling programs.*

II. All Organics Should be Diverted from the Current Linear Disposal Model of Incineration or Landfill.

Organic waste is the single largest component in the municipal solid waste stream. Removing organic waste from incineration or landfill involves a paradigm shift in how organics are collected and recycled. The US EPA defines organic waste to include paper, cardboard, yard trimmings, wood and food waste. In the EPA's July 2018 Sustainable Materials Management report that cites its 2015 data set, food waste was 15 percent of the 262 million tons of trash generated in the US.

Food rescue is expanding. However, the current economic model of commercial food donations as tax deductible while the non-profit food rescue operations that pick up the food donations do not charge for their services is not a sustainable practice. The cost of transporting food from the donor to a food recovery organization is common to all food donation but one that is difficult to cover.[3]

I have interviewed a local food pantry that receives donated wasted food from commercial entities. A large portion of this donated food cannot be served fresh or as a prepared meal because the food, primarily fruits and vegetables, arrives too soggy or overripe. This results in the food pantry with the additional organic waste that they didn't generate and now must pay a hauler to remove.

In addition to the value of feeding people and feeding animals, we need to replenish our soils. In Essex County alone, the next generation of young farmers is growing. Compost will become a valuable nutrient to help sustain local small farms that feed local families, as well as regenerate healthy soils in our communities throughout Massachusetts. We also need to expand commercial (non-farm based) composting facilities and educate surrounding communities that these compost facilities are valuable resource management operations.

III. Organics Processing Infrastructure Should include Regional Composting and Dry Anaerobic Digestion Facilities.

The MSW Consultants Massachusetts Materials Management Capacity Study[4] reports there is limited excess capacity in the agricultural compost, anaerobic digestion (AD), and animal feed facilities. More importantly the Large and Small compost facilities are already at capacity. There is limited capacity for organics processing in-state. What additional capacity the study presumes will be available is in the form of wet AD processing most likely on-farm.
Massachusetts should broaden its portfolio for managing food waste, compostable papers, compostable food service ware, yard waste and debris. Residential source separated organics, which tends to be drier than commercial food waste, and along with yard waste, cannot be properly processed through wet AD on-farm or wastewater treatment facilities.

The food slurry preparation process requires the necessary components of trucking, depackaging, energy, water, preprocessing, pumping into trucks, and transportation to a wet AD facility. It is a resource intensive operation. That work and capital expenditure makes possible a very limited amount of methane production for the waste water treatment facility --the energy value of which is barely in excess of the energy demand of the preparation processing facility.

The wet AD facility also requires the additional component to 'finish' the remaining biosolids digestate before it can be land applied. Now with the PFAS contamination issue, it is best to keep the valuable organic material (food waste) separate from wastewater biosolids.

This begs the question of why such an expense is justifiable if the process of composting food waste can be achieved with better efficiency and less capital outlay in the industrial (commercial) compost facility in the first place.

By comparison dry (high solids) AD, as the name implies, does not require the additional water for its process and no preprocessing of the organic material is necessary. Dry AD has similar benefits in terms of biogas generation to wet AD, and the digestate still has remaining value for the composting process to produce nutrient-stable soil products. Earlier I toured the Dry Anaerobic Digestion System in San Luis Obispo, California. The AD facility turns organic waste into carbon-neutral biogas and high-grade natural compost.

The rush to prioritize the organics-to-energy mantra has not been beneficial to a productive discussion of real processing options or environmental benefits. Here again the necessary component of a commercial composting facility goes begging, when the benefits of compost as a saleable commercial end product of organic waste processing with all of its value in soil replenishment, carbon sequestration, water retention, scalable processing options, and job creation are ignored.

Residential organics and commercial generators with front-of-house food service are better suited for commercial composting as well as dry anaerobic digestion. We will need an organics infrastructure to recycle 570,000 tons of valuable organics material.

IV. Develop Markets for Compost Use.

Massachusetts can lead by example to build markets for compost use through environmental procurement guidelines and policies that require the purchase of compost, and specify that compost be purchased locally, which helps minimize transportation and drives demand in the local market.
Residents should be educated to use compost products instead of synthetic fertilizers for lawns and gardens. Both public and private entities can apply compost to repair the degradation of ecosystems caused by human activities and variations in climate.

The US Composting Council has been active for over 40 years and represents an enormous asset of acquired knowledge, equipment and technical expertise in an ever-growing field. Massachusetts can benefit from some of these resources afforded by this industry association to solve this portion of the solid waste need.

V. Organics Processing and Technical Training are Needed.

• Recommend the MassDEP should bring back the position of Director, Organics Material Management/Composting Program. (To build upon the early successes of Sumner Martinson.)

• Recommend to launch a composting school to train and develop professionals in proper composting operations including site planning, materials and recipe management, and selling nutrient-stable compost. Composting is a biological process that is different from solid waste management practices.

The Massachusetts Compost School might be a partnership between the Essex North Shore Agricultural and Technical School, Massachusetts Department of Environmental Protection, and the Massachusetts Department of Agricultural Resources. Similar to The Maine Compost School, which is a collaborative program between the University of Maine, the Maine Department of Environmental Protection, and the Maine Department of Agriculture, Conservation and Forestry.

In October, I received technical certification for professional compost site operations from the Maine Compost School. So I am familiar with the program structure, syllabus, and operation. I am available to write the business plan and can work to bring the collaborative partners together.

Respectfully, Debra Darby Organics Recycling Sustainability Consultant

Darby Marketing, Debra Darby

Oral comment

Good morning. Thank you for having a public hearing today. I will provide written comment on the Solid Waste Master Plan draft because I am in the organics recycling and composting space. But what I wanted to do today is just share a story. I volunteer at one of our food rescue operations in my community, and I met with the executive director to talk about organics recycling and how much it costs and how easy it is for a food rescue organization. They also serve meals and provide a little store for people to come pick up food, and the issue that came up that when this organization goes and rescues food from the donors, whether it's a grocery store or other type of a food donor, a significant portion of that food is mushy or yucky. And so that has to immediately go into the nonprofits' organics recycling bin, which they pay a hauler to come and pick up. Is there a way where maybe we can push this issue up to make it more visible to the donors, let's say it's the supermarket, so maybe they can help pay for the nonprofit's organic waste hauling or processing costs?

This really good organization does food rescue, recycles textiles, and has repair shops, and they're operating on a very tight budget for taking in rotting food that they can't repurpose or donate, and they're paying for it. And it's my understanding that when a grocery store donates their wasted food, it might be a tax write off for them. This might be something to look at when we dig a little deeper into our reuse strategic planning. Thank you.

Dawn Thompson

Written comment

To Whom It May Concern,

Once companies are held accountable for the product packaging to be made of completely or mostly recyclable/biodegradable materials, the problem will be greatly reduced.

Hold businesses to a higher standard, to be ecologically aware and accountable by placing stringent guidlines and laws on using recyclable/biodegradable materials for packaging their products.

The general public needs to be responsible, as well, but it begins with the businesses.

Regards

Dick and Sandy Blaha

Written comment

Good evening,

Great idea about setting up a Solid Waste Disposal Plan. It is long overdue.

But we also need to address the elephant in the room - disposal of plastic material - and hope that will be in the plan as well.

The Cape Cod Times article addressed the challenges for commercial restaurants, hospitals and universities but did not include individual citizens. Collectively we can have a huge impact in the products we choose to use and how we dispose of the material. For a Solid Waste Disposal plan to be successful, everyone needs to be involved.

We look forward to hear about your progress,

Dick and Sandy Blaha

Don Mallison

Written comment

the waste master plan includes many ideas and proposals. I would like to see an emphasis on community wide pay to through trash recovery for those communities doing single stream. Better yet would be separating glass, metal and plastic from general waste.
Thank you,

Don Mallinson
[redacted]

Elizabeth Saulnier

Written comment

Mr. John Fischer

My name is Elizabeth Saulnier and I live at [redacted].

I attended the public meeting on Nov. 19, 2019 at DEP's Lakeville Office.

I would like to see the Massachusetts move to a zero waste policy. Waste to energy is not the solution to our problem. It encourages people to continue to trash items rather than recycle them. I see this in places that have dumpsters for their residents. I would suggest that there be a recycling dumpster to assist those that would recycle if it were convenient.

New Bedford currently collects yard waste and composts it. I would like to see a food composting program considered in the state plan. I know I throw out unused produce that I would happily bring to a recycling facility if it were available. I realize that commercial food waste is a bigger issue but small changes with residents could help.

I would also recommend a cleared "best by" or "use by" labeling on food products. The old adage of "when it doubt throw it out" contributes to throwing away perfectly good food. Perhaps DEP could influence the state to enact legislation that helps the consumer know when a product is beyond a healthy shelf life.

Your first draft report listed Parallel Products, Duchaine Blvd., New Bedford, Ma as a permitted facility. This error was corrected but everyone may not have seen that retraction. So far, Parallel Products has not been a good neighbor. Their glass recycling facility was to house the glass inside a building and instead, they stored it outside under multiple carports and the broken glass reached the roof. They also encroached into the buffer zone with this broken glass. They were cited by the New Bedford Conservation Commission for this violation and after several visits by Conservation Agent Sarah Porter, Parallel Products finally cleaned up their glass. This violation occurred during the permitting process. I'm concerned that if they are considered the solution to the state's waste problem, the state will overlook violations if they are not closely monitored.

Thank you for considering my comments.

Fergus Marshall

Oral comment

Good evening and thank you for that wonderful presentation. I think you covered a lot of bases on that. A lot of what I'm going to say is really not pertaining to this directly, but in general. But what are we doing to ourselves and our children and our grandchildren? In the past 30 years we've used more resources than we have in all of civilization. Twenty years ago, we here in Massachusetts had a ballot initiative that would have required the producers of products to use sustainable sensible packaging products. The packaging industry was up in arms and immediately started a campaign to discredit, and smear it with threats of higher prices and lack of technology and spend millions of dollars to defeat it. Similar bills and initiatives have been swept away by the influence of corporate campaigns and lobbying. Another such case was in California. We're never going to solve this problem until we get out of the paradigm of business as usual. We live in extraordinary times and time is running out. We treat our atmosphere and our bodies of water as dumping grounds. And as long as there is a permit, you can do whatever you want. I hope that much consideration is taken not just for a 10 year plan, but a generation plan. Native indigenous peoples got it right when they consider the effects their choices will have on the seventh generation. It's hard for me to see looking at the state of the world today that we care at all about our children and grandchildren. I hope we choose wisely. It's all about consumption. Thank you very much.

Global Alliance for Incinerator Alternatives (GAIA), Denise Patel and Mariel Vilella

Written comment

Dear Mr. Fischer:

The Global Alliance for Incinerator Alternatives (GAIA) and Zero Waste Europe (ZWE) submit the following comments on the development of Draft Massachusetts 2030 Solid Waste Master Plan ("the Plan").1 GAIA is a worldwide alliance of more than 800 grassroots groups, non-governmental organizations, and individuals in over 90 countries. GAIA and our members are global leaders in advancing visionary, win-win solutions to waste and pollution that protect the environment and human wellbeing and build strong, participatory local economies in regions across the world. In the US, we represent a leading movement to advance zero waste solutions that render toxic incinerators and other harmful waste disposal systems unnecessary. Zero Waste Europe's vision is to empower communities and change agents from around Europe to redesign their relationship with resources, to adopt smarter lifestyles and sustainable consumption patterns in line with "circular" resource management.

We recognize the progress the Commonwealth of Massachusetts has made to reduce per capita disposal and overall food waste, made important efforts to provide grant funds for communities, municipalities, and businesses to support waste reduction and recycling efforts, and increased inspections to ensure greater compliance.

The ten-year update of the Plan creates an opportunity for the state to establish itself as a national leader on zero waste and climate. The state should set ambitious goals such as:

1) A full phase out incineration and other forms of waste to energy.
2) More ambitious reduction targets on a stricter timeline.
3) Separate collection and full diversion of organic waste.
4) Increased incentives and enforcement actions.

In 2018, the European Union adopted a circular economy package that embraces these goals through a combination of high ambition and mandatory waste management policies. The Circular Economy Package outlines new legislation aiming at recycling 65% of total municipal waste by 2035, providing a good model for the Commonwealth of Massachusetts. The targets could have been more ambitious, but overall the legislation contains positive model policies and goals to move towards a zero waste circular economy. For example, the European Union has set targets for the Circular Economy that include mandatory separate collection of biowaste (organic waste like food and yard scraps) which is between 35-50% of municipal solid waste (MSW), strong separate collection obligations for all waste streams, and clear producer responsibility obligations.2 Most importantly, the Circular Economy Package sets a new vision to maximize material recovery.

While we hope that the Commonwealth of Massachusetts will set ambitious waste management goals aiming to achieve zero waste, we also express the following concerns regarding the Plan:

1) The draft Plan will compromise long-standing Massachusetts waste infrastructure policy on building new incinerators.

Massachusetts has had a moratorium on building incinerators since 1989 due to concerns that such facilities emit toxic air pollutants, are dangerous to nearby communities and businesses, and are costly to municipalities and taxpayers. These concerns are still valid thirty years later: a 2019 national report from The New School found that 79% of MSW incinerators in the U.S. are located in communities of color and low-income communities, disproportionately exposing these communities to increased air pollution and other health hazards.3 In addition, the report found that the currently operating stock of MSW incinerators face serious economic challenges, including high operating and maintenance costs, a volatile revenue stream, and dependency on public taxpayer dollars.

Specifically, on page 10, the Draft Plan notes the State would: *"Allow permitting of up to 350,000 tons of additional annual management capacity in the form of innovative waste to energy or other integrated waste management technologies and allow replacement of existing waste to energy capacity with more advanced technologies that reduce emissions and increase separation of recyclable materials."*

Strong waste management policy should focus on waste reduction and the elimination of incineration. In the last decade we have seen the European Union move away from incineration. It is true that in the early 2000s, some countries in the EU invested heavily in a waste management model based on incineration. This was due to the approval of the Landfill Directive in 1998, which required improvement of landfills, including strict requirements not to landfill biodegradable waste and mandates pretreatment of waste before being landfill. However, the Directive did not provide guidance as to what to do and resulted in increased incineration, especially in the North of Europe, which is generally richer and more industrialized.

Today it is acknowledged that this model is obsolete. European institutions have come to terms with the fact that waste-to-energy incineration is counterproductive to their resource-efficient policies. By 2011, the European Commission launched the Roadmap to a Resource Efficient Europe (COM(2011) 571) with new ambitions for the EU to move towards a Zero Waste Europe.4 The roadmap had a strong push towards "residual waste close to zero" and it underlined that "incineration with energy recovery should be limited to non-recyclable materials, landfilling

is virtually eliminated and high recycling is ensured." In 2017, the European Commission provided guidance to Member States on how to cope with these problems. It recommended for high capacity countries to: 1) Make incineration more expensive via a tax, 2) Phase out public support schemes for WTE and use funds more efficiently to support upper tiers in the hierarchy, and 3) Put a moratorium on any new facilities and decommission old ones. For countries with low capacity, the Commission recommended improved separate collection obligation and recycling with a long-term targets.

Moreover, the Renewable Energy Directive (2018) was revised and finally approved by the European Parliament and European Council in June 2018 to phase-out subsidies to incineration and the EU recently excluded waste-to-energy incineration from a list of economic activities considered 'sustainable finance', those that can make a substantial contribution to climate change mitigation and which do no significant harm to other environmental objectives such as transition to a circular economy, waste prevention and recycling.6 Recognizing that incineration undermines environmental targets, the European Investment Bank recently pulled financing for a controversial waste incinerator in Belgrade, Serbia. Recent European Union regulations are now removing subsidies for new and existing incinerators and improving other policies to reduce waste generation and expand composting and recycling. Massachusetts should similarly remove renewable energy subsidies for incineration and other financial and policy incentives that enable incinerator companies to secure capital investments as it phases out incineration.

Draft Plan, Pages 21-22: *"Massachusetts has a projected capacity shortfall of 700,000 tons by 2030, even assuming we meet our 2030 waste reduction goal. Massachusetts will retain capacity for municipal waste combustion within the existing 3.5 million tons of annual capacity. The need for this capacity will be reassessed every five years. Any replacement capacity would be required to meet tighter emissions standards and increased efficiency standards."*

Waste-to-energy incineration does not coexist with recycling in harmony. A recent study from Eunomia, commissioned by the Nordic Council of Ministers, highlights that the Nordic nations – Denmark, Finland, Iceland, Norway and Sweden – are not on track to meet the recycling targets of the EU revised Waste Directive, because of their overreliance on incineration.7 Despite the common opinion that Nordic countries have some of the most developed and mature waste management systems in Europe, Zero Waste Europe has highlighted several times the problems of incineration capacities in the region, such as Denmark and Sweden which appear to be, once again, one of the main obstacles towards the achievement of the recycling targets.8,9,10 Indeed, the report by Eunomia identifies a mismatch between the current waste infrastructure and the infrastructure required to meet the recycling aspirations outlined in the European directive, as most of the Nordic countries are currently between 16 to 32 percentage points below the 2035 target, with Finland, Iceland and Norway well off track from meeting even their 2020 target of a 50% recycling rate.

Incinerators are not high-tech, safe or reliable. The multiple accidents from incinerators in industrialized countries show that this technology is not reliable. Key examples of incinerators not complying with the emissions regulations and having severe operational issues are the one in Barcelona, Lithuania, REC in Netherlands and Norfos in Denmark.11,12,13,14 Lately, both the European Commission in its Taxonomy report and the European Investment Bank have agreed that incineration can harm recycling targets and acted accordingly, the latter pulling finance from the incineration proposal for Belgrade.

Draft Plan, Pages 21-22: *"Also retain the allowance for the permitting of up to 350,000 tons per year of additional capacity through innovative non-combustion technologies such as gasification and pyrolysis. This will help to ensure adequate management capacity while improving the environmental performance of our waste management infrastructure."*

According to the Plan, MassDEP wants to allow for 350,000 additional tons of capacity for "innovative waste to energy solutions" and waste incineration. Incineration includes more than mass burn and refuse derived fuel. Gasification and pyrolysis attempt to convert solid waste into synthetic gas or oil, followed by combustion of the gas or oil. Due to the use of combustion, these technologies are regulated in U.S. and EU as waste incinerators. In 2017, GAIA documented $2 billion of failed investments in commercial gasification and pyrolysis that were closed or were canceled before commencing operations.16 Technical and economic challenges for gasification projects

include failing to meet projected energy generation, revenue generation, and emission targets. Gasification plants also have historically sought public subsidies.

These limitations of gasification and pyrolysis incineration are similar to those noted by Tellus Institute in the 2008 Assessment of Materials Management Options for the Massachusetts Solid Waste Master Plan Review.17 In that Assessment, Tellus Institute accurately predicted that these facilities wouldn't succeed in the state, noting:

> "Several factors lead us to conclude that gasification and pyrolysis facilities are unlikely to play a major role in MSW management in Massachusetts by 2020. Key issues informing this conclusion include: the lack of experience in the U.S. with large-scale alternative technology facilities successfully processing mixed MSW and generating energy; the long lead times to plan, site, construct, and permit such facilities; the significant capital costs required and the loss of solid waste management flexibility that is associated with the long-term contractual arrangements that such capital-intensive facilities require; and the relatively small benefit with respect to greenhouse gas emissions compared to diversion or landfilling."

2) The timeline and targets lack ambition.

We understand that it will take time to develop systems to move the state to zero waste. The draft plan sets a target of 90% diversion by 2050, and only 30% by 2030. However, other states have set higher goals. California has a goal of recycling 75% of its waste and does not allow for waste as fuel (incineration) to be counted as recycling.18 Connecticut's goal is 60% by 2024, and Minnesota set a combined recycling and organics goal for metropolitan counties of 75% by 2030.

In addition, over 70% of Massachusetts' waste stream is compostable or recyclable (materials like paper, plastic, glass, and metal). Prioritizing systems to reduce these materials could lead to a 70% reduction by 2030. California has mandated a 50% reduction in organic waste disposal by 2020 and a 75% reduction by 2025 to reduce short lived climate pollutants. These policies require local jurisdictions to implement plans for expanded waste reduction, source separation, and composting. In July 2020, the state agency CalRecycle will analyze progress towards these targets and will begin enforcement and penalties by January 2022. Together these initiatives create extensive co-benefits for the climate, public health, and the environment. Local jurisdictions are taking the initiative to reduce waste further through local disposal-free dining ordinances, already being implemented in Berkeley and Palo Alto, and nearing approval in San Francisco.22,23

Reducing waste generation is increasingly well recognized as core to zero waste. The 2018 C40 Zero Waste Declaration has been signed by dozens of leading cities, including Boston (as well as Los Angeles, New York City, and Philadelphia).24 In the declaration, cities pledge to advance towards zero waste cities by:

1. reducing the municipal solid waste generation per capita by at least 15% by 2030 compared to 2015; and
2. reducing the amount of municipal solid waste disposed to landfill and incineration by at least 50% by 2030 compared to 2015 and increase the diversion rate away from landfill and incineration to at least 70% by 2030.

Similar action, taken at the state level, would ease the conversion of these city-level commitments to action for Massachusetts cities, like Boston and Cambridge, that have set zero waste goals.25

3) The draft Plan should require separate collection and processing of all food and yard waste by 2030.
Food and yard waste from homes and residences amount to almost 2 million tons, or just under one-third, of the state's waste stream. The Massachusetts DEP's Commercial Food Waste Ban led to the diversion of approximately 280,000 tons of food waste per year through donation, compost, and anaerobic digestion. However, that still leaves behind 80% of organic waste. Massachusetts should set the achievable goal of 100% organic waste diversion by 2030. This can best be achieved through the creation of organics collections systems to most effectively collect the waste and create jobs.

Reducing food and yard waste yields climate benefits via multiple mechanisms. First, keeping organic matter out of landfills eliminates the primary source of landfill methane emissions. This is achieved by reducing waste generation and composting the remaining organics in backyards, community compost sites, and large-scale composting operations, as well as anaerobic digestion of organics. In the next stage of handling these materials, the application of compost on soils leads to long-term carbon storage. Recent university life cycle studies of compost production and application show that "composted manure and plant waste led to large offsets that exceeded emissions, saving upwards of 55 metric tons of CO2 per acre per year."26 Additionally, application of compost results in multiple soil health benefits, including drought and flood resiliency due to improved water storage capacity.

The Spanish province of Pontevedra, which includes 61 northern municipalities, had an extremely low waste separation rate of only 9%, leaving the remaining 91% to be transported more than 100 kilometers away to incinerators or landfills. To shift from this unsustainable, centralized and expensive waste management system, and to comply with the EU recycling obligations, the province launched a project named "Revitaliza" which built a decentralized, community-led composting system that resulted in the province locally composting more than 2,000 tons of biowaste in just 3 years with participation from just two-thirds of the province's municipalities.27
The project relied on three key factors:

- A suitable location for the composting process adapted to the area's specific needs and context,
- The design and implementation of an effective monitoring system to ensure the success of the process, by identifying and solving issues that arise throughout the implementation phase, and
- A strong communication plan.

4) The Plan should set clear goals for incentives, enforcement, and penalties.
Currently, 1 in 4 waste loads contain significant materials that are banned from disposal in landfills or incinerators. If the Commonwealth of Massachusetts increased inspection and enforcement to find these waste loads, the proposed 30% reduction by 2030 goal could be exceeded by 40% simply through enforcement of existing waste bans. In addition, incentivizing waste haulers, material recovery facilities, and municipalities to improve waste prevention and recycling can have a significant impact on waste reduction. For example, Contarina, a waste management company serving 50 municipalities and more than 554,000 inhabitants in the districts of Priula and Treviso in Northern Italy, became the best performers in waste prevention and recycling in a wide area in Europe after the local government banned incineration from the waste management system in 2005.28

In addition, the local and regional government established a combination of good political will and commitment to continuously improving the system, transparency through a shared database among stakeholders, great source separation policy, and waste reduction incentives through a Pay-As-You-Throw (PAYT) system. As a result, separate waste collection reached 85%, with peaks around 90% in some municipalities, ranking far above the national average (42%) while maintaining low waste management costs (€178/year/household on average). To improve this already winning system, in 2015 Contarina set to open a Material Recovery and Biological Treatment (MRBT) plant which reduces the final residues to only 46.5% of the total residual waste.

5) Continued reliance on waste to energy undermines Massachusetts climate goals.
It's clear that strategies promoting waste to energy incineration could seriously undermine Massachusetts' efforts to reduce climate change emissions and prevent Massachusetts from achieving its goals under the Global Warming Solutions Act. All forms of incineration also have serious consequences for the climate. The carbon intensity of energy produced through incineration is nearly 2 times greater than the carbon intensity of the current EU average electricity grid intensity and has significantly more adverse climate impacts than conventional electricity generation from fossil fuels such as gas.29 Moreover, a number of reports indicate that much of what is currently used as incinerator feedstock could instead be recycled or composted, resulting in carbon savings and other environmental benefits. However, incinerators put or pay contracts lead to justifying increasing quantities of waste.

We look forward to your response.

Sincerely,
Denise Patel Mariel Vilella
U.S. Program Director Director of Global Strategy
Global Alliance for Incinerator Alternatives Zero Waste Europe

International Sleep Products Association, Ryan Trainer

Written comment

Dear Mr. Fischer,

The International Sleep Products Association (ISPA) is the trade association for the mattress industry. We represent mattress manufacturers and companies that supply components and services to the mattress industry. Among other things, ISPA and our members have devoted substantial resources for over 30 years to addressing the challenges of recycling used mattresses. Toward that end, in 2013 ISPA created a non-profit entity called the Mattress Recycling Council (MRC) to design, implement and operate mattress recycling programs required by state laws, currently in California, Connecticut and Rhode Island.

Each of those state programs is now fully funded and operational and are successfully recycling increasing volumes of discarded mattress. By the end of this year, MRC is on track to have recycled over 6 million mattresses and box-springs since its inception, and to recycle 1.8 million units in 2019 alone. Furthermore, ISPA established MRC so that other states that enact mattress recycling laws that are similar to those that exist today can be easily implemented and added to MRC's structure.

The Massachusetts Department of Environmental Protection (DEP) has released its Draft 2030 Solid Waste Master Plan (the Draft Plan), which lays out several initiatives intended to reduce the number of mattresses sent to landfills and incinerators in Massachusetts. Among other things, Page 5 of the Draft Plan notes that "More than 60 municipal grantees have recycled more than 70,000 mattresses through MassDEP's Mattress Recycling Incentive Program, diverting almost 2,000 tons from the solid waste stream since 2016" (emphasis omitted). Several times in the Draft Plan, DEP proposes to build on this achievement through regulatory actions that will ban discarded mattresses from disposal, with the expectation that such bans will incentivize additional recycling.[1]

On page 26 of the Draft Plan, DEP estimates that 3,118 tons of mattresses were disposed of in the Commonwealth in 2018 and sets a goal of reducing that amount by 935 tons by 2030. The Draft Plan also recommends that DEP work with the legislature to enact extended producer responsibility laws for discarded mattresses (as well as other products). Draft Plan at 10.

ISPA supports the Draft Plan's general goal of substantially reducing the number of used mattresses sent to landfills. Furthermore, ISPA (along with MRC) is prepared to assist the Commonwealth in its efforts to increase mattress recycling and reduce the tons of mattresses disposed of annually.

Nevertheless, we have a number of concerns with data and recommendations cited in the Draft Plan. Furthermore, we urge DEP to thoughtfully consider the potential ramifications of its goals and to make clear that no mattress disposal bans should be implemented unless and until a clear strategy is in place for establishing a practical, financially sound and appropriate statewide mattress recycling program.

1. 2018 Mattress Disposal Data Appears to be Understated

ISPA respectfully urges DEP to review its mattress data on page 26 of the Draft Plan because it appears to understate the weight of mattresses disposed in the Commonwealth in 2018. In the Draft Plan, DEP estimates that 3,118 tons of mattresses were disposed of in 2018. Based on MRC's experience operating mattress recycling programs in three states, however, as well as DEP's own data on its website, it appears that Massachusetts residents should annually discard mattresses that weigh roughly four to five times this amount.

Specifically, a study that MRC conducted shows that the average weight of a mattress is approximately 55 pounds per unit. Based on national mattress sales data that ISPA compiles annually, as well as mattress discard rates that MRC has encountered in other states, we would expect that the number of mattresses discarded annually in Massachusetts to be roughly 473,000 units, equivalent to approximately 13,000 tons.[2] Moreover, DEP's Mattress Recycling webpage estimates that "Massachusetts residents discard approximately 600,000 mattresses and box springs annually,"[3] which would equal approximately 16,500 tons (at the average weight of 55 lbs/unit). By comparison, the 3,118 tons of mattresses cited by DEP in the Draft Plan would only equal approximately 113,000 mattresses.

As noted above, grants provided through DEP's Mattress Recycling Incentive Program have apparently funded efforts by over 60 municipal grantees to recycle more than 70,000 mattresses, diverting almost 2,000 tons from the solid waste stream since 2016. Although it is not clear exactly what impact such municipal recycling had on the 2018 disposal data, it does not appear to be nearly enough to bridge the gap between the 3,118 tons cited in the Draft Plan and the just over 13,000 tons that we would expect (or 16,500 tons that the 600,000 units cited on DEP's website would weigh).

Therefore, in order that the recommendations proposed in the Draft Plan are based on as accurate information as possible, ISPA urges DEP to review the basis for the mattress disposal data on page 26.

2. Additional Details Are Needed to Explain How the Draft Plan's Proposed Disposal Bans Will Encourage More Recycling, and Not Simply Result in Massachusetts' Waste Being Exported to Neighboring New England States.

We applaud the results that the Commonwealth and over 60 municipalities have achieved since 2016 in using grants provided through DEP's Mattress Recycling Incentive Program to start local mattress recycling efforts. However, the Draft Plan is silent as to how its proposed mattress disposal bans will result in additional recycling capacity that will be sufficient to dismantle all of the 600,000 mattresses that DEP estimates are discarded annually.

We are concerned that the mattress recycling goals set in the Draft Plan will fail unless the Commonwealth has in place a well-defined strategy for creating a financially sustainable long-term means for supporting a mattress collection and recycling system that is capable of steady growth. For example, we respectfully urge DEP to amend the Draft Plan to address the following subjects:

- When does DEP plan to impose mattress waste bans between now and 2030? How are the policy details of those bans and their timing established?
- How many mattresses will be diverted annually from disposal by those bans?
- The Draft Plan assumes that the bans will stimulate additional mattress recycling. But are those expectations realistic? How exactly would that happen?
- Does DEP intend at least to maintain current funding levels for its Mattress Recycling Incentive Program, and to increase funding between now and 2030 to meet the additional 930 ton mattress diversion goal set in the Draft Plan? If so, how would that be accomplished?
- What regulatory actions will DEP take to make sure that the proposed disposal bans do not result in the diverted mattresses actually being transported from Massachusetts to neighboring states, rather than being recycled in the Commonwealth? What written and regulatory assurances can DEP provide its neighboring states that it will take action to prevent those states from having to pay for the disposition of Massachusetts' discarded mattresses?

We note that solid waste management capacity strategies identified in the Draft Plan include "allowance for the permitting of up to 350,000 tons per year of additional capacity through innovative non-combustion technologies such as gasification and pyrolysis," because those technologies will provide "adequate management capacity while improving the environmental performance of our waste management infrastructure." Draft Plan at 22. ISPA

supports such efforts because these technologies have the potential to provide viable recycling options for converting products like discarded mattresses into new materials. We would welcome the opportunity to work with DEP and others to examine the feasibility of using these technologies as they concern mattresses and evaluate their environmental benefits as compared to existing recycling and solid waste disposal options.

3. The Draft Plan Should Make Clear That No Mattress Bans Will Be Imposed Until a Statewide Mattress Recycling Program is Operational.

If DEP is intent on achieving the 2030 goals set forth in the Draft Plan and the 2050 90% diversion goal, we urge Massachusetts to endorse the approach that the states of Connecticut and Rhode Island have taken in establishing statewide mattress recycling programs in their jurisdictions. The statutory and regulatory model that those states have established has created systems that collected a total of 7,840.1 tons of mattresses during their last fiscal year.

By any measure, these programs have been successful. They are financially sound and are growing. We anticipate that similar results could be achieved in Massachusetts if the Commonwealth were to adopt this successful model. Furthermore, adopting this model in Massachusetts would likely allow MRC to achieve in New England economies of scale and other regional efficiencies that should help all participating states achieve better and more efficient recycling outcomes.
ISPA and MRC are prepared to work with DEP and the legislature toward this end. Those efforts would include building on the successes that DEP has achieved to date with its local grant program.
In taking this approach, however, it is critical to appreciate that although disposal bans for mattresses could help support a statewide mattress recycling program in Massachusetts, such actions should be taken *only after* such a recycling program is operational and ready to accept the volumes of mattresses that such bans would generate. For that reason, we respectfully urge DEP to modify the Draft Plan accordingly.

In closing, we note that ISPA's commitment to this kind of initiative is evidenced by our support for S.2388, a resolution now pending in the Massachusetts legislature that would require a study to evaluate the feasibility of mattress recycling in the Commonwealth. The bill would create a special commission to study the impact of end-of-life management and disposal of mattresses in Massachusetts. ISPA supports this legislation because we think that the results of such a study will help inform policy makers as they address these important issues.

Thank you for your consideration.
Sincerely,
Ryan Trainer
ISPA President

International Sleep Products Association, Ryan Trainer

Oral comment

My name is Ryan Trainer. I'm president of the International Sleep Products Association, which represents the mattress industry as well as the Mattress Recycling Council, which we established in 2013 to administer three state mattress recycling programs that we operate in Connecticut, Rhode Island, and California. I'm here to speak to the mattress-specific parts of the proposed Master Plan. I thank you for the opportunity to be here today. I realized that a lot of thought has been put into the plan. I just want to offer quickly three general points.

The first is we are concerned that the plan's estimate of mattresses disposed in the Commonwealth of around 3,100 tons annually is substantially understated, based on our experience in other markets, knowing what the mattress market is like, and what the discard rates are in other states. We estimate that the true discard rate is somewhere in the 13,010 ton rate. So we think that the plan has understated it by a factor of four. I don't know what the source of that information is–I gather it is part of it is based on an analysis of solid waste coming into

some of the facilities in the state. But we are very concerned that the understatement will distort what your long term goals are and that the long term goals should be recalibrated based on what we think the actual numbers are. I realized that the recycling efforts here in the state have resulted in roughly 70,000 units being diverted from disposal over the last three years, but still that's only a drop in the bucket in terms of that the gap between the 3,000 figure cited in your report or your plan and the 30,000 figure that we estimate for the state.

The second comment is that we are concerned that the proposed mattress landfill band could have serious repercussions, unless there is a well-defined strategy for dealing with those discarded products. The plan that I read did not have many details there. I don't think it's quite the sort of thing where if you build it they will come. I don't think the banning the mattresses from the landfill will necessarily result in more recycling. Perhaps some thought has been given to that, and we would urge you to modify the plan to reflect that.

The third point is that we support statewide recycling of mattresses. We have a system that works well in other states, and we would be glad to work with the department and with others in the state to try to develop an appropriate plan for Massachusetts. Mattress recycling involves the transport and handling of a fairly low value product at the end of its useful life, and you don't want to be exporting it to other states. You want to be handling it locally and getting the value out of it. We understand it's a problem in landfills. And we feel that there are responsive ways to take care of that in a cost efficient way. And we would welcome the opportunity to talk to you about how to do that. But we would urge you to have those strategies well defined before you implement the landfill band. I was interested to hear the gentleman who just spoke talk about the export of your trash to other states. You're going to have a lot—thousands and thousands of tons of trash in the form of mattresses being exported to other states. As I said, it's a bulky product that would not be efficient from a carbon footprint standpoint. So those are my three comments. Thank you for the opportunity. I appreciate it.

International Waste Petroleum, Adam Burkitt

Written comment

See Appendix A.

Joe Costa

Oral comment

I know you said you wanted to stick with the Master Plan, which I think its fair game because the Master Plan highlighted Parallel Products. So my issue with this is where it was listed, and it was said it was a mistake, was it mistake? I don't know, we have the perception when you're against it that it's kind of an inside deal with the state someone is wants to push it through. Now, I know a lot of people say oh it's not in my backyard, I understand this problem is solid waste problem. But the issue is New Bedford is the number six most of burdened community Massachusetts, and that was in the Conservation Law Foundation report. This site that was highlighted in your report is right in the residential area; it's going to be impacting everyone. You have PFAS chemicals, which is coming up for the EPA and I'm sure you're all aware of this, silica from construction, five times more deadly than asbestos and kills a lot faster. Silica that's in drywall, that's in construction material, that's in people's backyards. So when people do their report for the DEP, they need to do their due diligence, it's in an environmental justice zone. There's that law, federal and state, that has to be enforced, and also we're economic and minority communities. And we shouldn't be put under the gun because there is a problem. I understand there is a problem, but let's do this fairly. Let's follow the DEP regulations and the guidelines and not ram this through and put my grandson, or people in Schooner Cove, which is right next door to it, and their health in jeopardy so that's my comments. Thank you. Okay.

Keep Massachusetts Beautiful, Neil Rhein

Written comment

Dear MassDEP—I am writing to provide comments on the draft 2030 solid waste master plan.

First off, I'd like to commend MassDEP for setting such ambitious goals. I am happy to live in a state where we're taking these issues seriously!

On behalf of Keep Massachusetts Beautiful, I would like to provide feedback on some areas that I think could be addressed more strongly, as follows:

- We would love to see a stronger focus on the **REDUCTION of single-use plastics.** So far, as a state we are making progress on plastic bags, which represents a miniscule percentage of the waste stream. Some communities have passed laws on polystyrene and straws. While we commend these efforts, we're just nibbling around the edges of the waste pile. Let's extend efforts to pass Extended Producer Responsibility into more categories than currently proposed, such as beverages (bottled water, energy drinks, soda, etc.).

- **Recycling:** There seems to be a huge disconnect between residential and business recycling. Most communities have strong residential programs. Yet when consumers visit convenience stores, fast food outlets, restaurants, fitness centers, and other businesses, they rarely have the option to use a recycling bin. This appears to be a huge missed opportunity. Why not MANDATE that businesses provide recycling and then actually process that recycling (unlike some businesses that practice "faux recycling"). This could have a huge impact on reducing the volume of easily recyclable materials that go into the trash. While we're at it, let's raise the deposit amount to at least 10 cents (preferably 25 cents) to further discourage the purchase of single-use plastic.

- **Recycling:** Public space recycling. Let's MANDATE public space recycling at parks, public buildings and schools, MBTA stations, entertainment venues, etc. Again, huge amounts of easily recyclable materials, such as empty plastic beverage containers, go into the trash at these venues every day.

- **Recycling and Trash Collection:** We realize this would be a challenge, but it seems to us that if every community in the state had the same (or similar) rules for recycling and trash collection, that would reduce recycling contamination and produce economies of scale. The fact that we have so many different models for handling municipal waste creates inefficiencies and confusion. Let's devise a consistent method (or at least narrow it down) so that collectively, we will reduce waste and increase effective recycling programs.

- **Litter:** This may not be pertinent to this plan, but we would like to see some actual enforcement of our state's anti-littering laws. Our highways and roadsides are a disaster and that's partly due to a lack of enforcement.

Thank you and feel free to contact me with any questions.

Sincerely,

Neil Rhein
Founder & Executive Director | Keep Massachusetts Beautiful
www.keepmassbeautiful.org
[redacted]

Leanpath, Steve Finn

Written comment

The best way to achieve the waste reduction goals outlined in this Plan, and to greatly minimize negative environmental impacts (especially GHG emissions), is to prevent food waste from occurring in the first place. In other words, and building on a theme in the report, we need to think differently about food waste – elevating focus on source reduction (the top level of EPA's Food Waste Hierarchy) to maximize environmental benefit while freeing up resources to address the root causes of social problems.

As written, the Plan is overwhelmingly focused on downstream issues of recycling and diversion.

So I would recommend adding content which prioritizes a focus on preventing food waste (and all forms of waste) from occurring in the first place. Some detailed options to consider include:

Adding a provision to educate students on the food waste hierarchy and the maximal benefits of source reduction, under the larger context of changing the culture of abundance around food. Consider adding a targeted messaging campaign for education on prevention in schools.

Incentivize a measurement-focused approach to preventing food waste in foodservice organizations. Develop well-structured Grant programs to prioritize prevention/source reduction – look at California's grant program related to SB 1383 as an example to emulate. If Massachusetts wants to be a leader in this area – source reduction is the key area of focus.

Consider enacting legislation similar to the McNerny bill (not yet passed) which would require foodservice organizations doing business with the government (in your case the state of MA) to document/report on their levels of food waste and its disposition. This level of transparency sets the basis for analysis going forward, it provides the basis for measurement, and measurement is the key to prevention. It allows the state to more effectively drive prevention efforts going forward, and to use prevention programs as a way to facilitate downstream recovery/diversion efforts rather than solely focusing on building extensive infrastructure to recover and compost excess food. It's important to address and reduce, rather than support, the continued overproduction of food.

You could also consider adding a provision whereby recipients of state foodservice contracts have some requirement to push food waste prevention through their supply chains (see the WRI/Champions 12.3 10x20x30 campaign as an example).

Best,

Steven Finn
VP of Food Waste Prevention

Leonard Rosenthal

Written comment

Dear Mr. Fischer:

I am writing in opposition to a zero waste master plan by 2030. The group supporting this fail to think through the costs to society of implementing this plan as if the only thing that matters is the benefits. I have long been a contributor to environmental causes and follow the waste recycling rules of my city enthusiastically. As an economist, I also know that waste recycling has costs and not all the costs are accounted for either by my city or anyone else in discussing this very important question.

If households are required to compost garbage, there will be health costs in the form of having to increased rodent infestation. Rodents leave droppings that carry diseases are very dangerous to humans. There has been no discussion of how seniors and disabled people will able to carry glass bottles and jars to their market to be refilled with liters of milk and other beverages drink every day and then back to their dwelling once all plastic bottles are eliminated. Upper middle class and wealthy people can have someone else do the pickup and delivery. The working poor and poor cannot. This will also be a tax on them and has to be thought through.

We should reduce solid waste in a way that benefits all of society, while not hurting those who can least afford it.

Sincerely,
Leonard Rosenthal
[redacted]

Lovin' Spoonfuls, Lauren Palumbo

Written comment

Dear Mr. Cooper,

On behalf of Lovin' Spoonfuls, I am writing in support of lowering the threshold for compliance for the Commercial Organics Waste Ban from one ton to 1/2 ton per week, as per the 2020-2030 Solid Waste Master Plan.

As a food recovery organization, we strongly support the state's efforts to reduce food waste at the source and divert it from landfills. Toward that end, we feel it's important that state agencies work to support the tracking and reporting of food waste generation by food businesses. Additionally, financial support from the state for food recovery operations - in addition to investments made in solutions further down the hierarchy - are important to ensure the capacity exists to recover the increased amount of food made available by the lowered ban threshold. Finally, the state should support business education around food donation in partnership with other state agencies and local authorities.

Thank you for your consideration of these comments.

Best,
Lauren Palumbo

MA Food System Collaborative, Brittany Peats

Written comment

Dear Mr. Cooper,

The Massachusetts Food System Collaborative and the 25 undersigned organizations are pleased to provide these comments on the draft Massachusetts 2030 Solid Waste Master Plan.

The Commercial Food Waste Ban was one of the major successes that emerged from the 2010 - 2020 Solid Waste Master Plan. This Ban resulted in around $175 million in direct and indirect economic activity during its first two years and the amount of food waste diverted increased by over 150% over four years. We support the lowering of the threshold for compliance with the Commercial Food Waste Ban from one ton per week to half a ton per week; we would like to see this regulatory change implemented by fall of 2021. In addition we would like to see an inclusion in the Plan of a commitment to prohibit the disposal of all food waste from commercial sources by 2024 and from all sources by 2028.

Food waste source reduction is at the top of the hierarchy of preferred methods for reducing food waste, and it is critical that businesses and farmers are supported in adopting technologies to track and reduce their food waste generation. We would like to see the final plan offer such support.

The state should prioritize providing funding and technical assistance to businesses that are safely upcycling or repurposing food waste for human consumption. Because increasing the ban threshold will divert more food waste, ensuring sufficient demand for the projected increased supply of compost will help compost operators to remain financially viable. Agencies should help to build a larger customer base for compost operators through requiring that state and municipal landscape projects give preference to purchases of local compost over out of state sources.

Food rescue organizations collect nutritious food that would otherwise go to waste, and distribute it to people in need. The state should support this work through funding for infrastructure development and increased education for business owners about the benefits of food donation through explicit guidance from the Department of Public Health (DPH).

The state should also support municipalities in their efforts to design plans to reduce food waste in their communities. The plans should include outreach to residents about the importance of separating food waste and the options for diverting food waste in their community, including city sponsored curbside compost pick up, commercial compost pick up, compost drop-off sites, and town-sponsored backyard compost bins. Municipalities, with the support from local boards of health and DPH, should also encourage composting and food rescue at schools.

Education and outreach to residents about the importance of separating food waste will help elevate the topic of food waste reduction and increase general awareness. We would like the Master Plan to include more explicit language about support for a statewide educational campaign.

Though there is sufficient capacity to process the current amount of food waste in the state, in part because of the high capacity of AD facilities, the facilities are not geographically accessible to all those who would like to divert food waste and may not take all types of food waste. We support increasing investment in local and regional composting capacity, small AD facilities, and intermediate processing facilities. The state will need to be creative about finding locations that would be suitable for composting -- municipal yard waste sites and state-owned land may be appropriate. Changing local zoning ordinances and continuing to provide technical assistance to compost operators may encourage more composting operations near population centers. Making the permitting process easier for food waste collection companies to leave food waste at transfer stations would also help.

The state should require that digestate materials from anaerobic digestion facilities at wastewater treatment facilities, including those that digest food waste, be regularly tested for additional contaminants, including PFAS, and that the state work with the agricultural community to create safe maximum contaminant levels for materials intended for agricultural use. There are concerns that this digestate, which is frequently land applied, may be contaminated and that spreading this material will contaminate the land, food and water. If this is the case, this is not the best use of food waste, a potentially valuable local source of soil amendments when kept separate from such contaminants.

Thank you for your consideration.
Sincerely,
Bedford Mothers Out Front, Bedford
Bill Emerson Food Donation Act Awareness Campaign, Bernardston
Black Earth Compost, Gloucester
Boston Area Gleaners, Waltham
Brewer's Crackers, Somerville
Central Mass Grown, Worcester

City Compost, Gardner
Community Involved in Sustaining Agriculture (CISA), South Deerfield
Eastie Farm Inc, Boston
Edible Boston, Wayland
Edible Worcester, Wayland
Food for All Technologies Inc, Boston
Food For Free, Cambridge
Food Link, Arlington
Green Andover, Andover
Hamilton Waste Reduction Committee, Hamilton
Island Grown Initiative, Vineyard Haven
Lexington Global Warming Action Coalition, Lexington
Mill City Grows, Lowell
Northeast Organic Farming Association/Massachusetts Chapter (NOFA/Mass), Barre
Rachel's Table, Springfield
Rescuing Leftover Cuisine, Boston
Spoiler Alert, Boston
Superfrau, Cambridge
The Greater Boston Food Bank, Boston

Massachusetts Beverage Association, Stephen Boksanski

Written comment

COMMENTS ON MASSACHUSETTS DRAFT 2030 SOLID WASTE MASTER PLAN

The Massachusetts Beverage Association consists of bottlers, distributors and suppliers that collectively employ more than 6,300 Massachusetts' citizens from the Berkshires to Cape Cod. Their familiar brands can be found through local business partners in every community across the Commonwealth, from the largest supermarkets to the smallest corner store and every outlet in between. Our members companies offer variety in both packaging and beverage choices, including regular and low- /no-calorie soft drinks, bottled water and water beverages, 100 percent juice and juice drinks, sports drinks, ready-to-drink teas and coffees, energy drinks, and milk. They have set ambitious goals to collect and recycle the beverage containers they put into the market and have a keen interest in advancing meaningful policy solutions to the Commonwealth's current recycling challenges.
Thank you for the opportunity to share our thoughts and observations with the draft 2030 Solid Waste Master Plan (SWMP) that was recently published.

Introduction and Background
The underlying theme is that Massachusetts and New England continue to lose disposal and recycling capacity without the introduction of any new assets and are forced to look elsewhere to make up for that deficit. The Commonwealth has tried valiantly to succeed without approving new landfills or incinerators but, as this report indicates, this is a losing battle. While there are significant gains to be made in commercial and residential markets, without new capacity strategies the residents of Massachusetts are going to face increasing costs and inconvenience for the management of their waste and recyclable material.

Goals & Policies
We applaud the DEP for its many successful efforts including the commercial organics disposal ban, the various grant and loan programs, the Recycling IQ Kit, and promoting education on recycling quality.
The draft SWMP shows the Commonwealth is not meeting is current goals and not on track to reach future goals without bold new policies in place. To move recycling to the next level and achieve the kinds of waste diversion goals described in the plan, the state should look toward enhancing those diversion and recycling programs that target broad categories of solid waste – especially curbside collection of household recyclables and organics recovery programs.

Much of the material still to be recovered from the municipal waste stream is in households. We know how to make household recycling programs more effective – the research is clear – but we need leadership to move these policies forward. Massachusetts communities can see real recycling gains for all recyclable materials through numerous measures, including curbside pick-up of recyclables wherever trash is collected, same-day collection, use of single-stream collection, pay-as-you-throw pricing for trash (and free recycling), mandatory recycling, well-designed drop-off programs for communities without collection, and central drop-off of standard recyclables for condominiums and businesses, among others. Equally important are new and expanded efforts to improve public awareness and education about what can and cannot be recycled, to reduce contamination and enable communities to reap the economic benefit of high-value, recyclable materials.

Recycling should be equally convenient at home and on the go and there is a clear need for more recycling receptables and pick up in public places. The beverage industry has a long history of investing in local recycling programs across the country to help keep our 100% recyclable bottles and other recyclable packaging out of the oceans, rivers, beaches and landfills. Massachusetts Beverage Association is already spearheading efforts to help cities and towns increase recycling through comprehensive measures, while also providing more recycling receptacles in public places. In 2012, we established the Massachusetts Recycling Challenge to assist cities and towns with the cost of exploring and implementing enhanced public space recycling systems. Since then we have sponsored more than a dozen public space projects and two technical workshops, and we are always looking for new projects.

We also want to explore ways to collaborate with the DEP through industry's new commitment to recycling called the "Every Bottle Back" initiative. This bold beverage industry initiative will be pursued in conjunction with the World Wildlife Foundation, The Recycling Partnership and Closed Loop Partners and will (1) measure industry progress on reducing the use of new plastic; (2) improve the quality and availability of recycled plastic in key regions through investments in improved sorting, processing and collection systems; (3) launch a public awareness campaign on the value of 100% recyclable bottles, and (4) reinforce the message of recyclability to consumers directly on packaging. Through this initiative, industry will be working across the country and investing millions of dollars to donate recycling bins and improve recycling systems and infrastructure, and we hope to put some of that to work here in the Commonwealth of Massachusetts.

Every Bottle Back strives to tackle many of the challenges described in the draft Solid Waste Master Plan, from diversion to driving recycling market growth.
Additionally, our member companies are striving to meet their own aggressive commitments to reduce waste and the use of new plastic and recycle more:

- Coca-Cola will collect and recycle the equivalent of every bottle or can sold globally by 2030 and use 50% post-consumer recycled content across its portfolio by 2030
- Keurig Dr. Pepper will have 100% recyclable or compostable packaging and use 30% post-consumer recycled content across its portfolio by 2025

Major New and Expanded Initiatives

One of the legislative strategies is focused on developing an effective approach to reduce the use of single-use packaging. We are eager to play an active role in these discussions and share ideas in this area, as we think it is important to distinguish between packaging that is truly single use and cannot be recycled, and packaging that has value and life well beyond the first use. Our beverage containers have value in the recycling stream, and we want them back so they can be turned into new packaging. We do not want our containers to end up in nature and just as importantly, we do not want them sent to a landfill or incinerator. For these reasons, the promotion and greater enforcement of existing waste bans is something we would strongly support. Making sure local officials, residents and stakeholders are reminded of this ban should be a priority.

In addition, we urge DEP to research and consider extended responsibility (EPR) programs for packaging. These programs dominate the recycling policy landscape in developed economies around the world, and EPR is only

referenced in the context of paint, mattresses and electronics within the draft SWMP. Producer funding of multi-material recycling (municipal recycling) is in place across Canada and throughout Europe and extending into Asia and South America. EPR is not, by itself, a panacea for better recycling. The underlying infrastructure needs to perform at a high level and the governance and funding of the system need to be structured properly to ensure efficiency, accountability, and equity. For example, establishing EPR alongside an existing deposit return system, has significant implications for the cost, efficiency, and convenience of both systems. A close examination of the performance of the current bottle deposit law, established more than 35 years ago, will be critical when evaluating better material recovery systems for the Commonwealth. The outdated deposit law costs $50 million to operate each year and is showing a declining trend in redemption rates. The Massachusetts Beverage Association would welcome a discussion around the most effective ways to collect and recycle our containers and more, recognizing the unique issues posed by glass and that a dedicated glass recovery program may be necessary.

EPR should be part of any discussion of moving recycling forward because it holds the potential for meaningful and coordinated improvements in recycling infrastructure and operation that has held down the performance of recycling programs in the US. It is a policy option that takes into consideration the recyclability and costs associated with dealing with different kinds of materials, enabling communities to move beyond some of the perceived "quick fixes" – such as ending recycling programs or bans and prohibitions that in some cases have included 100% recyclable plastic bottles. Even with the wild fluctuations in the commodities market, PET and aluminum remain valuable and removing these items form the municipal stream could have long lasting negative consequences.

We appreciate that EPR represents a very different approach to funding recovery systems than exists in the US today. Other producers, recyclers, and municipal officials have concerns about changing the system and some of their concerns are valid. Given the inability of states to reach recycling goals they have set and the increasing need to look to better materials management as a way to reduce greenhouse gases and discourage use of unrecyclable "one and done" packages, a new paradigm is necessary. It doesn't have to be EPR, but it should be on the menu. In addition to creative legislative strategies, we recommend consideration of the following proposals that round out a comprehensive approach:

- Require/encourage cities and towns to meet performance standards on solid waste reduction in line with the Massachusetts Solid Waste Master Plan
- Require commercial buildings to offer access to recycling
- Require multi-family dwellings to provide access to recycling
- Require state government facilities, parks, etc. to provide access to recycling
- Create a dedicated fund for recycling infrastructure improvements, following guidelines informed by best practices
- Generate revenue for the fund through a temporary producer fee on beverage containers including those not subject to the bottle deposit law today
- Phase out the deposit law as the investments are made and allow municipal recyclers access to the most valuable material in the recycling stream: the aluminum can and PET bottles subject to deposits
- Develop and implement public awareness campaign to promote recycling and reduce contamination

We thank you for the opportunity to offer these comments and look forward continuing this important dialogue. The Massachusetts Beverage Association remains eager to collaborate with the DEP and others to support efforts that will improve the Commonwealth's recycling capabilities.

Stephen A. Boksanski
Executive Director, Massachusetts Beverage Association
44 School Street, Suite 710 | Boston, MA 02108 | [redacted] | sab@bcbgovrelations.com

Massachusetts Municipal Association, Ariela Lovett

Oral comment

Good evening, my name is Ariela Lovett. I am a legislative analyst with the Massachusetts Municipal Association, and I cover environmental policy and advise the MMA Policy Committee on Energy and the Environment, and I appreciate the opportunity to testify tonight and also the opportunity to serve on the Solid Waste Advisory Committee and to participate in shaping the Solid Waste Master Plan. As you know very well, the effects of China National Sword trickle down to impact cities and towns across Massachusetts. We even today hear from our members about the increase to the costs of their recycling and solid waste contracts and the burden that those increased costs placed on their local budgets. And we've even heard from some communities that say: "you know, is it cost effective for us to recycle anymore? Should we just end our recycling program if everything just going to the landfill anyway?" So this continues to be an issue that we hear about a lot from our members. It is also a top priority of the MMA Board, such that at the 2019 MMA Annual Meeting, we presented a resolution–a partnership between local, state and federal–addressing the challenges to the recycling marketplace. That resolution was passed unanimously by our membership.

I also want to mention that we really appreciate our partnership with DEP. We are really grateful for the municipal funding and technical assistance, which you mentioned in your presentation. I know that just recently there was another round of grant funding given out to municipalities, and more than 200 either received funding in that round or have to date, so large majority of municipalities are benefiting from the grant funding that DEP provides, and that funding has gone to help municipalities to clean up recycling streams. You know, I don't need to repeat all the programs that you offer, but cities and towns in Massachusetts and MMA know very well how those kinds of programs benefit our communities and help reduce items in the waste stream through diversion programs and your help with managing hazardous materials. So for all that we're very grateful.

And I just wanted to highlight a few areas of priority for DEP that are also priorities for the MMA. One is product-specific product stewardship. EPR could also be called product stewardship depending on the context or who you're asking. We are supportive of product-specific product stewardship initiatives, specifically for mattresses, paint, and electronics. Those also have bills in the legislature, which we have supported. Just to note, I saw that the mattress bill was recently reported out of the Environmental Committee in the legislature and proposes a study commission on having a mattress EPR program. It wouldn't set it up right away if the legislation were to pass, but we are reassured that that's moving in that direction.

As you mentioned in your Q&A before, these are all materials that are either bulky or hazardous and present a burden on municipalities to manage, and we really support the manufacturers helping to partner to help alleviate some of that burden from municipalities. More broadly, we also are engaged in conversation around extended producer responsibility for packaging. We appreciate that there's a mention of that in the Master Plan. And we have engaged in the various legislative proposals that have been filed around that. The MMA has not taken a formal position on one proposal in particular, but we do believe that packaging is a materials burden on municipalities, and we want to continue participating in education and policy discussion on various proposals for doing more extended producer responsibility, not just on very specific things like mattresses, but also on broader packaging.

One example we've been engaged with is plastic bag ban efforts. We are encouraged by local efforts to ban other single use plastic, but we understand that patchwork systems are not ideal in Massachusetts, and so we intend to be engaged in ongoing conversations around reduction of single use plastic from the waste stream, because by and large municipalities bear the responsibility for managing that waste stream.

I wanted to end with some areas of opportunity. We're really encouraged by the emphasis on food waste diversion. That's something that we're hearing on our end is of interest to municipalities that haven't gotten into it yet. We know about Cambridge, Newton, and other success stories, but the policy committee that I work with and the broader membership that I work with are eager to learn more about opportunities to participate in food waste organics diversion. I think more and more communities are also interested in rolling out textile diversion programs. And, on the whole, I think DEP can play a role in encouraging local governments that it's still important to invest in recycling and that DEP is working to address the diminishing disposal capacity and is playing its own role in helping to bring back local or regional markets. Obviously, you don't have much influence internationally but DEP can encourage local governments to kind of stay optimistic about things. We are excited to partner with you. So I'll end there. We plan to submit written testimony before the end of the deadline and have encouraged our members also to attend hearings and to submit testimony as well, so thank you.

Massachusetts Municipal Association, Geoffrey Beckwith

Written comment

Dear Mr. Fischer,

On behalf of the cities and towns of the Commonwealth, the Massachusetts Municipal Association (MMA) appreciates the opportunity to provide comment on MassDEP's Draft 2030 Solid Waste Master Plan.

In a January 2019 resolution unanimously adopted by cities and towns across the state at the MMA's Annual Business Meeting, the MMA and municipalities affirmed our commitment to working in partnership with the Baker-Polito Administration, the Legislature, and the private and nonprofit sectors to address the challenges associated with managing solid waste and recycling across the Commonwealth. Nearly two years after the enactment of China's National Sword policy, there remains an urgent need to reduce solid waste overall, divert organics and textiles from the waste stream, better manage hazardous and bulky items, and create new markets for processing recyclable materials. Our municipalities still feel the financial impacts of changes in the global recycling and solid waste marketplace, as well as changes to material consumption and disposal patterns. Any master plan for managing solid waste and recycling across the Commonwealth must recognize the financial and materials burden placed on cities and towns and offer some analysis of such, coupled with strategies for relief and support.

The MMA is pleased to support MassDEP's top goals for 2030 as outlined in the draft plan, a target reduction in solid waste disposal of 30% and a continued reduction in the toxicity of the waste stream. The MMA is also encouraged by sub-goals to promote source reduction across materials categories while increasing diversion opportunities. The MMA appreciates the continued partnership between MassDEP and the cities and towns of the Commonwealth to promote recycling, reduce contamination in the solid waste and recycling streams, and divert materials from solid waste disposal. As noted in the draft Solid Waste Master Plan, since 2010 MassDEP has warded $24 million in grants to 308 municipalities and regional groups for these purposes. Massachusetts municipalities have benefited greatly from DEP funding opportunities, while also contributing to a Commonwealth-wide solid waste reduction of 14% since 2010.

Our municipalities are committed to helping their residents implement MassDEP's strategies for residential waste reduction - to increase the quality of and reduce contamination in residential recycling streams, and to reduce overall disposal of residential waste through source reduction, reuse, recycling, and composting. We note that MassDEP has identified food material as the category with the highest diversion potential - 570,000 tons by 2030 - and believe that municipalities must be supported as essential partners in order for the state to achieve that goal. Several cities and towns have started organics composting pilots or full-scale programs, and the MMA supports the expansion of these initiatives, with MassDEP support.

The MMA is also pleased to see the inclusion of extended producer responsibility (EPR) and product stewardship under major new and expanded initiatives within the draft plan. The MMA is aligned with these priorities. As stated in our 2019 resolution, we believe that state and federal agencies and lawmakers should take steps to require that manufacturers and third-party sellers reduce the amount of packaging, both recyclable and non-recyclable, that accompanies products for sale. We also support product stewardship legislation that requires manufacturer responsibility for end-of-life recycling of mattresses, paint products, electronics, and other products that can be diverted from the local waste stream. In addition to their environmental impacts, excess packaging and hazardous, bulky, or difficult-to-manage materials place a heavy materials and cost burden on municipalities, who are largely responsible for managing and paying for their disposal.

Page 10 of the draft plan notes that MassDEP expects to develop and periodically update separate Action Plans for key areas of focus. The MMA requests that MassDEP develop a more detailed action plan specifically for reducing the use of single-use packaging and advancing EPR and/or product stewardship systems for specific products. We also support inclusion in the plan of specific language limiting or ending the use of hard-to-manage products and materials such as plastic bags, single-use plastic bottles, and Styrofoam and similar products. Specific mention of these product categories is currently absent from the draft plan.

The MMA shares MassDEP's concern with dwindling in-state disposal capacity for solid waste. Page 21 of the draft report notes that even if we achieve the 2030 solid waste reduction goal of 30%, there will still be an in-state disposal capacity gap of approximately 700,000 tons. While we all work to achieve reduction and diversion goals across materials categories, the MMA believes that the Commonwealth and the private sector must also invest in alternatives to landfill disposal. Therefore, the MMA supports MassDEP's commitment to permitting additional capacity for innovative waste-to-energy facilities and/or non-combustion technologies such as gasification and pyrolysis, all of which must meet robust public and environmental health standards.

Lastly, considering the impacts to municipalities stemming from changes to the global recycling marketplace over the past decade, the MMA is encouraged by MassDEP's commitment to foster in-state market development for reusable, recyclable and compostable materials. All such efforts will not only help the Commonwealth to achieve goals related to source reduction and diversion, but will also benefit cities and towns whose solid waste and recycling contracts are dependent on the strength and diversity of the market. We are hopeful that in-state and regional market development for recyclable and related materials will alleviate some of the financial burden that our members have experienced.

As stated previously, the MMA and our member municipalities appreciate the partnership with MassDEP on all efforts related to solid waste and recycling. Thank you for considering our comments on the draft 2020-2030 Solid Waste Master Plan. If you have any questions about our comments, or require additional information, please do not hesitate to contact me or MMA Legislative Analyst Ariela Lovett at alovett@mma.org or 617-426-7272 ext. 161 at any time.

Sincerely,
Geoffrey C. Beckwith
Executive Director & CEO

Massachusetts Municipal Association Policy Committee, Michael Suprenant

Oral comment

My name is Michael Suprenant of [redacted]. I'm also on the Massachusetts Municipal Association Policy Committee on Public Works, Transportation, and Public Utilities, and I'm also DPW director in the town of Ludlow.

We have to admit that single stream recycling is not the future. We have to get to multiple-stream recycling. This week we can't meet any kind of contamination goals. In the current single stream system that we have, we have to look at alternatives. I think at the meeting with at the MMA I had suggested that we do some, at least at our

transfer stations, to see how clean we can get the recycling stream. And that same day was the last day of the SWANA meeting in Boston. We have some of the best minds in the world working on extended product responsibility here right here in Massachusetts I think we should use those people. The organization centered in Boston to develop a more intensive plan for extended producer responsibility. We have the resources right here to do it. So I think as a planning tool, we have to look at those people that are working on that and move forward in that direction.

Thank you.

Massachusetts Sierra Club, Clint Richmond

Written comment

Dear Commissioner Suuberg:

The Massachusetts Chapter of the Sierra Club has been actively supporting efforts to reduce waste and to reduce toxics throughout the Commonwealth. Thank you for the opportunity to comment on the Draft Master Plan.

I. COMMENTS ON ITEMS IN THE PLAN

- We strongly support reducing the threshold for the commercial organics waste disposal ban to one-half ton per week by 2022.
- We support development of the recycled glass market.
- We do not support gasification or pyrolysis. These technologies are unproven and highly polluting.

II. ADDITIONS TO THE PLAN

A. Reduce single-use and increase reuse:

- Prohibit the purchase of single-use water bottles in government buildings.
- Support regulation or legislation to make all single-use packaging compostable or biodegradable or else recyclable. Support regulation or legislation for a statewide ban single-use plastic shopping and non-compostable product bags.
- In order to "foster increased use of dishwashers [...] in cafeterias", this should be supported by grants available to public schools and public universities.
- Grants for reuse stores at municipal facilities including seasonal stores.

B. Reduce toxics:

We think the support for this goal in the Plan needs to be expanded considerably.

- Support regulation or legislation to ban the use of PFAS in food packaging since it adds toxics to the compost and trash streams.
- Support regulation or legislation to ban the use of bisphenols in thermal receipts and business forms since these add toxics to the compost and trash streams.
- Include LED light bulbs in the hazardous waste ban. These could be treated in similar fashion to e-waste since the materials are similar.
- Include non-stick cookware that contains PFAS in the hazardous waste ban. This could include extended producer responsibility. This material needs to be stored until safe destruction methods are available.
- Consider including OTC pharmaceuticals, cosmetics, and health and beauty products that are liquid or semi-solid in the same program as prescription drugs. This will reduce the toxicity of the trash streams and improve water quality.
- If order to reduce the amount of pesticides from the food and yard waste streams, the state needs to restrict more classes of pesticides to registered applicators only, and to encourage natural and organic farming, gardening, and landscaping.

C. Disposal:

- Sewage sludge from wastewater treatment plants needs to be treated as toxic and put in a hazardous waste landfill.

D. Improvements to recycling and materials recovery:

- Grants for municipal curbside textile collection.
- Support increased source separation to avoid contamination and increase the value of recycling. Strategies include preserving and expanding dual-stream curbside pickup; ending any state support of single-stream recycling; increasing the types of beverage containers covered in the deposit system.
- Grants to pilot innovative collection methods especially in more urbanized areas such as neighborhood drop-off locations for high-volume materials such as cardboard and glass. These systems are prevalent in Europe for example.
- Promote and support the collection of restaurant fats, oils and greases for conversion into biofuels. This could start with grants for public school and public university cafeterias.
- Grants for the recovery materials from unusable items such as disassembly of old furniture or obsolete electronics in good condition. This could provide beneficial employment opportunities. This can complement extended producer responsibility.

Please let us know if you have any comments or questions. We look forward to working with you to achieve the goals of the Plan.

Respectfully,
Deb Pasternak
Mass. Sierra Club, Chapter Director
deb.pasternak@sierraclub.org

MASSPIRG, Janet Domenitz

Written comment

December 6, 2019
Submitted by Janet Domenitz, MASSPIRG Executive Director
Chanah Haigh, MASSPIRG Policy Intern

In recent years, we have become increasingly aware of the human impact on our planet. To wit, the American lifestyle is the most wasteful in the world. The U.S. produces 12 percent of the planet's total waste, though it is home to only 4 percent of the world's population. Massachusetts alone produces 5.7 millions tons of waste annually. We stand at a moment in Massachusetts where we must decide how we are going to perceive and manage that waste. Will we view it as something we put out of our mind as it goes in the ground or up in flames, or will we reckon with the fact that this waste we've produced is not something we can truly discard?

America's "linear" material economy, where materials are extracted, made into goods and disposed of in a one-way street, creates massive environmental and public health problems. About 42% of all U.S. greenhouse gas emissions are created in the process of extracting resources, producing goods, disposing of waste, and transporting materials at every stage of that process.

The 2010-2020 Massachusetts Solid Waste Master Plan proposed a 30% reduction of our waste between 2010 and 2020. As of 2019, we've reached a 15% reduction. The current draft for 2020-2030 proposes another 30% reduction. MASSPIRG has three areas of concern about the proposed 2020-2030 Plan.

1-Policy
2-Process
3-Evaluation/Measuring progress/Enforcement

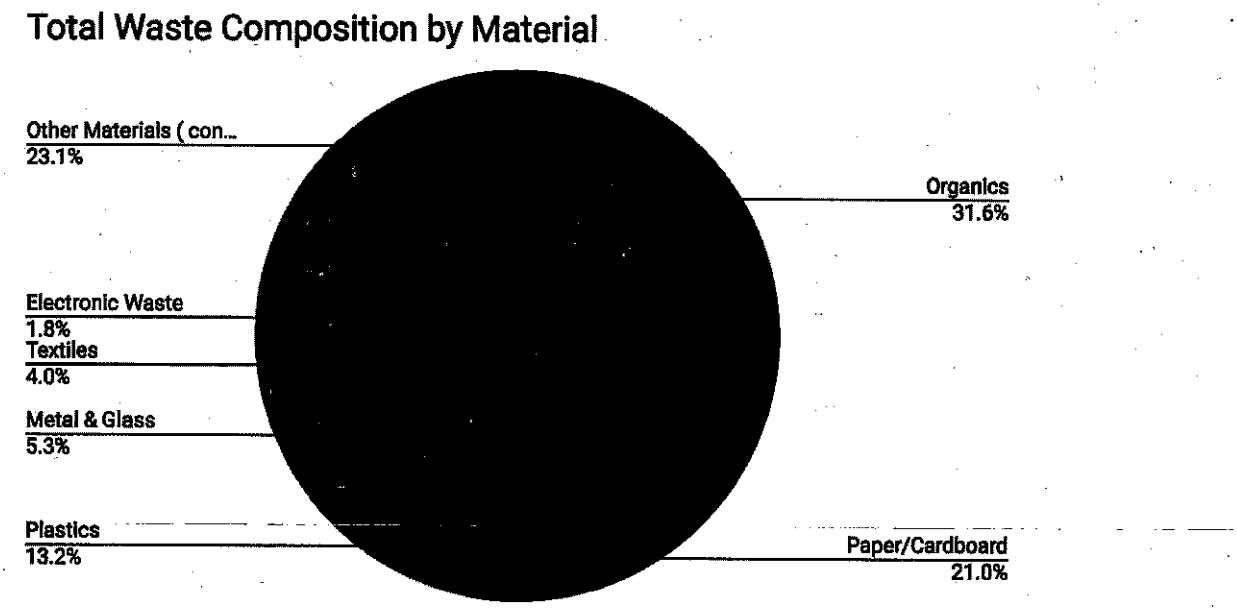
1-Policy
Real change is needed and it has to start with a change in our expectations. No longer can Massachusttes accept a mild cut of our waste production, we have to set our goals on zero waste by 2030, and work backwards from that

with a plan starting on day 1. In the next ten years (and beyond) we have to focus on serious reduction as well as proper enforcement of our current recycling systems.

To protect public health and the environment, conserve natural resources and landscapes, and address the mounting crisis of global warming, Massachusetts should move toward an economic system characterized by zero waste. To achieve that goal the government should enact policies and programs that incentivize shifting to a circular, or "closed-loop," economy in which less is consumed and all materials are reused, recycled and composted in a continuous cycle.

We need not reinvent the wheel. Though it will take a serious transition, we will be following in the footsteps of many cities and countries who have committed to zero waste. Massachusetts' masterplan for the coming ten years should lay out specific goals for the reduction of each of the materials spelled out below, as well as a detailed strategy for reaching those goals.

Our current system for dealing with trash is antiquated and dangerous. Our ability to export our excess trash is quickly reducing as foreign countries are less inclined to import our garbage. Massachusetts has a projected capacity shortfall of 700,000 tons by 2030, even assuming we meet DEP's 2030 waste reduction goals. Massachusetts incinerates about 3.2 million tons of solid waste each year. High heat technologies, including plastics-to-fuels facilities like pyrolysis and gasification, are polluting, expensive, and destroy valuable resources which should be reused. Incinerator emissions include heavy metals and mercury, a neurotoxin that impairs brain function, as well as cancer-causing pollutants like dioxin, one of the most toxic substances known to humanity. The SWM draft states that all current municipal waste combustion facilities continue to operate at their current capacity through 2030. The extraction and production activities needed to replace the materials that we dump and burn also cause environmental degradation, air pollution and water contamination. There are currently 20 active landfills in Massachusetts which handle 1.3 million tons of waste per year. These landfills inevitably emit toxic landfill gases, including methane, produce toxic leachate that can leak and pollute groundwater, squander reusable resources, and destroy open space. All high heat combustion of municipal solid waste should be phased out. Stabilized landfills should only be used for any materials that cannot be composted, reused, recycled, or redesigned. This is an issue which, like many, disproportionately affects lower income citizens. Currently, six out of Massachusetts' seven incinerators are in Environmental Justice communities. Waste facilities in Environmental Justice communities should be the first closed, and those citizens should be the first to benefit from the Zero Waste economy.



We have laid out the biggest contributors to our waste stream and the ways in which they may be diverted:

Organic material makes up a huge proportion of our waste. Food waste comprises 26% of our total waste or 1.48 million tons of waste. Yard waste comprises 5.3% of our total waste or 320,000 tons. All organic waste, 1.8 million tons, should be diverted through reduction, composting and anaerobic digestion. None of this should be going to landfills or incinerators. As organic materials decompose in landfills they create a huge amount of methane, a potent greenhouse gas, which goes into our atmosphere and accelerates global warming. Composting and anaerobic digestion closes the loop and allows us to divert waste into usable and non harmful substances. The proposed Solid Waste Masterplan only sets its sights on reducing organic waste by 500,000 tons, a mere 8.7% reduction of total waste. Its methods include lowering the current 1 ton per week threshold for Massachusetts' commercial food waste disposal ban to ½ ton per week by 2022 and enforcement of current laws. The threshold should be zero. No organic waste should be in landfills or incinerated. Enforcement should also be raised to a much higher standard, as currently many loads go unchecked.

Paper and cardboard recycling is another area in which much potential is missed. It's clear that if separated into its own stream of recycling, there would be a competitive market for these used materials. However, when thrown in with other recyclable materials, they are not accessible. Paper and cardboard compose 21.7% of Massachusette's total disposed waste or 1.2 million tons. All of this waste should, under DEP regulation, be diverted from disposal. Paper and cardboard disposal bans have been in place since 1994. The key to diverting all of this waste is through enforcement of existing regulations. Such enforcement has been lacking. The proposed draft does not provide a conclusive plan or goal for reducing disposed paper or cardboard. It mentions increasing adoption of the Recycling IQ Kit at the local level to implement hands on "boots on the ground" local initiatives to reduce contamination in residential recyclables, but includes no state level enforcement or incentive.

Plastic has been a popular and front issue in conversation of waste reduction and recycling. We know it to be a long lasting material which will take many years to decompose and leave a lasting impact on the earth. Half of US plastic is used in packaging, where it has a utility of a few minutes then is thrown away. It poses a huge danger to wildlife and ecosystems. In Massachusetts, plastic makes up 13.1% of our total disposed waste or 0.75 million tons. All of this should be diverted out of the waste stream by an expanded bottle bill, single-use plastic bans, refillable water stations, and reduced packaging. The SWM states its priority for reducing waste by phasing out the use of single use products and disposable packaging. No strategy or plan is stated for this reduction. Clearly the SWM addresses the importance of banning single use plastics but doesn't endorse any kind of strong measures. The SWM does not address the expansion of the bottle bill which encourages a much higher rate of material recovery.

Metals and glass take up 5.4% of our total disposed waste or 0.3 million tons. This waste could be diverted through an expanded bottle bill, separated waste streams, and other effective programs. The SWM mentions only that a market should be developed for glass. It provides no strategy for this and makes no mention of dealing with metal at all.

Textiles alone make up 4% of our total disposed waste or 0.23 million tons. All of this waste could be diverted through textile recovery and recycling. There is a huge market for recycling this material, however the government has made no effort to facilitate a recycling service. The SWM proposes new waste bans on textiles with grant and assistance programs to support and drive this infrastructure. It does not mention a plan for making recycling textiles more accessible.

Electronic Waste composes 1.1% of our total disposed waste or 0.1 million tons. This is a section of waste that is growing with the development of our world. We have to learn how to address and control this waste. Ways to divert this waste include Right to Repair legislation. People should have the ability and the right to fix their technology instead of throwing it out and getting a new one. That kind of mentality towards material possessions is a huge driver in the amount of waste we produce. The SWM supports the development of producer responsibility approaches for materials that are difficult and expensive to manage in local programs. Tactics such as producer responsibility should not be a backup scenario when materials are difficult to manage. We have to tackle waste proactively.

The last 23.1% of waste is made up of a combination of materials, some more divertable than others. It's primary composition is that of construction and demolition materials and household hazardous wastes. Massachusetts has to create better access for people to dispose of these materials safely and correctly. We should institute standard and widespread collection programs, as well as thoroughly educating the public. Many cities have found success with programs such as Deconstruction for Reuse which markets the reusable materials from deconstruction. More adoption of and education around Pay As You Throw programs and SMARTRecycle are also necessary for reducing this miscellaneous waste.

Education is a primary factor here. More of the public should be brought to understand the level of waste we as state produce, as well as what happens to what they throw away. Out of sight, out of mind is a mindset we can no longer afford when it comes to our trash. You shouldn't have to be a DEP employee or work for an organization which centers around waste to be aware of the Masterplan proposal, but that is pretty much the reality in the state.

2-Process

The review process of the SWM has been brief and has done little to encourage public engagement. The draft plan was issued on September 27, 2019. Five hearings were held across the state. None of the hearings were held later than 5 pm which made it difficult for people with day jobs or children to attend. Lower-income families are typically unable to take time off from work or negotiate childcare to make time to attend a daytime public meeting. The location of the hearings also limited the public's access as they were not spread broadly enough, particularly in Western Massachusetts. Only one of the meetings (Springfield) was held in a community which houses an incinerator or landfill. The meeting in Wilmington was held in an office park which, it's safe to say, few people in the area have ever visited. This makes it harder for those most affected by the waste stream to participate in the process.

The DEP should be conducting significantly more public outreach about this process. The people of Massachusetts are invested and interested in environmental and public health issues as they've repeatedly shown with protests, letters, phone calls, articles, and their choices in voting. If given the opportunity to have input in a process which so directly affects them and the health of our environment they will participate. But, the draft and subsequent hearings are so little known in the state. The very existence of a Solid Waste Masterplan is a little known fact. The DEP must conduct more public outreach and education so that the hearing process can fulfill its purpose of receiving public input, and consider a second round of public hearings, at least.

3-Evaluation

The SWM draft has no concrete plan for consistent enforcement of waste bans and recycling. It is vague on strategy and accountability. The DEP should institute annual reports on the progress of each year so that the public can be involved continually, not just every ten years. The people of Massachusetts need to be made aware of the impact we as a state have yearly with our waste, they need to know how their own actions affect this, and they need to be educated on how to create less of an impact. We know that a truly zero waste state is an ambitious goal for Massachusetts. Transitioning our infrastructure from disposal to reduce/reuse/recycle is going to be a major feat. That said, the pie chart demonstrates that we can divert the vast majority of what we dispose of now. It's not enough to aim for a 30% reduction and be satisfied with a 15%. We have to aim for total reduction and seek out our shortcomings as areas of improvement. We have the tools for diverting over 75% of the waste in Massachusetts; it is no longer a possibility, but a necessity that we do so. We have to lay the foundation now for a future with zero waste.

We appreciate your consideration.

MASSPIRG, Janet Domenitz

Oral comment

Good morning, my name is Janet Domenitz and I'm the Executive Director of Massachusetts Public Interest Research Group. We're a statewide nonprofit, nonpartisan public interest organization, and I am here today to represent our members in almost all of the 351 cities and towns in Massachusetts. And I also have a seat on the Solid Waste Advisory Committee of DEP, so I'm steeped in this. I will be submitting written comments before the deadline, but I just wanted to use this opportunity to make three quick general comments in no particular order.

One, MassPIRG, along with a number of other organizations, individuals, and civic leaders, would like a zero waste master plan, not a solid waste master plan. And we mean zero waste, literally, it's not just a concept or an idea, it's internationally recognized public policy. And for those of us that have had a chance to look at the numbers, we all agree on this: approximately 80% of what is being disposed up today in Massachusetts (buried, burned, or exported somewhere else to be buried, or burned) simply should not be disposed. And that includes a number of the topics that John Fisher covered earlier, whether it's food waste, whether it's yard waste, whether it's single use plastics, textiles, glass, paper, cardboard, the list goes on. If you examine what we are putting into landfills and incinerators right now, the vast majority of it should be diverted. So when we say zero waste, we literally mean we set a goal of zero for 2030. We have maybe 15% or 20% to really crack the nut to figure out what are we going to do instead of burying or burning. As a previous testifier said, we are not creating something from whole cloth; this exists in other cities and countries around the world. So, point number one is we don't want a 2022-2030 Solid Waste Master Plan; we want a 2022-2030 Zero Waste Master Plan.

The second point is process. And I say this truly with respect and having worked very closely with the DEP for years, if not decades, and I appreciate the process and the openness and the responsiveness of everyone that we have dealt with at this agency. So I want to make that clear. At the same time, I feel like the process for the public understanding and having a voice in the drafting of this next plan can still be changed and expanded and needs to be more open. We have, as Mr. Fisher iterated earlier, five public hearings scheduled at inconvenient times of the day. There was only several weeks' notice to this public hearing process. And we can see in this room maybe two dozen people here, when we all know that there are so many people engaged in this issue in communities around the state every day. I went to the hearing in Wilmington last night, and there were maybe a dozen people there. One of the people who spoke is involved in a committee in Lexington, and he said 80 people showed up at the public library just to talk about what you can recycle in Lexington. I mean, that's just one specific topic. It was standing room only, and I think all of us know that there are many people in Massachusetts that care about this issue. If I walked down Washington Street right now and asked 200 people, "have you ever heard of the solid waste master plan?" I would take a strong guess that 199 of them, assuming I didn't run into any DEP staff, would have no idea what I was talking about. That's just a fact that we have to see as a challenge, and we need to do way more outreach, way more education, give people way more opportunities. The place I went last night in Wilmington was kind of scary, an out of the way office park. I mean it's not exactly a place where people are used to congregating and being invited to be citizens and have their voices heard. So I'm really hoping the second point–the process for getting public input, educating the public, bringing them into this conversation, and getting their opinions and their voices–needs more work.

And the third thing I wanted to say is: we are not in a vacuum. All of us advocating for zero waste, for reduction, for recycling have run into way too many roadblocks, from what I will politely and officially call "opponents to change." I will give you one very tiny story. Along with others, a week or two ago, I testified in the state legislature in support of a bill to establish straws by request. Of course straws by request wouldn't solve the disposal problem

in Massachusetts, but is that one of many important positive forward steps that we need to take to get back to the first word and that mantra which is reduce. So a number of us testified in support. And then a lobbyist for a business association gave his testimony against, which included this data point that somewhere in the world a woman was impaled on a metal straw. And as such, we need to keep single use plastic straws available to everyone. These are the kind of arguments that passed for facts as we campaign to get back to reduce. I could give hundreds more examples. I do not want to take up the time of this public hearing, but all of us know that between the manufacturers of a lot of the single use plastics, between some of the companies that exist on waste being produced and disposed of, whether it's the fights we've had against the incinerators that Rep Vincent referred to or expanding landfills. There is a garbage industry. And I think it makes that second point that I made even more important. They have influence, they have lobbyists, they are entrenched in the system, and it makes it even more important that we go into this process with citizens voices heard and with our eyes wide open. So those are just the three points that I wanted to make, and as I said we will submit written testimonial for the deadline. Again, I truly appreciate this opportunity.

Thank you.

Municipal Assistance Coordinator, Irene Congdon

Written comment

John

Thank you for all your work on the master plan

I recommend adding on page 10. "Bottle bill support for all Glass". (This will save every community a lot of money.)

I recommend adding on page 17 For commercial waste that "the partnership with the business, hauler and community though municipal mandatory recycling policies will help foster compliance to the waste ban laws."

Question on page 4. It says 2000 pounds per capita, is that suppose to be household?

Thank you for your time.

Irene M Congdon

Central Mass Municipal Assistance Coordinator
[redacted]

National Waste and Recycling Association, Steve Changaris

Written comment

Comments of the MA Chapter National Waste and Recycling Association On the 2020-2030 draft Massachusetts Solid Waste Plan

The National Waste and Recycling Association (NWRA) is a 50 year-old plus Washington, DC area based national trade association of private solid waste and recycling companies that collect, handle, recycle, compost and dispose the discards and waste materials generated by the citizens, communities, institutions and businesses of America. Our members operate in all fifty states, and they have an active and significant presence in the solid waste system designed and currently operating under the state laws, regulations and rules of Massachusetts (MA). The MA NWRA Chapter (Chapter) membership is comprised of small "mom and pop" haulers to large national public

companies. Members also include small to medium to large privately held companies. All participate in MAs waste system to some degree and many provide full, integrated waste services including collection, recycling, organics, transfer, disposal and more.

The Chapter represents an industry that is dedicated to the environmentally protective and economically efficient management of recyclables and wastes. And further, as private companies, we regard the exercise of choice, and market competition, in the delivery of environmental services as being good for the environment, the public health and safety and for the economics of those using these services.

Our waste management facilities and companies are already among the most regulated in the state today. We are regulated by laws, rules and regulations established at all levels of government, including local, state, and federal. Private and public companies, under strict MA Department of Environmental Protection (DEP) permitting requirements, operate the state's largest landfills, municipal waste-to-energy facilities, waste transfer and processing facilities, recycling facilities, anaerobic digesters, compost sites, recycling and waste collection operations and related plants.

Our in-state waste, recycling and organics companies have stepped-up and helped move the needle positively regarding many issues in this pending draft 2020 – 2030 State Waste Plan (Plan). We have built -- and continually improve -- and operate modern, state-of-the art disposal facilities, recycling centers, organics management facilities and waste transfer sites all over the state. Our industry is responsible for 26,000 jobs (both direct and in-direct) of MA taxpaying citizens. We have an estimated $1.4 billion annual payroll. Our industry produces $5 billion of revenue annually. Last, on average, payroll compensation per employee is $57,722.
We employ thousands; we pay taxes and special fees to all levels of government; we invest, with private capital, in the physical infrastructure necessary to manage MA wastes, recyclables and organics, as well as in a fleet of collection vehicles and related infrastructure necessary to collect and manage these discards and waste materials.

Last, we also partner directly, and indirectly, with numerous governmental entities in MA to see that modern, environmentally sound waste management infrastructure, that is protective of the public health and safety, exists for all citizens and businesses within the state.

The Chapter shares the DEP's vision of a sustainable society that reduces waste, recycles more and recovers value from discards to the maximum extent practicable and properly disposes the wastes that remain. As a past motto of the trade group stated, we approach our job by thinking of ourselves as being "Environmentalists Everyday". In effect we are reality-checkers who must negotiate, adapt to, and address the day-to-day and evolving conditions associated with collecting recyclables and handling wastes. Thus, we are in a unique position to offer well informed perspectives on the realities of how recyclables and solid wastes are managed today in MA, and how they will be best managed tomorrow. The DEP's current effort thus provides a valuable opportunity for us to offer views and input about the proposed draft plan.

KEY INDUSTRY OBSERVATIONS

The Chapter has long been an active, constantly improving stakeholder in "all things waste and recycling" in MA. We have done this with our residential, municipal, institutional and commercial customers; and with the DEP; and within our own growing and changing industry and companies. Before delving into the proposed draft plan, we want to take this opportunity to review the state's current waste management system and its current waste plan. Then we will offer some overall comments about the state of MA's waste management system today.

Working in waste, recycling and organics is a lot like working in the legal system and pursuing justice. Pursuing justice is not only a goal; but it is also a process. So too it goes with our industry. We pursue goals and obtain goals too – like those outlined in the state's current 2010-2020 plan and the pending 2020 – 2030 plan – and have done so in an on-going process with lots of moving parts, stakeholders and variables. Our industry's saying about how the ton of waste is constantly evolving, parallels the state's waste management system we work in and how it too is evolving all the time.

In the last decade under the current state waste plan, several good things have happened. We have seen per-capita waste generation peak, level off and begin to decrease; we have seen an increase in access to recycling; we have seen more than 100 non-compliant Sub-title d municipal landfills close; we have seen the installation of maximum available control technologies at the WTE municipal waste combustors; we have seen the adoption of a construction and demolition (C&D) materials disposal ban and the building of more than a dozen C&D material recovery facilities; and we have seen the implementation of the first stage of an organic materials disposal ban and the building of several new anaerobic digestion and related organics management facilities. This is an impressive record; and by no means do we intend to rest on these great accomplishments. There are significant challenges currently -- and ahead -- in the state's waste management system.

MA's private waste services industry will continue to step-up and engage and be helpful in policy discussions and formulations. We will continue to offer our best and most applied knowledge in addressing and solving all manner of waste and recycling issues and needs. Last, we will continue to make significant capital investments in all the various components of the state's waste management system so that it is prepared as best as possible to meet all challenges of today and our future days to come.

2020-2030 MA Draft State Waste Plan

Key Plan Goals:

Reduce waste generation by 30% by 2030; and by 90% by 2050.

Reduce waste stream toxicity; promote household hazardous waste management services.

Promote EPR for targeted materials

Strive toward a Zero Waste Future for Massachusetts

MA NWRA Chapter Response - Plan Goals:

The Chapter understands the historical aspirational nature of goals in previous state waste plans; and why the DEP uses and adopts them in planning documents. Overall, we believe the DEP has balanced these aspirational goals well over the years in relation to the hard realities of policy implementation.

The Chapter recognizes the strong underpinning for the need to call our society to make less waste. Making less waste will ostensibly help reduce climate changing impacts; preserve energy and natural resources; and help us be more a more sustainable and resilient world moving forward. All good things no doubt. So invariably, there are some good features in setting waste reduction goals and some problematic features as well. The draft plan proposes a near planning term reduction goal of 30%; and a longer planning term reduction goal of 90%.

Waste generation is a vexing topic where industry experts can talk for hours about the evolving ton and how the characteristics of waste, recyclables and after useful life discards has changed and will likely change even more in the future. If one looked into a residential curbside recycling bin 10 years ago, there would be a slew of newspapers and magazines; much less so now and in the future as well. On the other hand 10 years ago there would not have been many corrugated fiber boxes in those bins; whereas today -- now with the advent and major acceptance of on-line shopping and shipping -- the presence of corrugated fiber boxes is most significant. This same kind of analysis also applies to the trash pail regarding organics. Today approximately 30% +/- of material in the overall trash tonnage is organics, food scraps, etc. In 10 years, it is likely to be less as the State's current organics disposal ban continues to ratchet down to lower quantity generators and the practice of generator source separation of organics becomes more the norm than the exception.

Given the nature and evidence of the evolving ton of waste and how we endeavor to manage the after useful life of materials and items, we believe targets to reduce waste generation are fine in the context of aspirational policy.

That said, we believe more education and incentives are needed to promote these aspirational policies and goals. Efforts to reduce the weight of packaging; to improve manufacturing processes to make less waste; to further study the life cycle of consumer products and packaging; to improve local recycling programs; and to educate consumers (waste generators) about better purchasing behaviors and impacts should be top priorities. It is also important to promote new technological advances in recycling facilities and practices; all to help further close the loop to the maximum extent possible to create a circular, sustainable economy.

These actions will help further support the waste management hierarchy policy established years ago by the USEPA and implemented around the country through the US government's intergovernmental state partners like MA. The trend line is well established in that we are doing more with less these days and becoming more efficient in the process. We believe the laws, rules and policies in place today have done us all good and will continue to move the needle forward in a positive way.

At times there was a DEP tendency to promote the thinking that haulers or waste companies were responsible for the disconnect when aspirational goals fell short or were not achieved. Recently we have noted a change in this DEP tendency to be more realistic and we applaud this movement and change. For example, take recycling contamination. As haulers and recycling facility operators, we don't contaminate recyclables. Rather, with the creation of new DEP programs like The Recycling IQ Kit and RecycleRight Campaigns, the DEP focused on how the lack of education and technical assistance for generators resulted in less than desirable generator recycling behaviors, causing the good quality recyclables contamination disconnect (where generators set-out recyclables we collect and process for market with high concentrations of contaminants). We appreciate DEP's efforts to promote a more robust discussion about shortcomings – real or imagined – in the state's solid waste system.

There are a wide variety of stakeholders in the MA solid waste management system – with lots of convergent and divergent views about how best to proceed with all things waste and recycling in the state. We know that it is appropriate to call for the creation of less toxic waste, reduced packaging and more diversion from disposal in the state's 2020-2030 draft plan. That said, we also know, since we are tasked to be stewards of all kinds of waste management operations and facilities, including disposal facilities, that is it most appropriate for us to make the case for adequate capacity to manage all materials – wastes, recyclables and other materials designated for diversion from disposal.

There are numerous issues that come into play here too, particularly with regards to recycling facilities and other material recovery and diversion facilities and programs. And that issue is markets for the items that are separated for reuse and otherwise diverted from disposal at these facilities. The effectiveness of these facilities without strong, robust and redundant markets for the materials to be reused, recycled or otherwise diverted from disposal remains questionable. There are many ideas about how to move existing or create new markets for the materials we recover; one that meets strong support in our recycling community is minimum content legislation (when structured properly). Striking the balance in all of this is the challenge; and then identifying pathways forward to make the best improvements possible will be the key to any success in this space.

It is clearly noted in the 2020-2030 draft plan that MA has a disposal deficit – brought about by the closure of in-state Sub-title d, lined landfills. It is fair to say over a few short years in recent and current history, upwards of a 1.5 million tons of in-state landfill capacity will have gone off-line. The preferred fixes envisioned for the management of this deficit in the 2020 - 2030 draft plan is a combination of waste reduction; further organics/food diversion from disposal; increased recovery of recyclables; and more diversion of C&D materials from disposal. To the extent these planning efforts fall short or do not materialize, the net export of MA waste materials for disposal will grow significantly (if not double) from its 1.1 million ton current export estimate.

As noted, MA has experienced a significant loss of in-state disposal capacity for solid waste, resulting in increasing reliance on sites out-of-state for disposal. Further, the DEP, in this draft plan is relying on a series of policies and developments to help mitigates – at least in part – some of this disposal capacity loss. In addition to the this mix of ideas and programs noted above we see the DEP is also calling for the development of 350,000 tons per year of new management capacity – other than traditional waste-to-energy and landfill disposal facilities. Reliance on

these policies and these possible developments indirectly suggests that if these initiatives take hold slowly or not at all, that MA waste exports will increase and will continue indefinitely into the future.

Insufficient disposal capacity within MA requires the industry to rely on long-haul trucking and rail to remote out-of-state locations for disposal of the state's wastes not otherwise managed. Relying on the long hauling waste greatly reduces the flexibility of the state's current system in the case of a casualty of an existing permitted facility or a natural disaster. Long hauling transportation infrastructure is simply not yet setup to move such waste volumes, perhaps at rates of more than a 1,000 tons per day, to distant disposal locations on short or emergent notice.

Insufficient disposal capacity within the state also adds easily avoided impacts to the environment regarding the air emissions associated with these long haul waste operations. The state will be impacted by the significant increased expense of transfer, transportation fees and other costs paid to move wastes to out-of-state disposal sites. Most, or all, of these impacts would be avoided if new, traditional disposal capacity assets like landfills and waste-to-energy plants were further developed in MA.

Additional waste-to-energy and landfill disposal in Massachusetts would add stability to existing waste processing programs and would support additional recycling. Jobs would be created in Massachusetts at the new facilities. The state economy would benefit from the opportunities to recover additional materials and energy value from waste. Moreover, the energy production from these facilities would offset emissions from conventional fuels and would reduce reliance on fossil fuels to generate electricity, all in accordance with state policies to encourage new sources of green renewable energy.

Accordingly, we believe, the pending 2020 - 2030 draft plan rightly proposes to affirm the updating and rebuilding, when necessary, of current state WTE facilities as essential for the planning needs of the state. This policy will go a long way to insuring that this needed in-state disposal capacity can continue to serve MA citizens, communities and businesses. Also, we believe the 2020 – 2030 draft plan should further provide the DEP with strong policy guidance that it should also address the state's in-state disposal shortfall: 1) by fulling lifting the moratorium on traditional waste-to-energy capacity and to explore best options about how to help communities and industry bring new in-state Sub-title d landfill capacity on-line as well. To do this the plan should call for the convening of a stakeholder group of municipal and business leaders, waste industry professionals and others to work towards restoring the long held and only recently abandoned "no net import – no net export" state waste disposal capacity policy. The Chapter urges the DEP to do so. New in-state waste-to-energy and landfill disposal capacity – will both serve the state well and is a good way to help protect and insure the free flow of waste remains legally available in interstate commerce.

The DEP, MA communities and businesses have done a good job regarding the "one in 500 year flood" kind of market downcycle we have experienced, and currently are experiencing with the recyclable commodities we manage. For years municipal and business recycling was supported and grew based on the strong commodity values of many of the items collected in recycling bins. With the sustained and on-going loss of those revenues, due to the drop in recyclable commodity values, the cost of recycling can no longer be hidden or offset by them. For years communities and businesses benefited by recycling and saved money due to sustained, strong commodity markets. In time we believe markets will improve for recyclable commodities; but, in the meantime, new arrangements need to be implemented to ensure recycling programs are financially sustainable. The cost of trucking to collect recyclables and the cost to process recyclables at material recovery centers must be paid. The splitting of the cost then to move recyclable material to market -- or the revenues derived from the market sale of recyclable materials -- should be worked out by generators and recyclers. As this is addressed and recycling programs continue, all the environmental benefits of recycling will also continue forward on a new, sound sustainable financial footing.

We believe, by and large, the current inter-governmental, public-private solid waste system partnership that we have all worked with over the years should stay in place and not be radically altered. As noted earlier the current

system has not only produced and is producing positive results; but it is well positioned to meet the state's future solid waste system challenges and needs.

Key 2020 - 2030 Draft Plan Priorities:

Diversion/reduction: organics/food; cardboard; untreated wood; textiles; bulky materials

Reduction/phasing out difficult to recycle materials - single use packaging (SUP); better packaging; less wasteful purchasing habits

Increase reuse and donation – food (rescue/diversion); building materials; office furniture; textiles

Markets for recycling/reuse/management – organics/food; mattresses; glass; textiles

Mattresses – Enact waste disposal ban

MA NWRA Chapter Response - Plan Priorities:

The 2020 - 2030 draft plan's priority materials to divert from disposal include: organics/food; cardboard; untreated wood; textiles; and bulky material.

The DEP is proposing to use the adoption of the draft plan to set the new disposal ban compliance threshold for organics/food waste generators at ½ ton per week; compared to the current 1 ton per week threshold. In presentations regarding the plan, and at other public meetings, DEP has consistently deemed the current 1 ton per week organics disposal ban a success. Given the shortfall in disposal capacity, and the pre-existing construction of the current organics disposal ban and on-going DEP signaling, the extension of this disposal ban to lesser quantity weekly organics generators is understandable. If the DEP proceeds with the new ½ per week threshold policy, we encourage the DEP to convene a organics stakeholder panel and to time the work of the panel to be done before the future release and promulgation of the new regulation supporting the ½ threshold. There will be thousands of more new businesses around the state covered by this threshold change. DEP's implementation of this change is supported by its experience of the initial large quantity generator threshold regulation. The scope of this new regulation is much wider and will invariably present new and unknown challenges. We believe the work of a new DEP ½ per week organics stakeholder group will be critical to ensure that the DEP and all concerned stakeholders to be affected by this kind of change.

As for the other priority materials we urge caution. For example, we agree adequate markets for cardboard exist today and that all cardboard generators need to be better at source separating cardboard materials for us to collect, process and get to market. Our concern here is "how" the DEP plans to do this. We support and believe it best for the DEP and local governments to do more recycling education with our cardboard generator customers (all customers, residential, commercial and institutional) and only to the extent necessary pursue additional DEP or local enforcement actions (notice of non-compliance, etc. to generators violating cardboard disposal bans). We cannot be supportive of actions that disrupt our collection or facility management efficiencies for cardboard waste ban non-compliance by our customers.

As for untreated wood, textiles and bulky items we urge caution for reasons like the cardboard discussion above, along with some other, very specific one-off item kinds of concerns. The biggest for all items is markets, or specifically the lack and extreme variability of them, for these items. As noted, we believe the plan should further direct the DEP to explore minimum content laws to help create or sustain markets for the material we collect and endeavor to divert into recycling and re-use markets. Our other concerns involve all the new costs to get generators (our customers) on board with the new source separation requirements; and, establishing the programs to collect them and the facilities to process and aggregate them for any available markets; and last, getting generators (our customers) to pay for these changes. We will endeavor to work with our customers to

divert and recover as many these prioritized materials as possible; but in order to do so the DEP must also support us to move the needle with them.

The first point we will make about Extended Producer Responsibility (EPR) generally is to remind the DEP that together in a "uniquely fantastic intergovernmental public-private partnership" we have built a tremendous waste, organics and recycling system in MA over the last 4 decades essentially without EPR. Millions of tons of recyclables and organics have been recovered and re-used and continue to be so managed. The irreducible volume of municipal solid waste that remains at the same time has been sent, and continues to be sent, to permitted state-of-the-art WTE and landfill disposal facilities – both in-state and out-of-state. The current recycling system is working well today and is expected to work well tomorrow.

An important consideration for the EPR issue in MA is ultimately about "who will pay" and correspondingly "how they will pay" to make the system for post-consumer management of materials and wastes work in the future. Historically municipalities, citizens, institutions and businesses have paid the companies in our industry for these services through local taxes or other local financing models or simply by paying the bill directly for the services rendered. In some instances, a community may have its own DPW do solid waste tasks or a business may self-haul, etc. However, our industry has invested in the facilities and programs to make MAs waste system work.

The Chapter's position is evolving in this EPR space, much like it is evolving in the MA regulatory and legislative policy arenas. We want to have a seat at this table as these discussions continue. Generally, we believe the issues surrounding EPR for consumer packaging are the most complex and will present the most hurdles to overcome and reach consensus on. That said EPR models for single items like paint are a little further developed. Accordingly, as this draft plan calls for the consideration of EPR for these items, we urge caution and additional research and stakeholder engagement before adoption of such legislation and regulation.

Regarding the after useful life management of mattresses, know we believe the DEP should create a mattress study group. We believe the work of such a group would be very helpful as the state further considers how best to deal with the after useful life of mattresses. Also, we think it is appropriate to note here the tension between MAs current waste system practice and models and possible, further use of an EPR for any product's after useful life management.

Historically the DEP, has promulgated disposal bans on targeted items suited for recovery/recycling/diversion. The electronics and organics disposal bans come immediately to mind. These disposal bans also have been deemed highly successful by the DEP. If the mattress study group supports a disposal ban for mattresses like we have for electronics and organics, and the DEP then promulgated a mattress disposal ban regulation, the issue of diverting mattresses from disposal for recovery and recycling efforts would be addressed.

Generally, the current use of disposal bans puts the cost of managing the after useful life of the disposal ban item on those who surrender the product when they are done using it and perhaps on a locality that has a program to manage the disposal ban item for its residents. A locality that does not charge their residents a direct fee for the management of a disposal ban item and that relies on funding the cost of this service from their town budget, might find an EPR mattress program offering municipal mattress management participation rebates preferable *since the producers of mattresses will ostensibly provide new outside funds help the town pay for the after useful life management of the item. The mattress manufacturer will get these funds from having already charged the consumer -- on the front end at the time of the mattress purchase – for the after useful life management cost to be reimbursed to the town. The revenue to pay for the after useful life of the item is still paid for by the consumer or citizen one way of the other. Either through the transaction when purchasing or by paying a combination of fees and local taxes to his or her community.*

This mattress discussion is a good example shedding light about where we pay for the after useful life management model of a product or item; and how we pay for it.

NEXT STEPS

We understand at the end of this comment period, the DEP will finish its review of all the oral and written comments it has received on the draft plan as quickly as possible and then endeavor to get it through the final administrative reviews required so that the draft plan, is formally adopted later next year.

The chapter is thankful for the opportunity to submit these comments on this 2020-2030 draft state waste plan. NWMA and its members strive to continue our professional work with the DEP on behalf of MA's private recycling and waste companies, and the citizens, communities, institutions and businesses we serve. Also, we look forward to working with the DEP in the months ahead on this and other matters that promote sustainability; that will advance sound and environmentally protective recycling, organics and waste facilities; and, that will provide economical and cost effective recycling, organics and waste services for all citizens, communities, institutions and businesses in MA.

Respectfully submitted,
Steve Changaris
MA NWRA Chapter Director

New Bedford City Council, Brad Mackey

Oral comment

My name is Brad Markey, and I am actually one city councilors for New Bedford. I'm a colleague of Councilor Morad, and she's a hard one to follow. She already covered it all for New Bedford, so I'm not sure if it's good or bad, but I did want to make a couple comments. I think it's a great idea what you folks are trying to accomplish in recycling. I'm in the textile business in company that was founded in 1898, and was probably one of the original recyclers. We took wool to collect. I wasn't with them at the time, but we took little clips and processed them back into fiber to sell them back to the spinner. Recycling back then was to cut your costs, and that's what you did. Today we need to recycle because we just can't keep putting it in the ground, and as a gentleman before me had mentioned, companies need to starting taking it from the cradle back to the grave. In the textile business that's exactly what we're doing. There's a lot of companies out there looking avoid leaving a footprint, and I think that's what everybody needs to do from a manufacturing standpoint. One mentioned is polyester. When recycling stopped being shipped to China, our business was affected by this because bottles go over to China, get put back in the fiber, and we sell that fiber here in this country. What people are trying to do now is take those fibers, and instead of PET, make into a product where you put it in the ground, you're not recycling you're going to bury it, but six months later there is a hole in the ground with nothing left. So that's what we need to do. I really would put on because you've heard New Bedford, we do have some issues there with recycling, and what I would just ask that when we do this we make sure we do it in an environmentally sound way, but also want a way that it doesn't affect people. We don't want to put processing plants in areas with people live. And I realized that sounds like not my backyard, but I do think there are areas that these places should be. And I think we could all work together and find those workplaces. So again, I just want to add my, my two cents. Thank you.

New Bedford City Council, Linda Morad

Oral comment

My name is Linda Morad. I'm a city councilor in New Bedford, but I generally try to let the public speak first. I have the honor of serving as president this year. I'm joined by a colleague here council Brad Markey. I'm not sure if he's going to speak, but he's here as well. So I would like to begin my comments by echoing the comments of Representative Orall. You have in front of you a humongous task, and I don't envy you, but I applaud you in actually taking the steps to try to address the issue that we have statewide.

You may or may not know that New Bedford has been active over the past several years in doing its best to reduce its output and to increase its recyclables. We have a mandatory recycling program in New Bedford that's been very successful. We have a landfill in New Bedford, and we've extended the landfill life by almost 15 years already by the recycling programs that we've put in. We understand the mission that you have and we're attempting to

support you as well in your mission. I'd like to make a couple comments to you. I noticed in your draft that you have policies to implement some statewide programs to foster your goal, and I would encourage you to do that. Our experience in the New Bedford area is that different policies of the various towns are competing against each other, and oftentimes we have issues where a town has a certain item that is or is not allowed to be recycled or to be picked up, and the surrounding town will find that item on its doorstep, or in areas where it probably is just recently dumped. So I think it's important on behalf of the study that you're doing to look broadly across the state, and if you're going to implement policies and procedures, do them across the state so that we don't have competing towns and issues.

They also know that you're looking to cite potential facilities for your ultimate goal. And I think that most of the people in this room have a concern about potential sighting of a company in the New Bedford area, specifically Miss Wallace just mentioned Parallel Products. I echo her words that the company has been arrogant in its position in New Bedford, indicating that it's a done deal, and it's got its permits, and it's moving forward. And that community is fighting that project, tooth and nail. Our city already has a wastewater treatment plant, it already has a landfill area in it, and we don't need another facility like Parallel Products. It moved from its location not too long ago to this location, under a false pretense as to what it was going to do. I understand it's an attractive project as it relates to where it's located in its proximity to the rail, but there are neighbors in that area. My last comment would be in no way critical of you or of the study, but as elected officials and as public agencies who are paid by taxpayer dollars, we have a responsibility to make sure that even though we have a goal, which is detailed in your master plan, that we protect the neighborhoods that are in the Commonwealth, and we protect the people who have lived there for many years, and I asked you to please consider that as you move forward in citing any of these facilities across the Commonwealth. Thank you for your attention. I appreciate it. Thank you.

Newton Solid Waste Commission, Marian Rambelle

In Residential Waste Reduction - Training, Education and Outreach strategy, I suggest that education also include raising awareness of the financial costs and potential savings associated with reducing contamination in residential recyclables, as well as in reducing overall trash generation. Many residents may not be aware of additional fees that are paid by municipalities when their recyclables contamination rate exceeds their contracted threshold, and of how much taxpayer money can be saved by reducing their trash disposal rates. The financial incentive may be another compelling reason to provide to residents. For example, Newton's Mayor Fuller led a publicity campaign in 2018 to inform residents about the additional fees the City of Newton was paying due to contamination of residential recyclables. As a result, the City's contamination rate was found to significantly decrease in early 2019, so much so that the additional fees were eliminated.

Thank you for your consideration,

Marian Rambelle, Chair, Newton Solid Waste Commission

Nicole Gardner

Written comment

Hello,

I'm writing to register my strong support for the draft new plan. In fact, I think it could go even further. Stay the course!

Nicole Gardner
[redacted]

Patricia Rosenthal

Written comment

Hello John Fischer,

Some environmental activists are advocating for Massachusetts to have a plan to produce zero solid waste by 2030. This is not possible in an industrial society, or in any human society. Native Americans burned wood, which produced ashes, and ate shellfish, which produced non-compostable shells. The energy use necessary to recycle all solid waste is enormous. This cannot be produced by solar or wind power alone. The environmental degradation, and poor health of the miners, that comes with mining huge amounts of lithium for batteries to store renewable energy is unacceptable.

As for the suggestion that households be required to compost food garbage, this will lead to a substantial increase in the rodent population. The rodents will then invade homes in the winter, bringing serious, and difficult to treat, diseases with them.

It is totally inaccurate to say that a goal of zero waste saves a lot of taxpayer money and improves the health of our communities. I do not want to return to an agrarian economy!

Regards,
Patricia Rosenthal
[redacted]

Perlmutter Associates, Amy Perlmutter

Written comment

Dear Mr. Fischer:

I read with interest the draft of the 2030 Solid Waste Master Plan and would like to provide the following comments.

First, I congratulate DEP for this update. It does a good job identifying issues and priorities and laying out goals. However, as with previous plans it:

- does no analysis of why the goals of the previous plans were not met and how to design programs hat build on lessons learned (both positive and negative);
- has no teeth to ensure goals are met;
- lacks specifics; and
- has no strategy for reaching goals, including even a general sense of resources needed (policy, staff, budget)

Without this, we will find ourselves in the same place in another ten years, without significant progress and looking at increasing disposal capacity.

Disposal Capacity

The Plan provides for increased "innovative" waste-to-energy capacity in-state because we are not meeting our goals. None of the supposed innovative technologies identified—pyrolysis and gasification- is in fact new or innovative; they have been around for decades. As Don't Waste Massachusetts illustrated to DEP and EEA ten years ago, the plants that were being proposed in Massachusetts that claimed successful track records elsewhere nationally and internationally were in fact not meeting up to their promises. The likelihood of any plant actually getting built is slim. No community wants one and there will be extended legal battles. Resources would be better put into implementing policies, programs, and facilities that will work to avoid waste generation and divert

materials from disposal. That said, if any so-called innovative facilities are built these should be designed and permitted for specific waste streams approved by DEP, not for mixed MSW. This allowance for new disposal technologies is for 350,000 tons/year. Yet the draft Plan says that we can increase diversion through PAYT by 400,000 tons/year if all communities went to PAYT. There are obviously more and less effective ways to put PAYT into effect. But it is clearly a proven way to reduce waste. If communities cannot reach a baseline diversion rate set by the state, they should be required to implement a PAYT program. The benefits are clear.

Waste Generation

The Plan states that, despite an increase in economic activity and population, tonnage of trash has decreased. While we don't really know why this has happened, it is likely due to a continued decrease in the generation of newspaper, a heavy material, and a proliferation of plastic, a lighter one, not due to less wastefulness on the part of residents, businesses, and institutions. Has DEP compared the trend in-state to the national trend? If it is not something that the state or communities can take credit for, then we need to be thinking about how to make our programs more effective. We have to do that regardless, since this reduction did not meet the goals in the last Plan. This ties back into my point above that we need an analysis and understanding of what worked, what didn't, and why.

Markets/Market Development

As the Plan states, quality is key. Materials that are of high quality are able to sustain market downturns, even one as significant as National Sword. The Recycling IQ program seems to have helped reduce contamination. However, single stream materials are by nature more contaminated. DEP should look at funding pilot programs that look at alternative collection methods, such as split or dual cart dual stream programs, and should discourage dual stream communities from going to single stream.

It could also develop incentives to MRFs to clean materials to higher quality, since the MRFs are often most interested in moving volume and they can pass along costs to communities. Yet it is in the interest of the state to have cleaner materials in order to keep programs running effectively during market downturns. The experience of mission driven processors in other parts of the country, such as EcoCycle and Eureka, show that single stream materials can in fact be sorted to higher quality with adequate education and processing.

Because of the increased amount of plastic in our discards, if it hasn't already, DEP should look into the possibility of creating a PRF (Plastics Recovery Facility) to sort plastics to higher grades.

And it should support an expanded Bottle Bill which will make curbside materials cleaner, as well as lead to a cleaner stream of glass that can go to higher value markets than fill.

Market Development grants that focus on priority materials are great and the definition of what is meant by priority on page 8 of the Plan makes sense. But DEP should consider opening grants to any material for which markets can be grown or retained in-state. A ton avoided or diverted is a ton avoided or diverted, regardless of the material. And creating more jobs and more diverse opportunities for reduction and diversion will help increase awareness about Zero Waste and create a culture of waste reduction, while also diversifying the materials markets. Some examples might be Zero Waste stores that sell items in bulk with reduced packaging; ways to reduce the proliferation of disposable cups, plates, utensils by creating businesses that wash durable ones; bottle washing plants for refillable bottles; grants and loans for glass products, such as blown glass or molded pavers, which may use relatively small volumes of material but be high value. DEP could partner with accelerators like Mass Challenge and Clean Tech Open to sponsor Zero Waste challenges, educate applicants about Zero Waste, or articulate Zero Waste priorities and ideas that budding entrepreneurs could turn into business plans. As part of the Boston Zero Waste plan, I co-authored a document on how the City could support local market development. DEP could provide grants to municipalities, though the Dividends program or otherwise, for implementing some of the ideas described in that document (which can be found at

https://www.boston.gov/sites/default/files/embed/file/201904/boston_recycling_market_development_final_12-4-18.pdf)
The Chelsea Center's old website is gone, but documents can be still be accessed through the web archive, the WayBack Machine (https://web.archive.org/web/20150801084314/http://chelseacenter.org/). There, lots of good research can be found that is still relevant, much funded by DEP, including reports on market opportunities; an RFP and case studies of how communities can match waste streams with job needs; and, the Strategic Plan for Recycling Market Development, which has a lot of good ideas for approaching market development.

Outreach

To create lasting change and ways of thinking about wasting behavior and recycling, what we need is a culture change, and culture change doesn't happen by giving people carts and an occasional mailer. I urge DEP to fund and/or implement outreach programs to diverse communities and businesses that address why, how, and who recycles. As part of the Zero Waste plan for Boston, my team put together case studies on outreach efforts by leading zero waste cities. Each one stressed the importance of constant outreach. That is sorely lacking in Massachusetts. That report with specific quotes and examples can be found on the Boston Zero Waste website, https://www.boston.gov/sites/default/files/embed/file/2019-09/task_7-_outreach_case_studies_final.pdf. From the report:

> *Fundamentally, Seattle approaches communication as a key component of sustained behavior change. As a result, they maintain high levels of communication even about programs that have been running for years. As Becca Fong, the city's lead on communication in the residential sector puts it: "we've been recycling for 30 years, and we still talk to people about recycling all the time!" This approach ensures that residents and businesses build and maintain new behaviors, learn continuously about Seattle's progress towards its Zero Waste goal, and that newcomers have ample opportunities to learn about the city's programs.*

While these cases are about municipal programs, there are lessons the state can use. Constant outreach on the state and local levels should be part of the Plan.

In addition, I was at a municipal transfer station in the state recently and was told by an attendant to put my paper in the trash bin, since it didn't matter if it went there or the recycling bin, as, according to him, it all just got burned, anyway. I engaged him in a discussion of recycling and he was full of misinformation. We need training for people working at these facilities who are on the front lines of interacting with the public.

Goals

DEP identifies product stewardship and HHW programs to reduce toxicity. Yet one of the most toxic materials, perflourinated chemicals, is spread through sewage and through compostable packaging and would not be addressed through such programs. These, and perhaps other toxic materials, must be banned.
DEP should add as a goal that materials should go to highest and best use. This would mean that a focus is put not just on diverting volume, but on making sure that volume is going to high value markets. It would also mean that food waste is not co-digested with toxic sewage sludge. Composting food scraps separately means that we can more safely put it on the ground, where it can help sequester carbon, make soils more resilient to drought and flooding, and provide nutrients for food.

Legislative Strategies

We need comprehensive policy to get to Zero Waste. An expanded Bottle Bill; banning PFOAs from compostable materials; requiring any community that can not achieve certain Zero Waste milestones to enact PAYT; requiring or putting carrots or sticks in place to reduce the use of disposable plates/bowls/utensils in restaurants where food is eaten in; putting in place disposal surcharges which can be used to fund programs, including education and enforcement; extending product warrantees; banning more single use plastics; building deconstruction requirements/incentives—these are some additional examples of needed policy. I would like to see DEP create a

comprehensive list of policies needed to enact each of the programs to support the Plan put together in one section of the document.

C&D

More emphasis should be put on deconstruction and reuse.
Data
We need better data on actual waste and recycling, such as waste generation; composition overall, not just at incinerators; and the amount of materials actually recycled vs collected for recycling. This lack of good data impacts DEP's ability to know what is effective, track changes over time, and design and target programs. Thank you for the opportunity to provide these comments. I look forward to seeing the final draft.

Sincerely
Amy Perlmutter

Phyllis Theermann

Written comment

Thank you for all involved in crafting the draft of the MA 2030 Solid Waste Master Plan.

The plan, however, seems to be underwhelming as we are drowning in plastic.

I would encourage the state to focus on and expand on moving to Zero Waste.

It will take a plan, policy, financial incentives and consequences for not participating. Plus some ethics since we all have a responsibility for the health of our planet.

Our state also should create policy for Extended Producer Responsibility.

(EPR) is a policy approach under which producers are given a significant responsibility – financial and/or physical – for the treatment or disposal of post-consumer products.

Thanks for all you do!

Phyllis Theermann
[redacted]
Member of Sustainable Wellesley

Rene Wood

Written comment

Dear DEP:

First thank you and your staff for updating these important plans, especially as the past targets have for the most part been missed.

I read the entire draft and make my comments both as a private citizen and as the Chair of the Sheffield Select Board. However, these comments are mine.

There are excellent parts to the draft SWMP; however what is missing throughout the Plan is DEP and the State taking an aggressive role in mandating or giving large incentives for a limited period of time, followed by mandatory directives to actually get the Plan implemented throughout the state.

The matters covered in the SWMP can not wait another 10 years for communities to adopt, or plan to adopt them. They must be adopted as soon as possible. The only way that is going to happen is if they are mandated and in a sense forced upon the municipalities, however hopefully not as unfunded mandates.

Coming from a small rural Berkshire County town, there is not the manpower to engage in what the plan calls for but we've been good about doing what has been directed our way. I saw this first hand when we struggled to and did pass a ban on all flavored tobacco and vaping products under age 18. Once the Governor issued his directive, and now stronger more legally solid direction has been given on this matter, it is easy to follow. Leading can be tough. I see the same issue with single use plastic bags and do hope the House will get it passed soon.

So while the draft SWMP is good, it lacks the teeth and mandated directives needed to get it done, in my opinion.

Please figure out how to issue binding directives, if you have that authority, or please work with the Governor to make these items happen given his directive powers, or lastly, work with the legislature to get the highest priority items with the greatest impact passed - possibly one or two a year. 10 years later, I believe much more will have been accomplished.

Thank you for receiving my comments.

Sincerely,
Rene C. Wood
[redacted]

Republic Services, Nick Stefkovich

Written comment

Thank you for the opportunity share comments on the 2030 Solid Waste Master Plan (SWMP). Upon review, my comments are minor. With few exceptions, the SWMP is an accurate and comprehensive summary of the current and future state of solid waste in the Commonwealth.

Page(s) 5, 10, 12, 14: Pay as You Throw (PAYT) is represented as a diversion success. Unfortunately, PAYT communities produce a recycling stream that is significantly more contaminated than non-PAYT communities. Simply reducing solid waste capacity at a point of generation does not change behavior. And the contamination of residential recycling streams is a major challenge facing the industry. At a minimum, implementation of PAYT requires corresponding enforcement and education on proper recycling practices.

Page(s) 2, 6, 7, 21: The **Goal** of reducing disposal to 1,310,000 tons (80% reduction) by 2050, along with the interim 2030 goal are without foundation. As noted in the plan, the 2020 goal was not achieved. And the draft SWMP does not detail significant changes in programs or activities with the exception of a plan to execute more effectively, along with general program maturation. While in a 30-year horizon new technologies could impact the results, the goals appear to be aspirational.

Page(s) 8, 10: Single-Use packaging, particularly beverage containers, of all commodity types represent a major societal problem. Rather than an industry perspective, this is more a general personal observation. The

convenience society comes with costs. Reducing the use of Single-Use containers is a broad endeavor, beyond just the solid waste management function of the Commonwealth.

Page(s) 1, 9, 13: We support the plan to incrementally increase the diversion of **organics** (implementation1/2 ton per week threshold). This change will increase the need to pre-process and transfer organic streams from population centers to regionally (rural) located processing facilities (AD and compost).

Please contact me with any questions.

Thank you.

Nick Stefkovich
Market Vice President

Robert Walsh

Written comment

Hello,
I have reviewed the presentation and draft plan. I have the following comments.

1. Focus on achievable goals, not signaling unrealistic targets for applause.
The report says "MassDEP has developed and implemented extensive programs since 2010 that lay the foundation for moving toward a zero waste future in Massachusetts." Zero waste is a utopian goal, and so is a distraction from what can be effectively accomplished by frail humans at reasonable cost. The perfect is the enemy of the good, as depicted by 2018 tonnage leaving a large gap relative to 2020 goals. There are opportunity costs and overheads when unrealistic targets distract efforts.

2. Clarify how the prioritized efforts need to be addressed.
Our local transfer station has a separate container for cardboard. You could indicate what percentage of municipalities need similar diligence.

Our local transfer station (as well as churches and other sites for charities) support the recycling of textiles. You could indicate what percentage of municipalities need similar diligence, or how the current charities are failing to address the problem.

Our local transfer station has a single stream for construction debris, and does not distinguish untreated wood. I do suspect that separating this at the transfer station could provide a significant benefit, but that also requires contractors using the site to not be lazy, or that they're overseen (at some cost). Some details for how this would be handled would inform the plan. Furthermore, untreated wood would still have hazards like splinters and nails.

3. I have lived in pay-as-you-throw and in transfer-station based communities. I think that transfer stations with sorted streams establish good household habits and shift (labor) costs onto the individual in a good way. I lived through a transition to pay-as-you-throw and it didn't change what or how much I put out (or my neighbors from what I could tell); it just seemed like another tax by the town. I also suspect it led to alternative dumping, such as unauthorized use of commercial business dumpsters.

4. If Asia is picky and if plastics are reduced, plan for increased local glass recycling, if you suspect glass might become a replacement for some of the plastics. If corn-based or paper-based products replace other plastics, discuss whether you expect them to be cleaned and separated as plastics now are, or if you foresee some other approach to them.

South Coast Neighbors United, Wendy Graca

Written comment

Dear Mr. Fischer,

I am writing to submit comments and express concerns regarding the inadequacies of the MassDEP's Draft Massachusetts 2030 Solid Waste Master Plan. As a member of a grassroots organization working to help shape effective policy surrounding environmental issues that impact our Commonwealth, I must say that I find this document severely lacking in any real bold measures to combat our state's waste production and management problems. We should be aiming high, and developing a ZERO Waste Master Plan, like the cities of San Francisco and Seattle are doing, which is what TRUE innovation looks like. To call any of the measures in this plan "innovative" is very misleading, as they are not much different than what we have been doing, and yet we are still in a waste production and management crisis. The definition of insanity is doing the same thing over and over again, and expecting different results, and using the term "innovative" to describe it is akin to the term "cutting edge technology", which sounds very progressive, but it just means that the method hasn't been tried and tested for efficacy or long-term consequences and is actually a gamble to deploy.

The biggest risk outlined in the plan is the so-called "innovative waste to energy" technology, which I object to vehemently. Solid waste should not be recycled or reused for ANYTHING. That is not a responsible solution; it is a cheap, temporary band-aid. Once removed, it will inevitably expose a gaping, oozing wound that is so severely infected, there will be no antibiotic or remedy we could invent that will fix it. For example, our state has been turning waste into fertilizer for some time now, and according to an article recently published in the Boston Globe, toxic chemicals have been discovered in that fertilizer. Per the article, "...recent tests of the fertilizer, which has been sold for nearly 30 years, have caused concern.They show levels of toxic chemicals known as PFAS, which have been linked to low infant birth weights, kidney cancer, and a range of other diseases." Additionally, "Over the past three decades, the fertilizer has been sold or given away in massive amounts: tens of thousands of tons a year sent to farms and golf courses, parks and gardens across the region." If they haven't already, the full article should be accessed and read those responsible for drafting this 2030 Waste Master Plan here.

Another major concern I have regarding this draft of the 2030 Waste Master Plan is the expansion of intake capacity at existing waste management plants and the proposed addition of these kinds of facilities. To me, that clearly indicates an anticipation of handling MORE waste, not less. Parallel Products of New England hopes to build a biosolids processing facility in a South Coast community already overburdened by pollution, and was inaccurately listed in your original draft as already permitted to operate. They have made comments to members of that community (who passionately oppose this project) that it's pretty much a "done deal", because they "have people" at the MassDEP. When the listing of this project as permitted in the Master Plan was detected and questioned by a citizen, it was excused as a typo and since corrected to pending, but I'm sure you can understand how citizens might have difficulty "trusting the process" now. After all, how does adding MORE waste processing facilities align with the proposed 30% reduction per decade goal we plan to begin in 2020?

This draft plan lacks clear goals, incentives, enforcement and penalties. Where are the proposals of waste reduction incentive programs? Like composting? More than 70% of our waste stream is compostable or recyclable materials. A strong focus on these materials could reduce our waste by 70%, rather than 30%, by 2030! Currently, 1 in 4 waste loads contain enough materials that are banned from the trash that they should not be disposed of in landfills or incinerators. MassDEP claims to want to reduce our waste 30% by 2030, but our waste could have already been reduced by 40% if existing waste bans had simply been enforced. This is extremely troubling, since it is difficult to have faith in an agency that is not abiding by the guidelines it has previously enacted. In a recent report, issued by numerous environmentally-focused organizations, it was stated that the MA office of Energy and Environmental Affairs has consistently failed to "acknowledge that its lackluster approach to reducing solid waste degrades the quality of our air, land and water and results in greenhouse gas emissions. Rather than reducing waste, the Commonwealth disposed of 230,000 more tons of waste in 2018 than in 2010, according to MassDEP." That report can and SHOULD also be accessed and read by the authors of this 2030 Waste Master Plan here.

State resources need to be directed to hire staff for cities and towns to build Zero Waste programs. State-wide policy banning all single-use plastics, beginning with bags, straws, and polystyrene containers, should be passed. We should adopt and support Reuse policies and programs for textiles and bulky waste (furniture), because these items account for more than 10% of our solid waste. We should adopt and support Right to Repair policies and programs for electronic waste, which is one of the most toxic and dangerous waste streams. We need to expand Deposit Return and adopt Producer Responsibility systems. An expanded version of the Bottle Bill and new Producer Responsibility systems would shift the cost of recycling glass, metal, and plastic containers, packaging, paint, electronics, and bulky items like mattresses off of cities and towns and onto the producers. All food scraps should be banned from disposal and composted or processed in an anaerobic digester, free from sewer sludge or any other toxic materials. Food scraps and yard waste make up more than 25% of our total solid waste, totaling about 1.4 million tons a year in Massachusetts.

I implore your agency to not take the easy way out, by doing things the same way it always has, and instead to actually strive for drastic change. This is the only way we'll achieve drastically different and positive results. We need to start putting the planet and its natural resources above corporate profits and greedy politics. Without these natural, CLEAN resources, the people, plants and wildlife inhabiting the planet will not be able to survive. There is no amount of money that can replace any of that. We are in a crisis, and our lives and the lives of future generations are literally on the line. We need bold actions from brave leaders to do the right thing, even if it isn't the popular thing. Please, PLEASE, be the brave leaders we so desperately need. Take action and modify this Solid Waste Master Plan to be a ZERO Waste Master Plan.
In community,

Wendy M. Graca, President
South Coast Neighbors United

South Coast Neighbors United, Wendy Graca

Oral comment

Wendy Graca, I am the president of South Coast Neighbors United. We are a local grassroots environmental group, and our concern–as should be the concern of every single resident of the Commonwealth of Massachusetts–is this plan and how we plan to take care of our solid waste going forward. There are responsible ways to do it. And we really need to be adopting those ways because doing it irresponsibly affects everyone, economically as well as their health. Our concerns are that we're not seeing programs that are incentivizing people to reduce their waste production, like composting programs that could be dealt with in communities, municipalities, cities, and towns. Additionally, there are waste bans in effect, but they're not really being enforced. If those were those were enforced, we could actually reduce waste by 40%, just with that alone. So we just want to make sure that we're getting a say in what happens in the Commonwealth over the next 10 years, from the point of production as well as disposal, and how it's taken care of. We need to be really responsible about what we choose to do. Thank you.

South Coast Neighbors United, Tracy Wallace

Written comment

To Whom it May Concern,

I strongly request the state to do the hard things, the hard work, and not put a bandaid on the waste issues we are facing. The state should not proceed with innovative waste to energy solutions, this is a regrets solution, with several social and environmental negative effects. We should not open ourselves up to the waste to energy avenue of handling waste because it is easy and there is money to made, and it perhaps fits a political agenda. We need to do the work and put in the energy to implement the right solutions. Cities like San Francisco and Seattle

are leading the way with zero waste initiatives. The state can put forth a Zero Waste Plan and not a Solid Waste Plan.

I would also like to comment on the fact that in the first issue of the draft, Parallel Products of New England was listed as a permitted facility for MSW and C&D waste, this is in fact not the case, they are not permitted. I do realize this has been corrected, however Parallel Products, a waste to energy company, has communicated to some in the South Coast community that their proposed facility is a done deal and that they "have people" at the MassDEP. When seeing their proposed facility listed as permitted on the state's draft Solid Waste Master Plan when in fact it is not, could imply what the company is saying is true.

New England Waste Disposal and New Bedford Waste Services in Rochester, MA have both recently put in requests for increased capacity. These two facilities in addition to the proposed Parallel Products facility would put three facilities all within 25 miles of one another the ability to process significant tons/day. How is this reducing waste? The proposal is to reduce waste 30% per decade beginning in 2020. Over 70% of our waste stream is compostable or recyclable (materials like paper, plastic, glass, and metal). A focus on these materials could reduce our waste by 70% - not 30% - by 2030.

State resources need to be directed to hire staff for cities and towns to build Zero Waste programs. State-wide policy banning all single-use plastics, beginning with bags, straws, and polystyrene containers, should be passed. We should adopt and support Reuse policies and programs for bulky waste, and textiles. Bulky waste (furniture) and textiles account for more than 10% of our solid waste. We should adopt and support Right to Repair policies and programs for electronic waste which is one of the most toxic and dangerous waste streams. We need to expand Deposit Return and adopt Producer Responsibility systems. An expanded version of the Bottle Bill and new Producer Responsibility systems would shift the cost of recycling glass, metal, and plastic containers, packaging, paint, electronics, and bulky items like mattresses off of cities and towns and onto the producers. All food scraps should be banned from disposal and composted or processed in an anaerobic digester free from sewer sludge or any other toxic materials. Food scraps and yard waste make up more than 25% of our total solid waste, totaling about 1.4 million tons a year in Massachusetts. State resources need to be directed to hire staff for cities and towns to build Zero Waste programs.

The Commonwealth's Environmental Justice policy must remediate the negative effects of existing waste facilities and prevent the siting of other dangerous waste facilities, in those communities going forward.

The draft Plan lacks clear goals, incentives, enforcement and penalties. Currently, 1 in 4 waste loads contain enough materials that are banned from the trash that they should not be disposed in landfills or incinerators. While MassDEP wants to reduce our waste by just 30% by 2030, our waste could be reduced by 40% if MassDEP simply enforced our existing waste bans.

Sincerely,
Tracy L. Wallace M.Ed
South Coast Neighbors United

South Coast Neighbors United, Tracy Wallace

Oral comment

I wanted to make some comments in regards to the statement in the draft about innovative waste to energy and other integrative waste management technologies. In the draft it goes on to state information about gasification and pyrolysis, and I wanted to make some comments about that. In terms of waste to energy it's a regressive solution. The social and environmental costs are harmful and high. Even when incineration facilities are state of the art, they are not to truly clean and toxin free. Incineration can hinder in recycling and composting rates due to

profit margins and sometimes political agendas. Incineration takes accountability away from citizens and businesses, about what waste they are generating compared to recycling.

I would also like to make a comment about what was listed on page 32 in the original draft that was posted on the website, in regards to parallel products as being a permitted facility, when in fact it is not. It was stated as permitted for MSW and C&D debris, and in fact it is not. I do realize that there has been a corrected form that has been put up online. But I would like to make note that the company has been saying that this project is a done deal, and that they have people in with DEP.

Springfield Green Team, Betsy Johnson

Written comment

Comments on MA DEP Draft 2020 - 2030 Solid Waste Master Plan Springfield GreenTeam December 6, 2019

Despite not attaining the 30% reduction goal in the 2010 - 2020 Plan, we commend the Department for continuing its sticking to the goal of a 30% reduction of the 2018 baseline by 2030, and on track to achieve 90% reduction by 2050.

New Policies. We support the stated efforts to focus on "encouraging and requiring any reusable, recyclable or compostable material to be diverted from disposal at an extremely high rate while eliminating the use of products or packaging that are not reusable, recyclable, or compostable." The Plan lays out the policy actions that are needed at the State and Local government levels, as well as by the general public and businesses. What strategies are going to get these policy changes? How are the Plan's strategies related to paint, mattresses, and electronics going to actually be implemented?

Reuse. The Plan needs to emphasize again and again, a focus on not producing what become waste and reusing materials. We are pleased that the Plan has source reduction as key.

We appreciate the State encoring school departments to "Foster increased use of dishwashers and beverage dispensers to switch from disposable to reusable food service ware in school, institutional and corporate cafeterias." The Plan should go further and call for a mandated elimination of polystyrene and other single use products for both health and environmental reasons.

Food Waste. We support enacting regulations that will lower the current 1 ton per week threshold for commercial food waste disposal ban to 1/2 ton per week by 2022. In addition, there should be goals for banning communities picking upload waste within regular trash.

Household Recycling. Despite years of community recycling programs and education programs — as your Lynn example demonstrates — many, many households don't or only poorly recycle. Many apartment buildings with private trash pick-up don't recycle at all. The DEP community education grants need to be expanded (both funding and encouraging additional innovations.)

Weight or Volume? All of the metrics in the Plan are about the tonnage of waster. Is the problem the weight or the volume? Perhaps this is not an issue at the landfill, but for schools, the cost is about the frequency of dumpster pickups — a volume issue. This needs to be considered when developing the incentives for waste reduction. The 2020-2030 Solid Waste Master Plan has the right goals — even more implementation strategies are needed.

State Representative Jonathan Hecht

Written comment

See Appendix A.

State Representative Norman Orrall

Oral comment

Good evening, I'm Norman Orrall, State Representative for Lakeville, Berkeley, East Taunton, and part of Middleboro. This is no easy task that you have here dealing with solid waste. It's something we all generate, but none of us want to deal with after that. I am concerned with the Master Plan that while you've done an excellent job of having goals of reduction, I am concerned that maybe the reduction estimates have been overestimated. And when we look at the graph that you had up with the waste generated versus waste capacity, they're relatively in parallel. I'm concerned that actually they won't be parallel in the capacity for disposal going down, and waste generation will stay closer to where it is. Landfills are closing as you know, without replacements. There's a moratorium on trash to fuel or any other combustion methods to dispose of trash, Yet while we in the legislature work on getting close to things like bans on single use plastic bags, etc. that will help and production goals. There still are many sources of waste that need to be dealt with.

I recommend that part of the plan looks into a state run disposal facility that would help alleviate a lot of the municipal issues. And I believe we should take another look at allowing the maximum capacity that exists at waste combustion facilities to add more capacity. I believe bold steps are necessary to provide clean options for the disposal and recycling. If we make the disposal and recycling too expensive, however, if it becomes that we're sending too much out of state for both recycling and for disposal, I'm concerned that will overrun our neighborhoods. In particular, people end up in our natural spaces, because it becomes too much expensive for people to throw away their trash. They will find rural areas, areas where they won't get caught and throw it out on the street, and that's something I think we want to avoid just as much as we want to make sure that it's dealt with in a way that is acceptable to our neighbors.

State Representative RoseLee Vincent

Written comment

See Appendix A.

State Representative RoseLee Vincent

Oral comment

Good morning. My name is RoseLee Vincent. I'm the state representative for the City of Revere, Chelsea, and the Town of Saugus. I want to thank DEP. I speak today as a state representative whose district is home to the oldest incinerator in the country, as well as the only unlined ash landfill that's still allowed to operate in the Commonwealth. I'm extremely concerned with the Solid Waste Master Plan. Although I'm concerned, I'm also hopeful. By implementing Zero Waste initiatives, Massachusetts could potentially reduce the state's waste by 70% by 2030. We all know that the Commonwealth has a waste problem. However, the problem is not that we need to build more polluting incinerators and landfills to burn our waste. The problem is we need to take action and require reduction, redesign, reuse, recycling, and composting so that we no longer need incinerators and landfills. If we do not, inevitably communities like mine will continue to bear the brunt of our waste problem.

When you take a look here at this map, this is where you have the oldest ash landfill that is unlined and you have the oldest incinerator in the entire country. And DEP still allows this to operate: you not only allow it to operate, you allow it to continue it is. And in my testimony I will explain a little bit more. This year is America's first public beach, where millions of people recreate every single summer and all year long, because they can't afford to go to Martha's Vineyard or to Cape Cod. This is the ash landfill and this is the incinerator, less than a half a mile from neighborhoods. I find it really amazing that nothing is done, but I will continue my testimony now.

The Wheelabrator Saugus incinerator is the oldest in the country, and when the new lower nitrogen oxide standards were introduced Wheelabrator said they cannot meet the new standards, because their boilers are too

old. This summer, one of the turbines was in disrepair. And my constituents had to endure constant noise weeks on end. And no one came to their aid. DEP ignored their pleas and their cries for help. There have been consistent, regular fires at this facility, and only a few weeks ago, there was a fire that burned a hole in the roof of this facility. And Wheelabrator never called the Saugus police, the fire department they said they handle it themselves. However, it was interesting that when the DEP response team finally showed up, 12 hours later, there was a 20 by 20 foot fire that was in the roof of this facility, and it had burned for hours with black smoke emanating from it. This incinerator, which has been running for almost 15 years, has also been shut down many times because of raccoon damage. It's a pretty good indicator that it's time for this facility to shut the doors. We know that this incinerator cannot remain open if we want to meet our Global Warming Solution Act goals. We know that incinerators actually hinder good recycling and composting programs. I asked you to include the closing of the Wheelabrator Saugus incinerator in your Solid Waste Master Plan and not to replace it with another high heat, burning incinerator. It's just too polluting, wasteful, and dangerous.

And unfortunately in my district, the incinerator is not our only problem, the ash landfill is possibly the most dangerous landfill in the state because it does not have the modern protections required by state and federal law, it is located in the salt water marsh in an area of critical environmental concern, and it is less than two miles from the homes of 50,000 people. It is the only ash municipal solid waste landfill in the state still accepting waste without the double plastic liner now required by law. DEP ordered Wheelabrator to close in 1996, 23 years ago. Over the last two decades MassDEP has allowed Wheelabrator to remain open and expand in an abuse of MassDEP consent order power.

Despite the obvious danger to the people I represent, the landfill is in the midst of a wetland–the Rumney Marsh–an area of critical environmental concern and one of the most precious and important salt water marshes north of Boston. It is adjacent to the Pines and Saugus Rivers, both of which empty near Revere Beach, America's first public beach. Fly ash, which contains levels of lead, mercury, cadmium, arsenic and other pollutants is mixed with the bottom ash, and then it's dumped into the landfill every day since 1974. These contaminants have been migrating through the air, water and soil of the community, negatively impacting the health and environmental quality of the residents that I represent. Because of its coastal location and with projected sea level rises and increasing intensity of coastal storm, adding additional ash (500,000 more tons) to this sensitive wetland is completely out of step with the state efforts to mitigate the negative impacts of climate change and to protect coastal infrastructures. MassDEP's position is that the landfill can expand its capacity without a hearing by the Board of Health in Saugus, and you issue will greater a permit to expand this landfill. This presents an unexpected danger to the people that I represent. I asked that DEP shut down this landfill, as they promised to do 23 years ago. In conclusion, this incinerator and the landfill is unsafe. We need to shut them down, we need to stop pandering to the waste companies and mandate disposal reduction, or Massachusetts will continue to poison my community and other communities like mine in Massachusetts where incinerated like this are located. Thank you, and I'll also be submitting written testimony. Thank you.

Sustainable Lexington, Charlie Wyman

Oral comment

Hi, my name is Charlie Wyman.

I'm a member of the Sustainable Lexington Committee in Lexington, but I'm appearing just on my own private behalf and not representing the committee or the town. In reading over the plan, there are two or three things that I wanted to ask about.

One is that the 2010 plan set a goal of a 30% reduction in total waste, and if I remember correctly, we're on track to achieve a 14% reduction, rather than 30%, and this plan proposes a 30% reduction by 2030. I think the plan would be a little stronger if it explained why the 2010 goal wasn't achieved, so that we would sort of have some confidence that you understood why it wasn't, and what you're doing differently this time, so that we have greater confidence the 2030 goal will be achieved. I want to say I just thought it was a very thoughtful, ambitious, and

encouraging plan and that I'm especially interested in the focus on producer responsibility and on development of recycling markets.

And I would just add one anecdote. In Lexington we had a community meeting about a week and a half ago, and it was called "Lex Recycle This, What Do I Do with This? And we had standing room only in the library. Over 80 people came, and they just want to do the right thing but it's so confusing right now because of the collapse of some recycling markets and confusing instructions. They just want to know what they can do, and they're upset to learn the things that they were used to recycling–numbers 1-7, milk cartons, etc.–that they're now being told to throw some of that in the trash. So to the extent that we can rejuvenate recycling markets and provide good, crystal clear crystal information, people will be happier.

Town of Barnstable, Daniel Santos

Written comment

See Appendix A.

Town of East Longmeadow, Liz Bone

I would really like to see some more information about food waste composting and recycling. I feel like our community and schools are really ripe to go and reduce their waste by so much, if we had better access and information to how we can compost. I reach out to my hauler, and they basically say yeah we don't do that or we don't know anyone to do that. And it's like pulling teeth trying to get some information. I called compost companies around here, like there's one in Hartford, and they say they won't come up here to western Mass. Thank you.

Town of Halifax, Charlie Seelig

Written comment

While I expect that the Halifax Highway Surveyor and the Halifax Recycling Coordinator will provide comments at our local I think that there are many components in the plan that intersect the issues in Halifax:

1) Finding sources for recyclables - do that and it helps to encourage recycling, makes the Town's programs financially solvent, which encourages residents to recycle that much more;

2) Changes in cultures/attitudes - stores need to accept the recyclables or waste that they produce - that encourages changes upstream in packaging, etc. - more financial incentives for residents (and businesses) to reduce waste - as much as I'd like people to make a choice on what is "good", money, whether it is savings or losses, speaks loudly. For instance, get a deposit on more items such as nips and water bottles for example.

3) One of the most significant challenges is the consolidation of private haulers - with fewer haulers, we end up with near-monopoly situations in that the municipalities need to pay whatever the haulers are charging - this makes it more difficult for municipal programs to compete with private programs and we end up in a downward spiral. I'm not sure how a municipality or even the State can respond to this situation.

My two cents.

Town of Plainfield, John Nelson

Written comment

To Whom It May Concern:

Thank you for the opportunity to comment on the proposed Solid Waste Management Plan (SWMP). As Recycling Coordinator for the Town of Plainfield and a weekly volunteer at our Transfer Station, I am witness to the disposal of many items for which there is no recycling option. Recycling of demolition material, mattresses and other bulky waste are not currently recycled in our region. Recycling of those materials would save our small town considerable amounts on money and save landfill space. I am particularly pleased to see an initiative to require manufacturer stewardship, which is already operating in Connecticut and other states.

Sincerely,

John Nelson
Plainfield

Town of Rockport, Sharon Kishida

Written comment

Public Comment

Roll out a Statewide Waste Ban Education Campaign (Keep Mercury from Rising, RecycleSmartMA, e.g.) Couple with ramped-up, visible and reported waste ban inspections and notices of non-compliance. This information needs to get out to the household and business level. Partner with disposal facilities some of which have instituted their own waste ban enforcement. You could begin by asking if people know what is banned from disposal in Massachusetts?

Justification:

1. Despite being around for more than 25 years *in some instances*, **most residents and businesses have never even heard of the waste bans!**
2. Massachusetts disposal capacity is at a crisis level. Municipalities and Commercial generators both are seeing their per ton disposal costs skyrocket. We know, based on recent waste characterization studies, that upwards to 40% of what is being disposed of in Massachusetts waste combustors is waste ban material. That is capacity that could/should be available now.
3. Massachusetts municipalities - cities in particular - have a recycling contamination problem and in some cases are paying more in recycling processing costs than what they pay for trash disposal. (For the City of Revere , a Recycling IQ recipient, they are paying more than double their per ton trash fee, since 100% of their recycling loads are failed loads. Let me repeat this: the City continues to collect recyclables and spend $150 per ton for contaminated recycling **because recyclables are banned from disposal**. They are not alone. These are unsustainable and may even be unjustifiable costs for a municipality with chronic failed loads. It is imperative that we support these communities in staying the course by educating ALL parties about the waste bans and increase waste ban enforcement at disposal facilities before these communities walk away from their recycling programs.

As a reminder, MassDEP states that the waste bans are designed to

- Conserve capacity at existing disposal facilities.
- Minimize the need for new facility construction.
- Provide recycling markets with large volumes of material on a consistent basis.
- Promote business and residential recycling efforts.

Keep certain toxic substances or materials from adversely affecting our environment when landfilled or combusted.

There is no better time to do this. Thank you for your consideration.

Sharon Byrne Kishida
Town of Rockport

Town of Wilmington, Jamie Magaldi

Oral comment

My name is Jamie Magaldi. Thank you for your presentation I just had a comment/question. I'm the operations manager for the Wilmington Public Works. The diversion of food waste to ½ ton per week concerns me a little bit from a municipal perspective. I'm curious if that would be per facility? In essence, would it be by each school for the town or the town as a whole? And obviously that would change depending on how many schools a certain community has. So that would be my very short testimony just very concerned about going from a ton to ½ ton and how that's even measured in a school dumpster, when the trash is obviously contained. I'm curious how that would be enforced, curious how that would be regulated, and what sorts of implications that would have to our solid waste contract for towns that have long term contracts with their haulers. And would those fines be imposed to the hauler itself or back to the town?

Waste Management, Steven Poggi

Written comment

Dear Mr. Fischer:

Waste Management of Massachusetts, Inc. (WMMA) provides comprehensive waste recycling, collection, processing, disposal and other sustainable environmental services to over a million Massachusetts residents. We manage, collect, transport and process recyclables and waste through a network of facilities in the State. These include operations at three regional recycling facilities processing over 130,000 tons of recyclable materials annually, an organics processing facility, four transfer stations, and four landfills, two of which are nearing their end of site life. Our operations employ a work force of nearly 800 in Massachusetts and annually we manage over 2 million tons of recyclables, residential, commercial and industrial waste. The landfills we operate in Massachusetts collect and beneficially use landfill gas to power thousands of homes.

This experience makes us uniquely qualified to address solid waste issues including the planning and development of plans that will affect regulations that govern these operations. It is with this experience and expertise that we offer these comments and recommendations on the Draft Massachusetts 2030 Solid Waste Master Plan issued for public comment. We appreciate the MA DEP's efforts in communicating and seeking input on the proposed changes to the plan and believe it will strengthen the final version that will be issued in 2020. We are especially interested in how the plan will shape the direction of the solid waste program for the State since we are a regulated entity that is tasked with managing a significant portion of the waste generated by the State's residents and businesses.

WMMA has been worked closely with the National Waste & Recycling Association (NWRA) regarding the Plan and how it will impact the State. We want to ensure it is directionally correct relative to the realities on the ground and how industry is able to ensure the waste we collect today and in the near future can be managed at outlets that do not provide undue economic burden on generators. WMMA supports the comments that will be submitted directly by NWRA. Rather than repeat the content of the NWRA comments in detail, issues of primary concern to WMMA are outlined herein. WMMA would like to highlight an issue it sees as significant with respect to the Plan comprehensiveness and impacts on waste generators of the State.

The draft Plan highlights the progress the Commonwealth has made in reaching recycling goals set in the current plan and the status of existing and future disposal capacity for materials that are not diverted through recycling or composting. The progress made in advancing recycling and waste diversion is commendable, however it has not made up for the recent loss of disposal capacity. It is this shrinking disposal capacity which we would like to focus

our comments and believe the draft Plan is remiss in its lack of focus regarding the adequacy and need for in state disposal capacity.

The Plan addresses the current network of the waste to energy (WTE) plants in MA and the growing reliance on out of state disposal facilities. WMMA acknowledges the role the WTE facilities play in the State and agree that these operations need to continue so their capacity is maintained. Similarly, the reliance on out of state disposal sites has been an important component to managing solid waste for the Commonwealth and this will need to continue. It should be recognized that sites in neighboring states are at capacity and will not be able to accept increased waste from Massachusetts. This has resulted in solid waste being hauled greater distances to sites beyond New England via rail and long-haul trucking. These long-haul alternatives come at a cost and an impact on the environment, while also requiring significant investments and presenting logistical and reliability challenges. The long-haul disposal alternatives are being relied upon to provide an increasing role and they come with their own challenges and risks, including the ability to respond to changing conditions. This reliance on long haul/rail service disposal and the lack of overflow capacity available at in state landfills created problems earlier in 2019 in eastern Massachusetts when an WTE plant experienced outages. A similar situation occurred in central Connecticut during 2018 and that state has no in state landfills. The Plan should more directly acknowledge the risk of relying solely on out of state landfills and identify the need for in state landfill disposal.

Landfills in MA have been reaching permitted capacity and closing at an increasing rate, with over 1MM tons of capacity coming off line between 2018 and 2020 alone. These sites have played an important role in the State and allowed flexibility in the waste management system to address outages at WTE plants and manage other waste streams not accepted at recycling or compost facilities. These include, but are not limited to, handling difficult to manage (special) wastes, accepting residuals from MRFs and C+D processing operations, scrap metal processers, sludge ash, wastewater biosolids, impacted soils, residuals from Brownfield cleanups, oversized bulky wastes, and as well as MSW from residents and business after recycling has been conducted.

The Plan indicates the Commonwealth is interested in having a facility that uses new emerging technology to manage 350,000 tons per year (no justification for this capacity is provided) of waste. While this is an aspirational goal and one, we support, it relies on unidentified and unproven technology to reliably manage large volumes of waste, for which there is an immediate need. The current need for maintaining, or expanding after 2020, solid waste landfill capacity should be acknowledged in the Plan. These important facilities can reliably provide back up, address a capacity shortfall, and manage residual wastes until new technology can be proven reliable and effective.

Thank you for the opportunity to communicate our concerns regarding the draft Massachusetts 2030 Solid Waste Management Plan and areas where greater focus should be made to address an immediate need. This Plan and the course it will set for the Commonwealth is important as it will impact residents and businesses in the State relative to solid waste management for the next 10 years. We acknowledge the effort taken by MADEP Staff in developing this draft Plan and in considering comments when completing the final document.

Our team is available for further discussion or to provide any additional information that might be useful to MADEP. Please contact Mr. Garrett Trierweiler at [redacted] if you have any questions.
Sincerely,

Waste Management of Massachusetts, Inc.
Steven Poggi
Area Director of Disposal Operations
cc: Garrett Trierweiler

Appendix A: Additional Comments Received

Cape Cod Commission, Michele White

Container Recycling Container Recycling Institute, Susan Collins https://resource-recycling.com/recycling/2019/10/06/international-embrace/

International Waste Petroleum, Adam Burkitt

State Representative Jonathan Hecht

State Representative RoseLee Vincent

Town of Barnstable, Daniel Santos

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CAPE COD
COMMISSION

Via Electronic Mail DEP.SWMP@Mass.gov

December 6, 2019

John Fischer, Deputy Division Director
for Solid Waste Materials Management.
Massachusetts Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Re: Comments on the Draft 2020-2030 Solid Waste Master Plan

Dear Mr. Fischer:

The Cape Cod Commission Act requires the preparation of a Regional Policy Plan (RPP) that provides regional planning policies and objectives to guide development and protect the region's resources. The 2018 RPP includes objectives relative to waste management to "Reduce waste and waste disposal by promoting waste diversion and other Zero Waste initiatives" and to "Support an integrated solid waste management system". The strategy of the Massachusetts Department of Environmental Protection's (DEP) draft *2020-2030 Solid Waste Master Plan* (the "Plan") and Zero Waste goal are consistent with the RPP. We agree that there are significant environmental and economic arguments for why we should continue to set aggressive waste reduction goals and to strive towards a zero waste future in Massachusetts. The Cape Cod Commission (Commission) supports reduction, diversion and reuse goals, and supports increasing capacity for anaerobic digestion and composting, as set forth in the Plan.

DEP's analysis, as reported in the Plan, identified limited and decreasing solid waste management capacity, which is projected to decline to "virtually zero by the end of the next decade". The Plan states that Massachusetts has a projected capacity shortfall of 700,000 tons by 2030, even if the state meets its 2030 waste reduction goal of 30% reduction. This capacity shortfall will impact municipal disposal budgets.

Combustion capacity is "essentially fully utilized" and as facilities age, "they may experience increased down time and maintenance needs". In addition, the Plan states that "Any replacement capacity would be required to meet tighter emissions standards and increased efficiency standards". The Commission supports the concept that future

combustion facilities and facility upgrades be required to meet more stringent emissions and efficiency standards. However, Commission staff note that static capacity and increased permitting requirements will raise the cost of municipal solid waste (MSW) disposal by combustion. We note that the Plan recommends permitting of 350,000 tons of additional annual management capacity "in the form of innovative waste to energy capacity". We request that the Plan further discuss how the 350,000 tons recommended to be managed via innovative combustion relates to the predicted 700,000 ton capacity shortfall (e.g. the remaining 350,000 ton shortfall is expected to be addressed through additional diversion; innovative combustion can only manage certain components of the waste stream, etc.).

The Plan acknowledges that the capacity to transfer MSW out of state by rail – an option the Cape Cod region has investigated in the past – "can face logistical challenges in terms of arranging rail shipments and ensuring an adequate supply of the right type of railcars". In our own study conducted in 2010, consulting firm CDM Smith reported that not only are the right type of railcars needed, but additional cars are needed to cover the 'backhaul' while certain of the railcars are engaged in hauling waste to the disposal facility. Transport costs are also highly dependent on fluctuations in fuel costs that could increase costs. *See*, Evaluation of Future Disposal Alternatives for Municipal Solid Waste, CDM, April 2010, pp. 2-17 – 2-18, 3-17, https://www.capecodcommission.org/our-work/solid-and-hazardous-waste/.

While the Commission supports the waste reduction and diversion goals of the Plan, it has been reported that our region has some of the highest municipal waste disposal costs in the state. Commission staff are concerned that Cape Cod municipalities will face higher and higher MSW disposal costs as disposal capacity remains static or is reduced. There is a distinct lack of competition in the waste disposal industry in southeastern Massachusetts, leading to the potential for excessive pricing for necessary municipal waste disposal.

The Plan does not outline a detailed path towards reaching the diversion goals set forth within. Regulatory and legislative changes will likely be needed to achieve those goals. For example, the goals of stronger recycling enforcement for private haulers and increased inspections at municipal transfer station drop-off locations are mentioned, but the Plan does not state how DEP will approach these challenges. Details such as the recommended number of employees to be added/reassigned, the time frame for program initiation, anticipated deployment across various regions, and other program details would be helpful.

Commission staff recommend DEP reconsider its approach to the predicted lack of disposal capacity and amend the Plan to establish a policy to increase in-state disposal capacity where it is most needed and can be most appropriately sited to alleviate the 10 to 30 year predicted capacity shortfall while we strive to achieve zero waste goals. We further suggest that reassessment of capacity needs should be conducted at least annually instead of every five years.

At a minimum, consistent with M.G.L. Chapter 16, Section 21, we respectfully request that the Plan include a fiscal analysis to ensure that the approach presented in the draft Plan is "financially sound". We recommend that DEP conduct a fiscal impact analysis of anticipated MSW disposal and transportation costs that may be expected under the Plan's no-capacity-increase policy over the next 10 to 30 years. We further recommend that DEP analyze the climate impacts of long-range, out of state, waste transportation to disposal options (*see*, 2010 CDM Report, Section 4.3).

Thank you for the opportunity to comment on the draft Plan.

Sincerely,

Kristy Senatori
Executive Director

cc: Kari Parcell, Municipal Assistance Coordinator, MassDEP

IWP
International Waste Petroleum

December 5, 2019

Mr. Martin Suuberg
Commissioner
Department of Environmental Protection
100 Cambridge Street
Boston, Massachusetts

RE: PROPOSED 2030 MASTER SOLID WASTE MASTER PLAN

Dear Commissioner Suuberg:

When MassDEP established the policy agenda of encouraging the innovation of gasification and pyrolysis technologies to expand disposal options for MSW, a vision was created. This vison was grounded in science, innovation and a belief that there are better economic and environmental solutions than burying or burning everyday rubbish. Coupled with aggressive recycling and waste minimization efforts, a different world view was created. True leadership in action.

To that end, and consistent with the Executive Office of Energy & Environment Affairs' stated goals to help create a vibrant and expanding economy, we offer the following ways to expand the scope of, and support for, gasification and pyrolysis technologies as part of the 2030 MSWP.

Gasification Technology – Policy Considerations

Gasification technology has existed for 100 years, but when it comes to being a solution that expands MSW disposal options, it has been challenging to make concept become reality. That said, building these solutions will need to be both practical, and on a large enough scale, to be economical.

Given the reaction by critics, and the fact that no operational solutions existed when the vision was first articulated, many thought it would never become a reality ... until now. But in order for this technology to be harnessed as a solution, we offer several policy considerations for Mass DEP as it creates the Commonwealth's 2030 MSWP:

> **Create a Separate Gasification Classification.** Consider a separate definition in statute and regulations that adequately describes and distinguishes gasification and pyrolysis technologies from the burying and burning of rubbish. It makes little scientific sense to include gasification in the definition of combustion, because it does not burn the refuse derived fuel. Below is one example. In 2017 Connecticut created a new category where the gasification IS NOT combustion:

CT General Law, Sec. 22a-207. (Formerly Sec. 19-524a). Definitions. (10) "Waste conversion facility" means a facility that uses thermal, chemical or biological processes to convert solid waste, including, but not limited to, municipal solid waste, into electricity, fuel, gas, chemical or other products and that is not a facility that combusts mixed municipal solid waste to generate electricity;.

Recognize Gasification as Recycling. Turning one used or spent commodity into a new product is a simple definition of recycling. As such, transforming the carbon molecules from one material into a new product should be recognized as possibly the "ultimate recycling."

Consider Permit Approvals Acceleration. Massachusetts has not only demonstrated its commitment to environmental leadership, but has linked its success in this arena to prosperity and strong economic growth. Going forward, an affirmative statement of the Commonwealth's willingness to incentivize this technology in a "spirit of partnership" would be to proactively establish a "fast track" review and permit process, without giving on environmental protection or citizen support. Given the size and scale of a gasification operation this expression will encourage the necessary large investments and clearly state a willingness to create productive solutions in cost effective ways. It will send a signal to the private sector and provide the necessary motivation to "turbo charge" the willingness to invest and engage.

Maximize an Integrated GHG Reduction Strategy - Replicate CA's Low Carbon Fuel Standard. Gasification of MSW represents tomorrow's solution. Gasification is complex, rooted in science and represents the potential to solve or contribute to multiple environmental priorities. Because it is a process that "re-engineers" carbon and can create bio-Fuels, this process currently generates carbon tax credits under California's Low Carbon Fuel Standards. As a result, manufacturers of bio-Fuels from across the United States transport their products to California to secure this addition to their profitability. Special consideration should be given to integrated solutions; those solving multiple problems.

Establish Economic Development Support (Bonds, Grants, Loans). Because the Commonwealth has a serious MSW disposal capacity shortfall, and has a demonstrated and on-going commitment to GHG reductions, consider an aggressive state-backed economic investment strategy ... one that addresses multiple environmental priorities ... that will accelerate the building of gasification operations. Finding an appropriate way to publicly state that the Commonwealth's "good faith and credit" stands behind such an important, diversified and environmentally sound private sector initiative would greatly enhance these solutions finding the necessary capital to be built.

Please don't hesitate contact with any questions and know that we stand ready to assist the Commonwealth in any way we are able.

Sincerely,

Adam G. Burkitt

Adam G. Burkitt
International Waste Petroleum, Inc.
Co-Founder

The Commonwealth of Massachusetts
HOUSE OF REPRESENTATIVES
STATE HOUSE, BOSTON 02133-1054

JONATHAN HECHT
STATE REPRESENTATIVE
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December 6, 2019

John Fischer
Massachusetts Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Dear Mr. Fischer,

Thank you for the opportunity to submit comments on DEP's draft 2030 Solid Waste Master Plan (SWMP). As we come to the end of the period covered by the 2010-2020 SWMP, it is evident that we have not taken effective steps to address Massachusetts' waste issue. In the face of unprecedented challenges in waste management and recycling, we need a rigorous, specific, and innovative master plan for everyone in the state to get behind. While the draft plan proposes some excellent strategies and initiatives, I would like to provide some additional recommendations.

GDP and Population Growth Forecasting

Whereas the previous plan set a goal of reducing annual statewide waste disposal by 30 percent to 4.55 million tons by 2020, in 2018 we disposed of 5.7 million tons. This level is essentially unchanged since 2011. Although the draft 2030 SWMP notes that the state's GDP has grown 16 percent during that period, and the population by 5 percent, that does not diminish the unfortunate fact that we did not reach a necessary target. The next plan needs to emphasize that we can grow GDP and still reduce waste.

In its upcoming SWMP, DEP should account for projected GDP and population growth when setting waste reduction goals and should set per capita reduction goals. This will help to put goals for tonnage and percentage reductions in proper perspective and make clear our commitment to making significant progress on waste management even as our economy continues to grow.

Reduction Goals

Given the radically altered and increasingly volatile recycling export market, paired with disappearing in-state disposal capacity, the 2030 SWMP must present bolder goals than ever before. Instead of using our current disposal level as the baseline, the missed 2020 goal of 4.55

tons should be the starting point for an additional 30 percent reduction by 2030, aiming to close the gap created during the last decade. This is not unrealistic – over 70% of what is currently burned or buried should not be, either because it is illegal under 310 CMR 19.000 or because it can be recycled.

An adjustment to the 2030 goal would also help create a better balance with the disproportionately large tonnage reduction needed between 2030 and 2050 to reach DEP's stated goal of 90 percent reduction by 2050. The plan must highlight the urgency of bold action now, instead of assuming a more rapid rate of reduction will be possible later in this century, when challenges are even less foreseeable.

In the interim, staying on top of yearly benchmark goals will get us closer to reaching the 2030 target. Frequent reminders of benchmarks will boost a sense of urgency. The ability to measure and publicize progress and adjust tactics on a yearly basis is invaluable.

Capacity Management and Facility Oversight

Even if the draft plan's waste reduction goal is met, we will still face a net shortfall in disposal capacity of 700,000 tons per year in 2030. The plan should aim to bridge that shortfall while setting goals that eliminate the 3.5 million tons of combustion capacity and the 350,000 tons of capacity reserved for false solutions such as gasification and pyrolysis. Studies have shown that these alternative waste-to-energy facilities use as much as 87 times more energy than they produce, and struggle to be financially viable.

Any type of waste burning endangers our health, our climate, and our environment, offsetting potential capacity-increase benefits. If a plan for eliminating currently-permitted municipal waste combustion facilities cannot be established, at the very least they must be required to meet the most up to date emissions and efficiency standards.

In addition, as food waste diversion is expanded, DEP oversight should ensure that food waste will not be mixed with combined sewage sludge in wastewater treatment plants.

Reduction Strategies

Encouraging and even mandating greater source reduction and demand management must be the central emphasis of the plan. Specific timelines and benchmarks should be outlined in the plan to target priority, high-impact areas, such as recycling market development, additional waste bans, extended producer responsibility, and reduction of single-use packaging.

A plan to bring industry to the table should be presented so we can move toward a more circular economy. Materials and products need to become compatible with the goals and functioning of our waste systems and reduction efforts. In short, we need an overhaul in the way products are designed, manufactured, and repurposed. Consumers are demanding new options for products and packaging, and the next ten years are the time to establish new ways of meeting that demand. DEP should conduct pilots to demonstrate that this shift is economically feasible.

Enforcement and Accountability

A target number of enforcement actions per year should be set, and education and awareness should be a priority outcome of enforcement. The enforcement of waste bans should be prioritized to reduce the toxicity of waste that cannot be diverted. Data on enforcement should be more publicly accessible. It is difficult at present to access information on enforcement levels over time. The EEA Data Portal should be equipped with the ability to filter information by program type to show waste enforcement levels and compare changes over time.

Hard constraints on waste disposal capacity will mean higher costs for municipal solid waste programs and the residents who pay for them, while also burdening businesses and institutions that contract on their own for waste disposal. The plan should include a fiscal analysis and projections for the costs of recycling and disposal, so that municipalities and other entities can plan ahead to make necessary shifts.

Equity and Environmental Concerns

All of us – particularly those living in communities that host disposal facilities – will continue to suffer significant negative impacts from waste disposal on the climate, environment, and public health. We need to be intentional about breaking the cycle of siting facilities in predominantly low-income areas and in communities of color. These communities bear an undue burden from pollution of all kinds.

Nationally, the greenhouse gas emissions that are generated over the full lifecycle of disposed materials (including emissions from overall production, use, transportation and disposal of products and packaging) are estimated to account for 42 percent of total greenhouse gas emissions. As stated earlier, we must adopt a broad array of approaches that will discourage unnecessary consumption and waste generation in the first place.

Public Involvement & Coordination with Policymakers

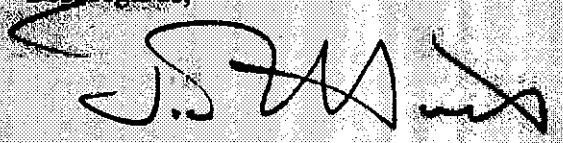
Every day, more people in Massachusetts seek to shift their individual behavior in order to reduce their contribution to the state's unsustainable waste levels. People are reducing the amount and type of trash they generate by composting, shopping locally, bringing their own reusable bags to the store, or eliminating single-use plastics from their lives. This master plan must support residents by providing an ambitious and achievable framework to reduce waste. To be effective, it must also involve them in that process in a more comprehensive and sustained way.

The SWMP needs to encourage better coordination between state agencies, advocacy groups, legislators, industry, and the public to work toward goals as efficiently and effectively as possible. In doing so, we can encourage the transition to a sustainable solution to our state's waste problem. The state needs leadership and guidance from DEP to prioritize actions that will help remove roadblocks and move the state toward our Zero Waste goals.

The coming decade will be a turning point for waste management in our state. With everyone's involvement and effort, we can move toward a future that uses our resources conscientiously. Thank you very much for taking the time to consider these comments. I look

forward to seeing the final 2030 SWMP and urge DEP to include these revisions to help address the waste crisis.

Best regards,



Jonathan Hecht
State Representative
29th Middlesex District

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December 3, 2019

Mr. John Fischer
Massachusetts Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Dear Mr. Fischer,

As the State Representative whose district is home to the oldest incinerator in the country, as well as the only unlined ash landfill still allowed to operate in the Commonwealth according to MassDEP's own inventory of landfills, I am extremely concerned with the Massachusetts Department of Environmental Protection's Solid Waste Master Plan. Although I am concerned, I am also hopeful. By implementing Zero Waste initiatives, Massachusetts could potentially reduce the state's waste by seventy percent by the year 2030. If we do not take action to begin to reduce our waste stream, inevitably, communities like mine will continue to bear the brunt of our waste problem.

We all know that the Commonwealth has a waste problem. However, the problem is not that we need to build more polluting incinerators and landfills to burn and bury our waste. The problem is that we need to take action and REQUIRE reduction, redesign, reuse, recycling, and composting so we no longer need incinerators and landfills. Additionally, **MassDEP needs to do a better job of enforcing waste materials that are already banned from entering incinerators, yet somehow still end up getting burned**. Without enforcement, there is no incentive for waste companies to comply.

Given that the Wheelabrator Saugus incinerator is the oldest in the country, there are constant environmental, public health and quality of life issues that arise at the facility which negatively impact my constituents. Recently, when new, lower nitrogen oxide standards were introduced, Wheelabrator said they could not meet them, because their boilers were "too old." Further, this past summer because one of the turbines was in disrepair, my constituents endured constant, ungodly noise that emanated from the plant for weeks during the months of June, July and into August. Additionally, there have been regular fires at this incinerator, including a severe one in September which burned for hours in which the local fire department was never notified.

Because of these issues, I am deeply troubled that MassDEP is considering a plan to replace existing incinerators. Specifically, replacing the Wheelabrator Saugus incinerator, which is located in the midst of an Area of Critical Environmental Concern, a half mile from neighborhoods in Saugus and Revere which are designated communities of "Environmental Justice," adjacent to the Pines and Saugus Rivers, and with 150,000 people living within a three mile radius of this unbuffered facility would be a travesty and an embarrassment on the part of an agency whose mission it is to preserve and protect the environment. **As you know, permitting a new incinerator to be built in a location like this would never be allowed by today's regulations – how could MassDEP even entertain such an idea to replace the Saugus incinerator in its current location? This is one of the worst locations for waste disposal I can fathom.**

Further, we know that this incinerator cannot remain open if we want to meet our Global Warming Solution Act goals. We know that incinerators actually hinder or entirely squelch good recycling and composting programs. I ask you to include the closing of the Wheelabrator Saugus incinerator in the Solid Waste Master Plan, and NOT to replace it with any other high heat burning – it is just too polluting, wasteful, and dangerous.

Unfortunately, the incinerator is not our only problem. The unlined Saugus ash landfill is possibly the most dangerous landfill in the state because it does not have the modern protections required by state and federal law, because it is located in a saltwater marsh, and because it is less than a half mile from the homes of thousands of people.

The Saugus ash landfill is the only ash or municipal solid waste landfill in the state accepting waste into an unlined landfill cell. Lacking the double, plastic liner system now required by law, MassDEP ordered Wheelabrator to close the landfill by December, 1996 – twenty-three years ago. Over the last two decades, MassDEP has allowed Wheelabrator to remain open and even expand in an abuse of MassDEP's consent order power, despite the obvious danger to the community.

The landfill is located in the midst of a wetland—the Rumney Marsh – an Area of Critical Environmental Concern and one of the most precious and important salt marshes north of Boston. It is also adjacent to the Pines and Saugus Rivers, both of which empty near Revere Beach, America's First Public Beach.

Fly ash, which contains high levels of lead, mercury, cadmium, arsenic and other pollutants, is mixed with bottom ash, and is then dumped at the landfill every day. Since 1974 these contaminants have been migrating through the air, water, and soil of this community, negatively impacting the health of the residents.

Because of its coastal location, with projected sea level rises and the increasing intensity of coastal storms, adding any additional ash to this sensitive wetland is completely out of step with state efforts to mitigate the negative impacts of climate change, and to protect coastal infrastructure, natural resources, and adjacent neighborhoods.

In conclusion, this incinerator and landfill are unsafe. We need to be discussing and planning for closure of the Saugus incinerator and landfill – not expanding or updating what is currently there. When is enough, enough? Thank you for your consideration of my comments.

Sincerely,

RoseLee Vincent
State Representative
Sixteenth Suffolk District

The Town of Barnstable
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382 Falmouth Road, Hyannis, MA 02601
508.790.6400

Daniel W. Santos, P.E.
Director

Robert R. Steen, P.E.
Assistant Director

December 6, 2019

Mr. Martin Suuberg, Commissioner
Commonwealth of Massachusetts
Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Re: Comments on the Draft 2030 Solid Waste Master Plan

Dear Commissioner Suuberg:

Please accept the following comments on the Commonwealth's 2030 Solid Waste Master Plan (Plan), which was prepared in accordance with M.G.L. Chapter 16, Section 21. The Plan certainly represents an aggressive approach to managing solid waste generated in the Commonwealth.

The most notable problem that we see with the Plan is that it neglects to address the serious problems that face communities today. While plans are of course necessary to anchor the Administration's policy and priorities on the issue, it must start with the current situation, which is dire. For example, in Barnstable, four years ago we paid nothing to dispose of recyclables. In the past year the price has gone up to over $100 per ton, more than double what we are paying to dispose of municipal solid waste (MSW)! Just last week, the Town's solid waste disposal contractor informed the Town that the tipping fee for MSW is increasing from $60 per ton to $93 per ton due to circumstances beyond their control. The reason given: a lack of available landfill space in Massachusetts and that the contractor is being forced to haul out of state. Consider for just a moment the resource inefficiency and greenhouse gas consequences from hauling MSW by truck to West Virginia.

While Figure 10.1 and accompanying text shows a 700,000 ton annual gap between disposal and disposal capacity, what is more alarming is that in 2020, the figure shows a deficit of twice that amount.

The Plan promotes the increasing use of Pay-As-You-Throw programs to reduce MSW. While we agree the data are compelling as to the success of these programs, the situation is

vastly different today. Why would any Town implement a PAYT program in this environment that would shift tonnage from MSW to recycling, when recycling is twice the price of MSW? A PAYT program would significantly increase costs to Barnstable residents, who are already extremely sensitive to MSW disposal costs.

Extended Producer Responsibilities (EPR) have been proposed in the past but have not been met with much support. We encourage MassDEP to aggressively pursue this avenue with the administration. Producers must have more cradle-to-grave responsibilities for their products.

The Plan would benefit from identifying the amount of reduction that is predicted to result from each of the strategies being proposed. As presented, it is difficult to understand the relationship between strategies and the proposed 2030 goals presented in Appendix B. In other words, can the Commonwealth viably attain a 90% reduction with the proposed strategies? This analysis could avoid a situation in 2029 like the one we currently face in 2019, with the reduction goal far from being met.

The Town requests MassDEP consider expanding existing landfill capacity and expediting new landfills, particularly given the current situation and the possibility that innovative waste to energy or other integrated waste management technologies may not materialize. Has MassDEP considered permitting one or a series of State owned and operated landfills or waste to energy facilities, as private business does not appear to be willing to invest in this infrastructure?

Thank you for the opportunity to comment. Let me know if you have any questions.

Sincerely,

Daniel W. Santos, P.E.