


CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: Monday, November 22, 2021

TO: Honorable Mitch O'Farrell, Chair
Honorable Paul Koretz, Member
Honorable Kevin De Leon, Member
Honorable Paul Krekorian, Member
Honorable Gilbert Cedillo, Member
Energy, Climate Change, Environmental Justice and River Committee

FROM: For Barbara Romero, Director and General Manager 
LA Sanitation and the Environment (LASAN)

SUBJECT: REPORT ON VARIOUS MOTIONS ON THE REDUCTION OF SINGLE-USE PLASTICS

I. EXECUTIVE SUMMARY

On April 15, 2021, the Energy, Climate Change, Environmental Justice and River (ECCEJR) Committee instructed LA Sanitation and Environment (LASAN) to provide a status update on Council Motions (Table 1) as related to the reduction of the use of plastics, including reusable alternatives, potential California Environmental Quality Agency (CEQA) activities, and funding.

Table 1. Council Motions

	CF #	DESCRIPTION	MOVER
1	18-1190 December 5, 2010	Source reduction goals for single-use food and beverage packaging, and highly littered and non-essential single-use plastic products.	Koretz Krekorian

2	17-0656 May 31, 2017	Feasibility of banning polystyrene foam containers in the City.	Koretz Blumenfield
3	07-3155-S1 June 9, 2017	Updates on polystyrene phase out policy.	Koretz Blumenfield
4	18-0652 July 3, 2018	Feasibility of implementing a Minimum Recycled Content ordinance, a Leash-Your-Lid ordinance, and establishing local recycling.	Koretz Martinez
5	18-0301 April 10, 2018	Feasibility of converting existing water fountains at municipal facilities to hydration stations to facility use of reusable water bottles. <i>(Note: Assigned to GSD)</i>	Rodriguez Martinez
6	19-0480-S1 June 11, 2019	Recommendations on implementing an ordinance to ban purchase and sale of single-use water bottles on City facilities, properties, and events where access to municipal water exists.	Koretz Blumenfield Martinez, O'Farrell Rodriguez
7	19-0519 May 17, 2019	Conduct a Life Cycle Analysis (LCA) on City's waste management practices.	Krekorian Martinez Koretz

8	19-0522 May 17, 2019	Recommendations for a flexible revolving loan program, resources required to transition to recyclable product manufacturers, and flexibility within competitive process.	Krekorian Martinez Koretz
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LASAN provides weekly solid waste collection services to 750,000 residential customers consisting of single family residences and small multifamily units. Multi-family units of 5 and more and commercial customers, approximately 65,000 accounts, are serviced through the recycLA program and the recycLA Service Providers (RSPs).

LASAN collects over 220,000 tons per year of recyclable material from its curbside blue-bin program. The recycLA program collects an additional 180,000 - 200,000 tons per year. These recyclable materials are sorted at Material Recovery Facilities (MRFs) and marketable products are sold to be reused as feedstock; and residual materials (trash) are sent to landfills.

The successful resale of recyclable material is heavily dependent on market demand. Currently, certain plastics such as film plastics and foam plastics do not have markets to incentivize the collection and recovery of these materials. This is due in large part to China's National Sword policy, which banned such items from entering China starting in 2017. Before then, China was the leading recipient of mixed plastic bales from around the world. As a result, these plastics are now being landfilled.

The State of California is already looking at how to address the misrepresentation of certain plastics as recyclable. This year, the State legislature passed SB 343, which will look more closely at the use of the "chasing arrows" which most consumers relate to "recyclability;" however the "chasing arrows" and the number placed within the arrow are only indicative of the type of plastic resin the container is made of. The actual recyclability is dependent on an entity having the ability to break down that plastic and reform it to make new material. Additionally, the State passed AB 881, which will prohibit plastic waste exports to other countries as being considered recycled.

The use, recovery, and recyclability of plastics in general are of great concern. Plastic goods are ubiquitous in our everyday lives, as the material is utilized in many products that consumers purchase and use everyday. However, many of these plastic products are considered "single-use," are not-refillable, and are used as covering/packaging; and most consumers do not reuse these materials. As a consequence, an abundance of plastic waste ends up in our landfills and/or pollutes our environment, affecting our environment and public health.

RECOMMENDATIONS

In this report, LASAN recommends multiple policies for the Council to consider and choose. LASAN's policy recommendations are grouped into seven broad ordinance recommendations. All policies aim to reduce the entry of plastic waste into the environment, reduce waste generation, eliminate single-use products, and encourage sustainable green procurement.

LASAN has coordinated with the City Attorney's office and has conducted a preliminary evaluation of the environmental and legal considerations for the recommended policies. Upon Council approval, LASAN will coordinate with the City Attorney's office and conduct additional in-depth analyses of these policies, including legal review and compliance with California Environmental Quality Act (CEQA).

RECOMMENDED POLICIES

Policy 1: Zero Waste City Facilities and City Sponsored Events: Adopt the following policies for City operations, City departments, and City-sponsored events:

- Direct LASAN to establish guidelines for City sponsored events to be zero waste. The guidelines should ensure that reusable and compostable products are utilized, as well as ensure organic waste and recycling collection is made available at all events.
- Prohibit the use of expanded polystyrene cups, plates and containers at all City facilities, City sponsored or supported events.
- Prohibit catering events at City facilities from utilizing single-use plastic items.
- Adopt a policy banning the purchase and use of single-use plastic beverage bottles in all City facilities and at City-sponsored events.
- Direct City departments to begin consultations with City unions to evaluate uniform specifications and investigate non-synthetic options.

Justification for the policy: Los Angeles Councilmembers and the Mayor have demonstrated strong leadership by approving ordinances that focus on green energy, reduce water consumption, Zero Waste, single-use reduction etc. In addition, the council adopted an ordinance that focused on reducing plastics pollution, with measures such as the plastic bag ordinance of 2014, to the more recent plastic straws on request and single-use foodware accessories-on-request ordinances. The City should continue its "walk its talk" by modeling Zero waste behaviors at all City sponsored events, facilities and parks as directed by Council and Mayor Garcetti [Executive Directive 25 \(ED 25\)](#), "L.A.'s Green New Deal: Leading by Example". ED 25 directs all General Managers, Heads of Departments, Offices, and Commissions of City Government to submit plans for their departments to achieve the City's zero waste by 2025. Furthermore ED 25 require General Managers to include an annual status report and waste review, including tonnage by type (recycling, landfill, green waste), at each of their City-owned facilities.

Policy 2: Ban Expanded Polystyrene Foam (EPS): Adoption of an ordinance that prohibits the manufacturing, sale, and use of specific expanded polystyrene (EPS) goods. Such goods may

include, but are not limited to, foodware and food-related trays/packaging, packing materials, insulation containers (e.g., coolers), and other items for consideration.

Justification for the policy: Material Recovery Facilities (MRFs) contracted by LASAN have indicated they are capable of recycling commercial **clean** EPS. However, given the mixed stream collection format of LASAN and the recycLA RSPs, no EPS reaches a MRF clean. EPS from residential waste streams is contaminated with food and broken into small particles, making them impossible to capture and recycle. Over the years, LASAN has attempted multiple pilots to improve the collection and recycling of EPS; unfortunately none of them were viable or sustainable. EPS material received at the MRFs from the residential stream, is difficult to recycle and is typically disposed of at landfills.

Many universities and over 100 cities in the United States have ordinances restricting EPS food ware and/or packaging materials. In the state of California, there are 97 cities or counties that have an EPS ban, ranging from bans that apply only to government facilities, to bans on use in restaurants and by foodware vendors, to full bans on the distribution or use of any EPS products.

A thorough analysis by UCLA has identified alternative foodware materials with minimal cost impacts. LASAN will reach out to restaurants, food trucks, and sidewalk vendors that utilize EPS cups and containers and educate them on alternative materials identified in the UCLA report.

Policy 3: Ban Single-Use Plastic Bags and Cups: Adoption of an ordinance that bans the provision, sale, and use of all types of plastic bags. Such plastic bags may include, but not be limited to, plastic produce bags, food-related packaging and wrapping, plastic shopping bags (of any thickness), plastic dry-cleaner bags and plastic cups.

Justification for the policy: On January 1, 2014, the City of Los Angeles banned Single-Use Carryout Bags, becoming the largest City in the Country to implement such a ban. The objectives of the single-use carryout bag ordinance were to reduce litter in the City and associated adverse effects to stormwater quality and marine resources, as well as reduce adverse effects to solid waste landfills. The City ordinance banned thin plastic bags and allowed thicker plastic bags that are at least 2.25 mils thick. The ban required a \$0.10 fee on each paper and plastic carryout bag requested. In addition, the ordinance allowed the following thin plastic bags:

- Produce bags used for bagging vegetables, fruits and meats, and pharmacy bags
- Restaurant bags
- Hardware stores bags (e.g., Home Depot, Lowes and others)
- Select retail stores bags (e.g., Macy's, JCPenney, Ross, TJ Maxx, and others)

In recent years, during several beach and LA river clean-ups events, a reduction in the number of plastic bags collected has been noticeable. However, paper and plastic bags continue to be utilized as single-use items, thereby contributing to litter, environmental and marine pollution. Additionally, in some stores, thin film plastic bags have been replaced with thicker plastic bags deemed "recyclable," thus voiding the intent of the original ordinance. Plastic bags of any thickness are not easily recyclable and clog sorting machines at MRFs.

Policy 4: Bottled Beverage Policy: Adoption of ordinances to address the ban of non-refillable plastic water bottles, and the mandate that refillable bottles have post-consumer recycled content as well as leashed lids.

- Ban the sale of water in plastic bottles that are not refillable.
- Ban the sale of water in plastic bottles at City facilities and City-sponsored events.
- Ban the sale of Los Angeles-sourced water outside of Los Angeles due to drought conditions.
- Ban the inclusion of plastic in tea bags.
- Mandate that 25% of all plastic bottles sold in LA must be refillable.
- Mandate that 10% of beverage bottles sold in LA must be refillable within 5 years.
- Mandate post-consumer recycled content in all plastic bottles.
- Mandate leashed-lids on plastic beverage bottles/containers.

Justification for the policy: Billions of plastic beverage bottles are sold each year, and while such bottles are recyclable, many bottles - along with the caps/lids - are never recovered and recycled. The LA Department of Water and Power (DWP) operates and maintains a strictly regulated water distribution system supplying hundreds of billions of gallons of water. In contrast, bottled water is more expensive and less regulated than tap water, and there are significant environmental impacts from its production and transportation. Reducing the number of plastic water bottles produced will in turn decrease the number of bottles to be recycled. In addition, requiring minimum post-consumer content in plastic bottles creates demand from manufacturers to purchase recycled plastic, thus creating a market for the material that will help keep such bottles out of landfills or from being littered.

Policy 5: Foodware Accessories: Restaurants, and environmental groups were instrumental in supporting the adoption of the *Disposable Foodware Accessories on Demand Ordinance (2021)*. LASAN recommends building on that momentum and expand the *Disposable Foodware Accessories Ordinance* to mandate reusable foodware for dine-in services; and that all cups, plates and cutlery utilized for take-out and delivery services ,be domestically compostable by 2025. For products that lack compostable or reusable alternatives, it's recommended that the City council mandate a minimum of 70% post-consumer recycled content (pcr). Council, can also mandate a fee for single-use disposable items, such as cups and straws.

Justification for the policy: Many single-use foodware items are not easily collected and recovered for recycling due to size, material and food residue, resulting in the majority going to landfills. Dine-in restaurants should invest in reusable foodwares, rather than providing disposable materials; however a switch to reusables would require infrastructure and equipment changes (e.g., dishwashers and space). Alternatively, for take-out services, requiring that take-out foodware have a minimum post-consumer content should drive a market for recycled plastics, increase diversion and reduce the use of plastics. ; however the recyclability of those materials would still be a challenge, unless there are separate collection, recycling or composting services. Fees for disposable items deters consumers from accepting those accessories in the firstplace.

Policy 6: Promote Reuse/Recycle: Adopt an ordinance that bans the use of non-recyclable plastic packaging, unless the non-recyclable components have local take-back or reuse programs.

- Ban non-recyclable plastic packaging.
- Ban meal-kits unless manufacturers have a take-back or reuse programs for the non-recyclable components.
- Mandate manufacturers to fund take-back programs for non-recyclable components.

Justification for the policy: Many products are provided with excessive packaging, many of which are non-recyclable. Many meal-kit services have also become popular as they provide convenient means for consumers to prepare meals in less time. Although some meal kits help reduce food waste (purchase only what is needed), many of the items come in smaller plastic packaging, and many kits include cold packs and insulation for the transportation of items that need to be kept cold. This creates more material that needs to be disposed. Product packaging, meal-kit services, and the like, should provide consumers with take-back programs, for which these materials can be collected and recycled.

Policy 7: Banning Disposal of Textiles: Adopt ordinances to ban manufacturers and retailers (online and brick and mortar stores) from disposing apparel and textiles, including those items that are unsold, returned, scraps/remnants.

Justification for the policy: Textiles are divided into two broad categories, natural fibers and man-made plastic based fibers. While a significant portion of textiles are reused locally or overseas, waste characterizations studies by CalRecycle revealed that textiles represent the six most prevalent materials disposed of in California landfills with ninety-five percent of this material is either reusable or recyclable. In addition over the last decade, there has been a significant increase in the use of synthetic plastic-based fibers in textile.

In 2014 Calrecycle approved the Mattress Recycling Council, a mattress recycling organization, to further promote the diversion of mattresses from the landfill. The MRC is authorized to negotiate and execute agreements with jurisdictions to collect and transport used mattresses for recycling. MRC activities are funded by a recycling charge per unit collected from purchasers of mattresses in California. The funds are used to help collect, transport, and recycle the mattresses. LASAN contracts with the MRC to collect disposed mattresses and deliver them to MRC recyclers who reuse, recycle, and market the materials reclaimed from used mattresses and foundations into secondary markets for manufacturing new products. The program has successfully diverted 6,776 tons of mattresses from the landfill since FY 2015-16 through FY 2020-21. Such types of product stewardship or extended producer responsibility programs can be utilized for the recovery and recycling of textiles materials.

Additional Policies for Consideration - The City has a long history of implementing new strategies and programs for managing its solid waste system to meet new challenges over time. The shift of emphasis from waste disposal to waste prevention and the march towards circular economy has been influenced by a growing public concern for the environment, and the need to reduce the environmental and climate impacts of microplastics. LASAN suggests further policies that support plastic pollution reduction. The following policies will require further detailed analysis and review.

- The sale and use of bio-plastic containing materials that are neither recyclable and/or compostable within City infrastructure and contracts.
- The manufacture, sale, and use of materials that contain Per- and poly-fluoroalkyl substances (PFAS). AB 1200, signed into State law in October 2021, bans the use of PFAS in paper-based food packaging and disclosure of toxic substances in cookware beginning in 2023.
- A mandate that clothes washers be equipped with a microplastic filtration system.
- A fee on washable synthetic items (e.g., clothing, home goods, textiles). Collected fees would be used to procure infrastructure and/or equipment needed to prevent the dispersion of microplastics to water resources.
- Divest City investments from fossil fuel (all plastics) and tobacco products (plastic cigarette filters).
- Adopt ordinances that improve the utilization of recyclables locally.
- An Ordinance to mandate the labelling of items in regards to recyclability, compostability, flushability, and post-consumer recycled content, as applicable.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

As Council selects which projects to undertake, LASAN will work closely with the City Attorney's Office to further define the project, its impacts, and determine the appropriate environmental clearance needed for each action.

The comprehensive series of actions the City is considering to minimize and/or eliminate single-use plastics require consideration under CEQA. Depending on the action and legal considerations, the City may consider different options to comply with CEQA. Many of the actions under consideration appear to be sufficiently related as to warrant a programmatic vs. project-level review. The May 2014 Program EIR for the *Solid Waste Integrated Regional Plan* (SWIRP) provides an analysis of environmental effects for many of the items under consideration by Los Angeles, that the City could rely on for CEQA coverage. However, there are some items that are not considered by that analysis, and some of the comprehensive plastics options do not appear to be directly related to the SWIRP objective of "zero waste discharge". To comply with CEQA for these items, the City may consider preparing an amendment to the 2014 PEIR if the additional actions would not result in any new or more severe environmental impacts that described in the SWIRP Program EIR, or the City could prepare a stand-alone new Program EIR (See Table 3 Below).

The City could also consider addressing CEQA compliance for the actions presented in the Comprehensive Plastics Report individually. This approach would allow Los Angeles to introduce some of the actions proposed quickly. CEQA compliance for some could be addressed through addenda to the *EIR for Single-Use Carryout Bag Ordinance* dated May 13, 2013 or from the *SWIRP Program EIR*, while others, if considered on their own, may qualify for Categorical Exemptions under CEQA (See Table 2 Below).

The potential exists for some of the items in the comprehensive plastics report to result in public controversy. For instance, there is likely to be concern among businesses regarding feasibility of implementation, as well as claims that the measures may fall disproportionately on disadvantaged or underserved communities. An outreach process similar to that followed for the 2013 *Single-Use Carryout Bag Ordinance* would help with these concerns. This included initial business and public outreach, support to businesses for the change, pilot testing in specific geographic areas, and selected exemptions to reduce the impact and improve the rollout. For some of the measures in the Comprehensive Plastics Report this process is contemplated through education and phased implementation, but not consistently.

More recently, the City conducted an Environmental Analysis to implement the *Straws on Request Ordinance* (2019) and the *Disposable Foodware Accessories Ordinance* (2021), which complied with CEQA through Categorical Exemptions (Class 7 and 8).

- Actions by Regulatory Agencies for Protection of Natural Resources (Class 7) - consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of natural resources where the regulatory process involves procedures for the protection of the environment.
- Actions by Regulatory Agencies for the Protection of the Environment (Class 8) - consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of natural resources where the regulatory process involves procedures for the protection of the environment.

PUBLIC EDUCATION

To support Council policies, LASAN recommends the implementation of a public education campaign to raise stakeholders' awareness of plastic pollution and the impact of single use products on the food chain. The public relations campaign would encourage sustainable practices starting with reducing waste, reusing and fixing products, and green procurement. In addition, LASAN has recently developed and will begin deployment of new blue bin stickers that will educate residents on the proper way of utilizing the blue recycling bin.

IMPLEMENTATION TIMELINES

The following policies have been separated into shorter term (6 - 12 month) achievements, and longer term achievements (timeframe of four or more years), as well as those policies that would be better slated for action at the state level.

Table 2. Potential City Policies Achievable in Short Term

Recommended Policy	Estimated Potential time frame	Estimated CEQA & Public Outreach Cost	Outreach & Enforcement Personnel Needed
<i>Zero Waste City Facilities and City Sponsored Events</i>	Six Months	\$95,000	Four
<i>Food ware EPS ban city-wide</i>	Six months	\$95,000	
<i>Lift exemptions from Single-Use Carryout Bag Ordinance</i>	Six months	\$110,000	

Table 3. Potential City Policies Requiring Longer Term

Recommended Policy	Potential time frame	Requirements	Funding
<i>EPS ban on other material</i>	1 - 2 years	A Program Environmental Impact Report and/or a Project Environmental Impact Report will be considered in meeting the California Environmental Quality Act requirements. In addition, outreach and education campaigns are needed to ensure participation by all stakeholders and address concerns of impacted industries.	Cost of implementation will depend on which of the policies Council directs LASAN to implement.
<i>Ban all plastic bags of all types</i>	1 - 2 years		
<i>Mandate reusable foodware for dine-in services</i>	1 - 2 years		
<i>Fee on disposables (e.g., cups/straws)</i>	1 - 2 years		
<i>Mandate leashed beverage lids</i>	1 - 2 years		
<i>Ban water in plastic bottles unless refillable; mandate refillable plastic bottles</i>	1 - 2 years		
<i>Ban sale of LA source water</i>	1 - 2 years		

Table 4. Potential Policies for State Level: The City can use its stature in Sacramento to lobby for State legislation on initiatives that are best implemented at the state level, such as bans, extended producer responsibility and packaging legislation.

<i>Recommended Policies to be addressed at the State Level- The following policies have State and National level impact.</i>
<i>Mandate post-consumer content of plastic bottles and single-use disposable items</i>
<i>Ban disposal of textiles (returned, unsold, excess)</i>
<i>Ban non-recyclable packaging</i>
<i>Ban the sale of Bioplastics</i>
<i>Ban PFAS in foodware and other items deemed necessary</i>
<i>Mandate filtration systems in washing machines to capture microplastics</i>
<i>Mandate labeling/disclosure of material types</i>

ENFORCEMENT and METRICS MONITORING

The enforcement of many of the recently adopted policies and ordinances has relied on consumer reporting, making the customer our partner in keeping Los Angeles free from plastic pollution. LASAN recommends the addition of staff to proactively monitor, and track the performance metrics for the new policies and ordinances.

NEXT STEPS

Depending on Council instructions and the policies that Council selects to consider further, LASAN will assess the funding requirements, staffing needs, and other resources needed to implement the policies. LASAN will conduct an Environmental Analysis and/or EIR for specific project(s), outreach, tracking, reporting, and any other activities necessary for the implementation of the project(s).

II. BACKGROUND

Hundreds of scientific studies have proven that plastic pollution to be particularly harmful to the air and marine environment. The LA City Council (Council) recognized that no single solution exists, and therefore introduced multiple motions focusing on reducing pollution from single-use items and other harmful chemicals. Council has recognized that multiple solutions must be implemented to cut the flow of plastics into the environment.

It has been widely reported that, by 2050, if no significant changes are implemented, the oceans will have more plastic by weight than fish. Council has directed LASAN to not only address the eight motions introduced to reduce plastic pollution and single use items, but to also recommend solutions to stop the plastic tsunami. LASAN is hereby recommending multiple approaches, including bans and mandates as mechanisms for changing the status quo to stop the plastic trash tidal wave.

On a weekly basis, LASAN directly services 750,000 residential customers consisting mainly of single family dwellings and multi-family buildings of 5 units or less. LASAN's contracted franchisees, aka the recycling service providers or RSPs, service approximately 64,000 commercial and large multi-family accounts. Starting January 2022, with the new recycling contracts in place,

LASAN will stop accepting low-grade plastics, including film plastics, in the residential curbside and City facilities recycling programs. Only plastics (resins) #1 and #2 will be accepted, along with some #5 items. Plastics #3, #4, #6 and #7 will no longer be accepted in the blue bin. The recycLA franchise recycling program will be revised in the same manner. This radical change to the recycling problem reflects market conditions - the lack of demand for most plastics - and the simple fact that plastic pollution and climate change are interconnected - in fact, they are inseparable. *Plastics are fossil fuels.*

"Almost one hundred percent of plastic is made from fossil fuels. Oil and gas are extracted from land (and seabeds), sent to ethane "cracker" plants. Ethane crackers are plants that perform the first step in the process of transforming ethane – a component of natural gas – into plastics products. First, the plants separate ethane from natural gas to produce ethylene, the building block of plastics and other industrial products. The plants use extreme heat to "crack" the molecular bonds in ethane to produce ethylene. Ethylene is further processed into a resin, which is used to produce plastics products. <https://www.cimaterealityproject.org/blog/ethane-cracker-plants-what-are-they>

The shale gas boom in the United States is fueling a massive build-out of plastic infrastructure in the US and beyond. Shale gas is produced through hydraulic fracturing – or "fracking." <https://www.ciel.org/issue/fossil-fuels-plastic/>

An investigation by The Guardian recently found that just 20 oil and gas firms are responsible for 35% of global greenhouse gas emissions since 1965. How will they adapt as fossil fuel demand wanes with the rise of renewable energy and battery power? The answer is plastic – and that shift is already well underway. Most of the plastic that exists today has been made in the last decade. The environment appears to be drowning in plastic for the same reason that global temperatures continue to rise – fossil fuels have remained cheap and abundant. <https://theconversation.com/fossil-fuel-industry-sees-the-future-in-hard-to-recycle-plastic-123631>

The increasing use of plastics in the US is linked in part to our demand for increased convenience - aided and abetted by the fossil fuel industry. Too many of us have lost the habits of reuse and waste minimization, or never developed them. Too few of us understand the consequences of throwing items away - not grasping that there is no "away." Changing consumer habits is essential, but the imperative to address climate change in significant, meaningful ways compels us to adopt top-down bans and mandates now.

In our current "linear" economy, for-profit entities are allowed to manufacture and sell non-recyclable, non-reusable, non-refillable and/or non-compostable products and packaging, and to externalize the costs of managing the resulting waste to municipalities and their ratepayers, with few exceptions. This transfer of responsibility and costs is not sustainable, cannot be justified, and must be ended.

Many countries have adopted sweeping legislation intended to address plastics pollution. The California Circular Economy and Plastic Pollution Reduction Act (SB 54/AB 1080) mandated a 75% reduction in single-use plastic packaging via recyclability/compostability requirements. The

plastics industry invested millions fighting the legislation, which was narrowly defeated. The Act was tabled in the California legislature in late 2021, but is anticipated to be reintroduced in 2022. Since then, many “narrower” pieces of legislation addressing individual elements of plastic pollution have been introduced in California.

Some of the recommendations in this report are addressed wholly or partially by proposed statewide legislation. But the success of the statewide legislation cannot be guaranteed.

The City of Los Angeles has the right - indeed, the responsibility - to restrict the introduction into its boundaries of non-essential, non-recyclable, non-compostable, single-use/disposable items products that endanger human health, harm the physical environment, contribute to the waste stream, increase waste management costs and accelerate climate change.

Los Angeles Leadership

Rather than waiting to learn if proposed state plastics legislation will succeed, or whether the November 2022 ballot measure addressing plastics pollution will pass, Los Angeles should assume a plastics pollution leadership position now. As the largest city in California, the second largest US city, owner of a major port, and a major purchaser, Los Angeles can exert significant influence.

Per an EPR expert, because Los Angeles is viewed as more politically moderate than San Francisco, its policy recommendations would “resonate” with industry. That is, industry would assume these policies would likely be emulated by other local governments.

Consistency of Programs and Principles:

LASAN policies and operations must match the City’s stated goals and values. In the solid waste arena, zero waste is prioritized. Zero waste necessarily implies a primary focus on upstream – waste prevention – measures.

Zero Waste Goal

Los Angeles declared a goal of zero waste and published a Solid Waste Integrated Resources Plan (SWIRP) in 2014. The SWIRP’s Guiding Principles are:

1. Education to decrease consumption
2. City leadership as a model for Zero Waste practices
3. Education to increase recycling
4. City leadership to increase recycling
5. Manufacturer Responsibility (Extended Producer Responsibility- EPR)
6. Consumer responsibility
7. Convenience
8. Incentives
9. New, safe, technology
10. Protect public health and environment
11. Equity
12. Economic efficiency

BASIC FACTS ABOUT RECYCLING PROGRAMS

1. *The* most fundamental fact of recycling is that, generally, paper, aluminum, and other metals are the only blue bin materials that pay for themselves, as advised by the City's contracted MRFs.
2. Recycling is not free. Advertising any collection program as "free" could be construed as counter-productive – regardless of revenues the program may generate. There are costs associated with *each* curbside bin. In the best of times, revenue earned from the sale of recyclables *may* cover or exceed the blue bin collection costs, but 2018 proved that scenario is not necessarily permanent. A "pay as you go" structure -versus a flat rate – better reflects costs and can help shift behavior away from disposables.

The New Flow Control

Los Angeles is proposing a new definition of "flow control:" Governments have the right to exert control over goods (products and packaging) that flow into their jurisdictions, because these governments must assume responsibility – and costs - for managing the products and packaging at the end of their useful lives. Extended Producer Responsibility (EPR) mandates are the means for exercising this type of flow control. "Plastics" are the primary focus because of the incontrovertible facts about the impacts of plastics/plastics pollution on human health and the environment.

Broadly speaking, all the recommended policies in this document can be considered to be extended producer responsibility (EPR) mandates. EPR is mandatory – in contrast with "stewardship" – which encompasses *voluntary* programs. EPR is deemed necessary since producers and manufacturers have not "stepped up" in a meaningful way to address the environmental and health impacts of their plastic products.

According to Californians Against Waste:

- With a planned 40-percent increase in plastic production over the next decade, plastic production will account for 20 percent of global fossil fuel consumption unless we make major policy changes to counter.
- Less than 9 percent of plastic is recycled, and that percentage is dropping since the implementation of China's National Sword and policies in other countries, which severely restricted the amount of foreign waste these countries accept.
- Although PET is considered one-hundred percent recyclable, the United States struggles to properly recycle this resource. According to the National Association for PET Container Resources, in 2019, the recycling rate of PET dropped from 28.9% to 27.9%.

73 This means that out of the 6.4 billion pounds of PET bottles used in the United States, only 1.7 billion pounds were collected and recycled.

- While the state and local communities in California have tried to reduce the burden from single-use packaging since the 1980s, taxpayers and local governments still spend over \$420 million annually in ongoing efforts to clean up and prevent litter in streets, storm drains, parks, and waterways.

- Packaging products are typically designed to be used just once and then discarded and they account for 42 percent of all non-fiber plastic produced. Single-use items therefore rely heavily upon the continued introduction of more – new - plastic items made of virgin plastic. <https://www.cawrecycles.org/sb-54-ab-1080-bill-page>

The Myth of the Recyclability of Plastics Helped Sell Plastics to Consumers

NPR and PBS *Frontline* spent months digging into internal industry (oil and gas) documents and interviewing top former officials. As reported in 2020, they found that the industry “sold the public on an idea it knew wouldn't work — that the majority of plastic could be, and would be, recycled — all while making billions of dollars selling the world new plastic.” The article continues: “All used plastic can be turned into new things, but picking it up, sorting it out and melting it down is expensive. Plastic also degrades each time it is reused, meaning it cannot be reused more than once or twice. (During a recent conversation, American Beverage Association representatives stated that food-grade plastic can be recycled 7 – 8 times).

On the other hand, new plastic is cheap. It is made from fossil fuels, and it is almost always less expensive and of better quality - so it's easier to just “start fresh.” All of these problems have existed for decades, no matter what new recycling technology or expensive machinery has been developed. In all that time, less than 10 percent of plastic has ever been recycled. But the public has known little about these difficulties.”

<https://www.npr.org/2020/09/11/897692090/how-big-oil-misled-the-public-into-believing-plastic-would-be-recycled>

The Plastics Industry and California Jobs

The economic impact of the plastics industry in California may not be widely known. While California does not have any plastic manufacturers that make new, virgin plastic, per the website Quartz (qz.om), the Plastics Industry Association indicates that California is home to plastics manufacturers and establishments engaged in plastics processing, marketing, support, and captive activities that directly employ 79,718 people. Nationally, California is ranked first in plastics industry employment. It is also home to a number of plastics-dependent industries that use plastics to make products or provide related services. Plastics and dependent industries combined employ 4.7 million people in California. <https://www.plasticsindustry.org/factsheet/california>

The policies recommended in this report will support a circular economy, which creates more jobs than does a linear economy largely predicated upon disposables.

In the report *The More Jobs, Less Pollution*, the Tellus Institute projected the results of two scenarios in the United States: a business-as-usual scenario, where there are no significant climate policy changes, and a green economy scenario, where governments have implemented various sustainable policies. Analyzing the conditions of the economy and environment in a business-as-usual scenario, the report found that the waste disposal industry will only create 0.1 jobs per 1,000 tons of waste and greenhouse gas emissions will only be reduced by 15 percent.[1] In contrast, following the green economy scenario, the United States will not only create 2,347,000 million jobs through waste diversion but also reduce greenhouse gas emissions by 25 percent. Zero waste programs have the potential to change society's reliance on single-use plastics that continue to damage our environment and economy.

Document Scope

Although the Council Motions referenced above and addressed in this report pertain primarily to plastics, this document addresses related topics and materials, as it emphasizes a reduction in single-use/disposable items.

III. RECOMMENDATIONS FOR COUNCIL ACTION

In response to the Los Angeles City Council Motion 21-0064 (Motion), LASAN is hereby recommending to the Los Angeles City Council the following ordinances and actions.

The following recommendations are grouped thematically rather than by individual motions. Attachment 5 details which governments have adopted or proposed policies similar to the following recommendations.

A.P PRODUCT/MATERIAL/CHEMICAL BANS

1. **Adopt an ordinance that bans in Los Angeles the manufacture, sale, and use of expanded polystyrene (EPS), unless the EPS is wholly encased within a more durable material.** While CF # 17-0656 addresses only EPS *foodware* (such as cups and plates), LASAN recommends adoption of a broader ordinance, identical to San Francisco's, which includes additional products: packing materials*including "peanuts" and shipping boxes, :meat and fish trays, and egg cartons; coolers, ice chests or similar containers*; pool or beach toys*; dock floats, mooring buoys, or anchor or navigational markers*

**Unless they are wholly encased within a more durable material.*

Rationale for the EPS Ban:

Over the years, LASAN has conducted pilots to recycle used EPS into beneficial products, but unfortunately none of the pilots were sustainable. EPS is essentially non-recyclable in the City of Los Angeles curbside recycling program because most is food-contaminated or broken into pieces that are too small to be captured by recycling processing equipment.

While EPS is very light and therefore represents a small percentage of material in the wastestream, as measured by weight, it is well documented that it causes harm to marine life and the environment when littered. And EPS contains the carcinogenic material benzene* and another constituent, styrene, is classified as probably carcinogenic for humans.** Plastic products can leach harmful chemicals when landfilled. These chemicals can impact groundwater. Due to these impacts, and due to the benefits of reducing the amount of any and all material that is deposited into area landfills (a. extending the useful life of nearby landfills, b. avoiding/delaying having to haul trash to more-distance landfills, thereby reducing the potential for increased fuel usage and vehicle emissions to haul trash to more-distance landfills, and c. disposing of products/materials that have the potential to leach harmful chemicals), banning EPS would be of local benefit. Per the US EPA: “Municipal solid waste (MSW) landfills are the third-largest source of human-related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2019. The methane emissions from MSW landfills in 2019 were approximately equivalent to the greenhouse gas (GHG) emissions from more than 21.6 million passenger vehicles driven for one year or the CO2 emissions from nearly 12.0 million homes’ energy use for one year.”

Discussion

EPS food containers are still widely used, primarily because of their low-cost. Alternatives to this product are readily available and many food establishments have transitioned to them, some due to EPS bans already adopted by many California cities.

The consulting firm Cascadia conducted a pricing study for the City of San Jose, which implemented the first phase of its EPS ban in 2014. It is limited to clamshells, cups, plates and bowls. It concludes that the restaurant industry will not be significantly impacted, with these caveats: Full-service restaurants would be the least-impacted, while those offering limited service would be affected on a scale ranging from negligible to significant. The report recommends alternatives for several different items (clamshells, plates, etc.) based on price and divertability (recyclability). Limited anecdotes are available from other municipalities:

- After an EPS ban was enacted in Malibu on January 1 2017, local businesses reported the switch cost them nearly \$30,000.
- After a ban was enacted in the City of Santa Monica in 2008, Santa Monica City officials noted that it was a challenge gauging the ban’s impact on local merchants, for several reasons. Businesses and EPS container manufacturers were reluctant to release financial information. Estimates based on surveys of between 150 and 200 businesses found that switching to more recyclable packaging products, such as paper, plastic and tinfoil, would cost businesses anywhere from nothing to nearly 300 percent more each month. The merchants hardest hit by the ban would be mostly fast-food restaurants, which

could pay as much as \$180 more per month. Those estimates, however, are uncertain. One local business that derives a third of its sales from take-out meals said the ban could impact (future) sales because hot food may not retain heat during a customer's trip home (if packaged in other than an EPS container).

*<https://emergency.cdc.gov/agent/benzene/basics/facts.asp>

**<https://www.sciencedaily.com/releases/2018/05/180530113105.htm>

2 Adopt an ordinance that bans in Los Angeles the manufacture, sale, and use of foodware and food-contact products made partially or wholly from bio-plastics. These are products derived wholly or entirely from plants; corn, potatoes, rice, tapioca, wheat fiber, and sugar are the most common. Some are labeled "PLA" (polylactic acid) and some display resin codes of "7" or "0."

Discussion

Rationale for the ban on bioplastics:

Bioplastic products are neither recyclable or compostable in the City of Los Angeles' programs; they are therefore single-use/disposable items that must be landfilled. While bioplastics do reduce the use of fossil fuels for their manufacture, compared to conventional plastics, bioplastic products that contain hardeners (such as utensils), can cause the same harmful environmental impacts when littered. Due to these impacts, and due to the benefits of reducing the amount of any and all material that is deposited into area landfills (a. extending the useful life of nearby landfills, b. avoiding/delaying having to haul trash to more-distance landfills, thereby reducing the potential for increased fuel usage and vehicle emissions to haul trash to more-distance landfills, and c. disposing of products/materials that have the potential to leach harmful chemicals), banning bioplastic products would be of local benefit. Per the US EPA: "Municipal solid waste (MSW) landfills are the third-largest source of human-related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2019. The methane emissions from MSW landfills in 2019 were approximately equivalent to the greenhouse gas (GHG) emissions from more than 21.6 million passenger vehicles driven for one year or the CO₂ emissions from nearly 12.0 million homes' energy use for one year."

Recycling: Bioplastics cannot be distinguished visually from conventional plastics. Per the City's contracted MRFs, equipment that can distinguish these products is expensive and market conditions do not warrant this type of investment. Bioplastics require industrial composting.

Composting: Industrial composters contacted by LASAN do not want and do not process bioplastics, because bioplastics break down much more slowly than other materials they compost (such as green waste grass clippings, etc.) and there is no market for them. They dispose of these items as trash. Facilities that do accept bioplastics must separate them from other materials. Or, if they are mixed with green waste, the bioplastics need to be "screened out" (removed) when the green waste is "cured."

LASAN staff are engaged in discussions with multinational companies that are actively testing the biodegradability and compostability of bioplastic products. LASAN will continue this investigation and evaluation and will update the Council as necessary.

3. **Adopt an ordinance that bans in Los Angeles the provision/use/sale of:**
 - a. **Plastic produce bags**
 - b. **Fresh produce wrapped/encased in plastic wrap;**
 - c. **Fresh produce packaged in plastic mesh bags.**
 - d. **Plastic shopping bags of any thickness/style in all stores/retailers;**
 - e. **Film plastic dry cleaner bags.**

To help reduce waste and pollution, the City of Los Angeles implemented the Single-Use Carryout Bag ban in 2014. The ordinance phased out single-use (very thin) plastic bags and mandated more durable, reusable plastic bags and paper bags (available for a fee). The reusable plastic bags must be at least 2.25 mils thick. LASAN contacts area stores annually for information about bag sales and the bag fees they generated and retained. LASAN does not have the resources to ensure that all stores are adhering to the ordinance's requirements for the thicker, durable plastic bags.

a. Rationale for the ban on plastic produce bags (typically made available to consumers via dispensers in produce sections):

Reusable, durable alternatives to plastic produce bags include solid bags, loose-weave bags, and string bags - in all-cotton versions. Stores could stock these. Consumers can also choose to reuse their own plastic produce or other bags. Many people do so and those queried said store personnel have never stopped this practice. Some consumers don't bag their produce at all. There are essentially no markets for film plastics such as bags. When consumers are finished using these bags, if they are not reused, they must be disposed of as trash. (Some consumers are reluctant to reuse plastic bags, even if washed.) Plastic products can leach harmful chemicals when landfilled. These chemicals can impact groundwater. Due to these impacts, and due to the benefits of reducing the amount of any and all material that is deposited into area landfills (a. extending the useful life of nearby landfills, b. avoiding/delaying having to haul trash to more-distance landfills, thereby reducing the potential for increased fuel usage and vehicle emissions to haul trash to more-distance landfills, and c. disposing of products/materials that have the potential to leach harmful chemicals), banning plastic produce bags would be of local benefit.

b. Rationale for the ban on produce tightly wrapped/encased in plastic wrap:

Produce is sold in both plastic bags (the pre-bagged, 5-pound bag of apples is one example), but some stores also sell individual pieces of produce (cucumbers, for example) that are encased in plastic (essentially, shrink wrap). One argument for this practice asserts that the plastic wrap reduces spoilage and therefore means less wasted food. But improved ordering practices to reduce excess stock, complemented by robust food donation and food waste programs, are the better solutions. Grocers can - and should - ban the use of plastic by their growers/suppliers; specifications regarding plastic produce wrap are within their control.

Encasing produce in plastic wrap is a newish, unnecessary and inherently wasteful practice and it can easily be abandoned. Produce can and is sold loose. There are essentially no markets for film plastics such as “shrink wrap.” This wrap has virtually no reuse potential. After removal, the wrap must be disposed of as trash. Plastic products can leach harmful chemicals when landfilled. These chemicals can impact groundwater. Due to these impacts, and due to the benefits of reducing the amount of any and all material that is deposited into area landfills; a. extending the useful life of nearby landfills, b. avoiding/delaying having to haul trash to more-distance landfills, thereby reducing the potential for increased fuel usage and vehicle emissions to haul trash to more-distance landfills, and c. disposing of products/materials that have the potential to leach harmful chemicals), banning plastic wrap on produce would be of local benefit.

c. Rationale for the ban on sale of produce that is pre-packaged in plastic bags:

This recommendation addresses another non-essential, non-recyclable plastic product. Grocers control the specifications for the produce they purchase. Produce was historically sold loose (unbagged). LASAN does not have access to sales information for pre-bagged versus loose produce - but is confident that the former is sold primarily as a convenience for shoppers, especially online shoppers. Pre-bagged produce may slightly reduce sales prices and also speeds restocking by store staff. That said, this type of plastic will no longer be accepted in Los Angeles’ curbside program because it has no markets, and convenience should not override environmental and health considerations. LASAN is confident that industry can develop non-plastic bags and/or implement a system built upon returnable bags. These bags have no markets and very limited reuse potential. The bags must be disposed of as trash. Plastic products can leach harmful chemicals when landfilled. These chemicals can impact groundwater. Due to these impacts, and due to the benefits of reducing the amount of any and all material that is deposited into area landfills (a. extending the useful life of nearby landfills, b. avoiding/delaying having to haul trash to more-distance landfills, thereby reducing the potential for increased fuel usage and vehicle emissions to haul trash to more-distance landfills, and c. disposing of products/materials that have the potential to leach harmful chemicals), banning (pre-packaged) produce bags would be of local benefit.

d. Rationale for the ban on plastic shopping bags of any thickness/style in all stores/retailers:

The thicker plastic grocery bags that are offered in lieu of single-use/disposable bags were intended to be reused multiple times by consumers; but many are actually discarded after a few uses, based on informal surveys. There is no need for new plastic shopping bags to be sold or provided by any Los Angeles store. Many consumers likely have accumulated a supply of shopping bags of all types. Reusable bags are widely available, or consumers can elect to bring in boxes or other containers in which to pack their groceries or other items. Small items often don’t require bags. Stores of all types can elect to sell or offer reusable bags made of other materials. These plastic bags have no markets and very limited reuse potential. The bags must be disposed of as trash. Plastic products can leach harmful chemicals when landfilled. These chemicals can

impact groundwater. Due to these impacts, and due to the benefits of reducing the amount of any and all material that is deposited into area landfills (a. extending the useful life of nearby landfills, b. avoiding/delaying having to haul trash to more-distance landfills, thereby reducing the potential for increased fuel usage and vehicle emissions to haul trash to more-distance landfills, and c. disposing of products/materials that have the potential to leach harmful chemicals), banning all plastic shopping would be of local benefit.

e. Rationale for the ban on film plastic dry cleaner bags:

As with the other recommended bans presented in this section of the report, plastic dry cleaners bags are non-essential, non-recyclable, and contribute to waste and climate change. Alternatives are available, including reusable bags that the dry cleaners can sell or provide (charging for bags that are not returned), all-paper “sleeves,” and consumers can purchase their own reusable bags. Consumers can also elect to forgo bags.

These bags are a suffocation hazard for children (as are all plastic bags) and harmful to clothing: Leaving freshly cleaned laundry in the flimsy plastic bag can cause yellowing, staining, mildew growth, and weakening of fibers. The yellowing and other changes in color are caused by BHT (butylated hydroxytoluene), an antioxidant used in the manufacturing of the plastic bag. When BHT comes in contact with any moisture and impurities in the air, it forms a yellow pigment that transfers to the fabric. <https://www.thespruce.com/problems-with-dry-cleaning-plastic-bags-2145941>

Plastic products can leach harmful chemicals when landfilled. These chemicals can impact groundwater. Due to these impacts, and due to the benefits of reducing the amount of any and all material that is deposited into area landfills (a. extending the useful life of nearby landfills, b. avoiding/delaying having to haul trash to more-distance landfills, thereby reducing the potential for increased fuel usage and vehicle emissions to haul trash to more-distance landfills, and c. disposing of products/materials that have the potential to leach harmful chemicals), banning all film plastic dry cleaner bags would be of local benefit.

The above recommended bans (items a.-e.) are logical extensions of the City’s ban on single-use plastic shopping bags:

Discussion

Plastics are fossil fuels, and oil and gas companies have been turning their focus to plastics, to offset fuel consumption that is being impacted by renewable energy mandates. Per an article in The Conversation online site, the so-called “T-shirt bags” - the now-ubiquitous, lightweight, single-use plastic bags with handles - were developed in 1965. Plastic grocery bags were introduced to the US 1979; Kroger and Safeway began providing them in 1982, but they were still not common.

The article continues: “Mobil Chemical wanted in (on plastics; information added) too. From the 1960s on, the company had pursued an aggressive policy on polyethylene packaging patents and by 1977 was producing its own bags. In 1985, the Society of Plastic Engineers’s Newark Section held its regional conference at the Holiday Inn in Somerset, New Jersey. The topic was “New materials and profits in grocery sacks and co extrusions.” There, the author Vince Staten later

wrote, a speaker pointed out to the assembled that plastic bags cost less than paper—one thousand plastic bags cost \$24, while the same number of paper bags could set retailers back \$30. By the end of 1985, 75 percent of supermarkets were offering plastic bags to their customers. Customers still preferred paper bags—plastic held just 25 percent of the market—but Mobil was working to change that. ‘The last stronghold is the grocery sack bag,’ an executive told the *Los Angeles Times*, “and now we are going after that.’ Within the next decade, the plastic bag had captured 80 percent of the market.”

4. Adopt an Ordinance that would ban any plastic in tea bags.

Rationale for recommendation:The plastic is not necessary (not all manufacturers use it), so it represents an unnecessary use of a fossil-fuel derived product. The plastic is a contaminant in composting and mulching operations, and the health impacts of consuming a hot beverage in which plastic is submerged are unknown. Banning this use of plastic will reduce fossil fuel extraction and related emissions globally, and will protect the quality of local mulching and composting operations - and end products - by eliminating a potential contaminant.

Discussion

Per a 2018 citation by PlasticSoup, “....the BBC has recently demonstrated that teabags which appear to be made of only paper sometimes also contain plastic. The added plastic, however, is rarely mentioned on the packaging, and so the consumer remains blissfully unaware.” https://www.plasticsoupfoundation.org/en/2018/05/paper-teabags-contain-plastic/?gclid=CjwKCAjw4KyJBhAbEiwAaAQbE01aPKOXGG4010AEK4HT0gVbf95-4ihvDjxDnqL8sKRxmlCOyVo2vx0Cy44QAvD_BwE

The plastic may not be visible to consumers and is not referenced on "In normal tea bags, they put a thin layer of plastic fibers over the top of the paper before they put the tea on it," explains Andrew Mayes, a senior lecturer in chemistry at the University of East Anglia. "Then another thin layer of plastic fiber and then another layer of paper, so they can very rapidly seal it around the edges by heating it." The plastic is likely polypropylene. <https://newseu.cgtn.com/news/2020-10-29/Why-hidden-plastic-in-your-tea-bags-is-still-choking-the-ecosystem-UXK9AMUfgA/index.html>

Some “upscale” pyramid tea bags are made *entirely* of nylon mesh. Per an online Guardian article, “These tea bags actually flood every cup with multitudes of microplastics – according to a new study released by researchers at McGill University in Montreal last week.” <https://www.theguardian.com/food/2019/sep/30/those-fancy-tea-bags-nylon-microplastics-in-them-are-macro-offenders>

Tea bags with any plastic are unnecessary because there are brands that have no plastic.

5. Adopt an ordinance that bans in Los Angeles the provision/use/sale of packaging deemed non-reusable, non-refillable, non-compostable or non-recyclable by LASAN and/or third-party entities identified by LASAN.

Rationale for packaging ban:

This recommendation is intentionally very broad because a list of applicable (non-recyclable, non-reusable, non-refillable or non-compostable) packaging would become outdated almost immediately upon publication. Packaging of all types continues to evolve, food packaging in particular, with little to no regard as to recyclability. Much food packaging is made wholly or partially of plastic. An estimated 40 billion packages are produced from multi-material films in the U.S. each year. While undoubtedly on the lower range as to weight and volume, when compared to other packaging types, multi-material packaging contributes to plastic pollution and stokes demand for fossil fuels. Much packaging has a plastic element. Plastic products can leach harmful chemicals when landfilled. These chemicals can impact groundwater. Non-recycled, non-reusable, non-refillable and non-compostable packaging must be disposed of as trash. Banning the sale of such packaging would reduce the amount of materials that is deposited into area landfills. Extending the useful life of nearby landfills would avoid/delay the need to haul trash to more-distance landfills. This in turn would reduce the potential for increased fuel usage and vehicle emissions. Per the US EPA: "Municipal solid waste (MSW) landfills are the third-largest source of human-related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2019. The methane emissions from MSW landfills in 2019 were approximately equivalent to the greenhouse gas (GHG) emissions from more than 21.6 million passenger vehicles driven for one year or the CO2 emissions from nearly 12.0 million homes' energy use for one year." Banning this type of packaging serves a legitimate local purpose.

Discussion

Packaging is complicated. When designing packaging, designers and manufacturers must balance multiple factors - costs, shipping weight, product protection and more. The use of flexible packaging (malleable packaging that includes bags, pouches - including standup and squeezable pouches - shrink films, tubes, sleeves, and carded packaging) is increasing, adding to our waste stream and costs and introducing more plastic. Many of these packages do not disclose their constituent materials - leaving consumers without necessary information. While flexible packaging may be lighter in weight than the equivalent "conventional packaging," the packaging industry acknowledges that the former is de facto non-recyclable:

".....flexible packaging is "..... a sophisticated fusion of various lightweight plastics and (sometimes) other materials."

<https://www.industrialpackaging.com/blog/flexible-packaging-materials-buying-guide>

"Current compositions of multi-material flexible packaging vary from three layers up to nine. Because there is no standard composition, and different resins are utilized across the various layers, there is no existing program anywhere across the globe to provide for the public recovery of these materials. With an estimated 40 billion packages produced from multi-material films annually in the U.S. (emphasis added), finding solutions to collect, sort and recover these materials is becoming of increasing interest to packaging and waste communities, as well as,

consumers across the globe. Diverse designs on the market means there is much uncertainty in the contents and properties of a mixed flexible bale, which can make optimizing processing equipment very challenging and produce low quality outputs.”

<https://collaboratives.sustainablepackaging.org/multi-material-flexible-packaging-recovery>

This ordinance will require that LASAN, solely, or in concert with packaging experts, MRFs and environmental organizations, establish a process by which manufacturers and retailers can submit packaging samples and have them evaluated as to recyclability. This could entail charging a fee for the recyclability assessment, which is entirely reasonable given that packaging designers and manufacturers are for-profit entities.

6. Adopt an ordinance that bans in Los Angeles:

- a. The sale/provision/use of pre-and poly fluoroalkyl substances (PFAS) in all food-contact items, including but not limited to, containers, cups, wraps/wrappers, snack bags (such as those to hold French fries) and “boats” (or trays); in cosmetics; and in household products, including but not limited to, polishes, waxes, paints, cleaning products, cookware, clothing, furniture, carpet, electronics; molded plastics; and in building insulation;**
- b. The manufacture, use, sale of PFAS in Los Angeles and the importing of PFAS into Los Angeles.**



Rationale for PFAS ban:

PFAS are toxic chemicals that endanger human health; they may increase the risk of contracting infectious diseases like COVID-19 and reduce the effectiveness of vaccines. These chemicals have been detected in ground water and drinking water, as well as in finished compost. Their use in any product endangers human health, as does their manufacture. Eliminating them from products will reduce demand and protect the environment from continued contamination.

Per BioCycle magazine: ““PFAS” is short for per- and polyfluoroalkyl substances. Chemicals in this class of more than 5,000 substances are found in products like nonstick pans (e.g. “Teflon”), food packaging, waterproof jackets, and carpets to repel water, grease, and stains. They’re also used in firefighting foam often used on military bases and at commercial airports. Even personal care products like waterproof mascaras and eyeliners, sunscreen, shampoo, and shaving cream can contain PFAS. If you make compost from biosolids and/or from food scraps, it is likely your compost does contain PFAS chemicals. Unfortunately, it is very difficult to test for PFAS in composts as the EPA-approved laboratory procedures in use are those for drinking water.” <https://www.biocycle.net/managing-pfas-chemicals-composting-anaerobic-digestion/>

PFAS contamination could present implications for the City’s ability to comply with SB 1383 organics diversion requirements: Reduce organic waste disposal 50% by 2020 and 75% by 2025.

The Earth Justice organization discusses the human health impacts: “PFAS don’t easily break down, and they can persist in your body and in the environment for decades. As a result of their pervasiveness, more than 95 percent of the U.S. population has PFAS in their bodies, according to the Centers for Disease Control and Prevention (CDC). According to one senior CDC official, the presence and concentration of PFAS in U.S. drinking water presents “one of the most seminal public health challenges for the next decades.”

Studies of the best-known PFAS (PFOA and PFOS) discuss linkages to kidney and testicular cancer and endocrine disruption. Recent studies have even shown a link between COVID-19 and PFAS, meaning an increase in the likelihood of contracting infectious diseases. Clusters of serious medical conditions are found in areas with heavily-contaminated drinking water - many of which are near military bases. Department of Defense fire-fighting foam containing PFAS is the suspected source.

In addition to fire fighting foam, industrial discharges are the other major source of PFAS that contaminate water supplies. PFAS can also accumulate in people through food and food packaging. A 2017 study found PFAS in one-third of all fast food wrappers; the chemicals can easily migrate from wrappers into greasy foods.

“First-generation PFAS are so toxic, in fact, that U.S. manufacturers largely phased them out by 2015, though U.S. law doesn’t prohibit companies from importing them. Now, against the advice of more than 200 international scientists, chemical companies have replaced first-generation PFAS with other chemicals in the PFAS family. New PFAS such as GenX act a lot like old PFAS. Early studies show that they are similarly dangerous.”

https://earthjustice.org/features/breaking-down-toxic-pfas?gclid=CjwKCAjwmqKJBhAWEiwAMvGt6BGBMfJrC0uX_nuGO9egOldbXjR5cPeldh8aKL5g3Wea9XaHFbLIxoCUqMQAvD_BwE

A PFAS ban would protect human health and the physical environment.

9/7/2021 Update:

AB 1200, as amended, Ting. Plant-based food packaging: cookware: hazardous chemicals.

Existing law prohibits the manufacture, sale, or distribution in commerce of any toy or child care article, as defined, that contains phthalates exceeding a specified percentage. Existing law prohibits the manufacture, sale, or distribution in commerce of any bottle or cup that contains bisphenol A, above a specified detectable level, if the bottle or cup is designed or intended to be filled with any liquid, food, or beverage intended primarily for consumption from that bottle or cup by children 3 years of age or younger. Existing law, beginning January 1, 2025, prohibits the manufacture, sale, delivery, hold, or offer for sale in commerce of any cosmetic product that contains any of several specified intentionally added ingredients, such as perfluoroalkyl and polyfluoroalkyl substances (PFAS), except under specified circumstances.

This bill would prohibit, beginning January 1, 2023, any person from distributing, selling, or offering for sale in the state any food packaging that contains *regulated* perfluoroalkyl and polyfluoroalkyl substances or PFAS, as defined. The bill would require a manufacturer to use the least toxic alternative when replacing PFAS chemicals. The bill would define “food packaging,” in part, to mean a nondurable package, packaging component, or food service ware that is comprised, in substantial part, of paper, paperboard, or other materials originally derived from plant fibers.

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=20210220AB1200

B. PLASTIC CONTAINERS/BOTTLED WATER/WATER

- 1. Adopt an ordinance that requires all plastic containers sold in Los Angeles, including but not limited to, containers for beverages (excluding water), food, personal care and home care items, must contain at least seventy-five percent (75%) post-consumer recycled content (pcr) by 2025 and that by 2025, all plastic beverage containers, regardless of the beverage type, have a leashed (attached) lid that remains attached after the lid is opened.**

Note: CA AB 793, which was adopted, requires that all plastic bottles covered by the container redemption program (“bottle bill”) average at least 15% post-consumer resin (PCR) starting in 2022, 25% in 2025 and 50% in 2030. AB 793 preempts municipalities from adopting more stringent requirements. Los Angeles would need to negotiate with the California legislature to implement its 75% or other pcr mandate.

Rationale for 75% pcr mandate: Lacking access to detailed research regarding the supply of recycled PET --rPET (#1) plastic, LASAN suspects there is a sufficient supply of recycled rPET to achieve 75% pcr in all plastic beverage containers. Structural barriers and cost considerations are likely the major impediments to achieving 75% pcr. For decades, cargo ships delivering Chinese-made goods to the US, returned to China carrying recyclable materials. The “dirty secret” of this system was that many of the lower-grade plastic items

shipped primarily to China were discarded as trash, often literally tossed into major rivers. The rivers deliver plastic pollution to the ocean, where the plastic items accumulate in circulating systems known as gyres- which resemble plastic islands. Although not strictly a “local problem,” the gyres harm the health of the ocean - which impacts the globe - and injure and kill marine life. High levels of post-consumer recycled content in plastic containers offers other global benefits, the primary of which is reducing the amount of fossil fuels and energy used for plastic production. Reduced energy consumption in turns reduces CO2 emissions.

<https://www.mjspackaging.com/blog/the-benefits-of-using-recycled-materials-in-your-plastic-packaging/#:~:text=The%20amount%20of%20oil%20used,reused%20in%20manufacturin g%20new%20products.>

Mandates for recycled content feedstock also functions as an incentive that will keep plastic bottles out of landfill ls. Extending the useful life of nearby landfills would avoid/delay the need to haul trash to more-distance landfills. This in turn would reduce the potential for increased fuel usage and vehicle emissions. Per the US EPA: “Municipal solid waste (MSW) landfills are the third-largest source of human-related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2019. The methane emissions from MSW landfills in 2019 were approximately equivalent to the greenhouse gas (GHG) emissions from more than 21.6 million passenger vehicles driven for one year or the CO2 emissions from nearly 12.0 million homes’ energy use for one year.”

Rationale for Leashed Lids: Per a 2020 report from the Ocean Conservancy: “In all, 943,195 volunteers in 116 countries collected nearly 32.5 million pieces of trash, including 4.2 million cigarette butts (which contain plastic filters); 1.9 million plastic beverage bottles; 1.5 million plastic bottle caps; and 942,992 straws and stirrers. In total, volunteers removed 20.8 million pounds (or 9.4 million kilograms) of trash during last year’s ICC. <https://oceanconservancy.org/news/food-wrappers-top-list-items-found-beaches-waterways-worldwide-first-time-three-decades-ocean-conservancy-report-reveals>

Although some industry representatives contend that about 80% of California’s bottle caps are recycled, environmental groups assert that bottle caps are the third-most common item found during beach cleanups.

(<https://www.cnn.com/2018/03/07/california-targets-removable-plastic-bottle-caps-plastic-straws.html>) These statements aren’t necessarily in conflict. But leashed lids could significantly reduce the number of lids (caps) that are littered. Less litter could mean reduced street clean-up costs, although the reduction in costs cannot be estimated.

A reduction in litter reduces visual blight and would reduce the amount of plastic pollution carried by stormwater into waterways, where marine life could be harmed as a result. Leashed lids and would also reduce the number of lids that are disposed of as trash.

Although small and lightweight, any reduction in disposed trash is beneficial. Extending the useful life of nearby landfills would avoid/delay the need to haul trash to more-distance landfills. This in turn would reduce the potential for increased fuel usage and vehicle emissions. Banning this type of packaging serves a legitimate local purpose.

Discussion

“An estimated 12 billion plastic bottles are sold every year in California. (The number of *bottles* that contained beverages versus other products was not provided.) Although about 70% (of the 12 billion) are recycled, often into other types of plastic packaging, more than 3 billion bottles are not recycled at all, according to state statistics.”

<https://www.packagingstrategies.com/articles/95692-california-requires-plastic-beverage-containers-to-contain-15-recycled-plastic-by-2022>

Per the publication Resource Recycling, which is owned by the Association of Plastic Recyclers (APR): “... most beverage companies selling their products in California use zero recycled plastic. Some use very low percentages of PCR. Others, including some major brands, used noteworthy amounts that would satisfy the initial requirements of AB 793. As examples, Coca-Cola and Danone Water of America were at 19% and 20% recycled content, respectively, and Nestlé Waters North America exceeded 36%.” <https://resource-recycling.com/recycling/2020/09/01/california-mandates-recycled-material-in-beverage-bottles/>

LASAN recently queried representatives from an industry association as to why 50% pcr in bottles is feasible by 2030, per AB 793, but is not feasible *now*? A clear explanation was not provided.

Given the plastics crisis, there can be no justification for excluding plastic bottles used as packaging for personal care (shampoo, etc.), home care (dishwashing soap) and other items from the 75% pcr mandate. The manufacturers of these products must be responsible for creating market demand for their packaging. Some consumer goods companies have already started using ocean plastic in their bottles (ocean plastic is an “exotic” option given that plastic retrieved from the ocean is usually degraded), and Procter & Gamble announced it will introduce 25% recycled plastic across 500 million bottles sold yearly on its hair care brands. <https://headandshoulders.com/en-us/whats-new/shampoo-bottles-made-from-recycled-plastic>

Leashed lids: These are technically feasible, in fact, they already exist on many sports bottles. Leashed lids will help reduce litter. Bottle caps and lids are #3 of the top 10 debris items found on California beaches during Coastal Cleanup Day; caps were 9% of the total <https://www.coastal.ca.gov/publiced/ccd/history.html>

Industry sources reported to LASAN that about 85% of beverage containers collected within California include their caps, per CalRecycle, while the City’s contracted MRFs report the rate as closer to 35%, based on visual assessments. While it is true that leashed lids will slightly increase total bottle weight, they will reduce litter.

In May 2021, Coca-Cola began a pilot project in Spain to introduce and test tethered – or attached - caps on plastic bottles on select soft drink brands. Conversion of production

lines will begin in May, followed by eleven weeks of production, with bottles featuring the new cap reaching the market in the summer.<https://www.coca-cola.eu/news/supporting-environment/coca-cola-begins-european-testing-of-attached-bottle-caps>

We should not forget that in the 1970s, the beverage industry replaced pull-off tabs on aluminum cans with tabs that were affixed, specifically to address litter. Leashed lids are merely a variation of that.

California's Bottle Bill is outdated: "Bottle bills" were initially intended to address litter, the majority of which was at one time beverage containers, at about 40-60% of the total.
<https://www.bottlebill.org/index.php/about-bottle-bills/what-is-a-bottle-bill>

The state Bottle Bill, formerly cited as a model, needs to be restructured so more plastic beverage containers will be redeemed. Per State Senator Bob Wieckowski: "California now ranks third to last in redemption rates among bottle deposit states, because of the insufficient number of redemption locations and consumers' inability to redeem their deposits. With a 57% redemption rate for 2020, Californians forfeited more than one half billion dollars in bottle deposits and added to pollution and climate change." (The collection rate of PET bottles in California was 74% in 2019 while the US average was 29%. Likewise, 68% of HDPE bottles were collected in California in the same year versus 30% in the entire country. But that means that 26% of PET containers were not collected.)
<https://www.icis.com/explore/resources/news/2020/10/21/10565676/insight-california-mandate-seeks-to-develop-market-for-recycled-plastic>)

The Senator authored SB 38, which proposes a stewardship model similar to Oregon's. Oregon has a redemption rate of 86 percent and more locations to recycle, despite having just one-tenth the population of California.
<https://sd10.senate.ca.gov/news/2021-06-03-state-senate-passes-landmark-bottle-bill-reform-shift-responsibility-beverage>

Only 10 states now have bottle bills or container deposit laws, which suppresses the domestic supply of rPET. A proposal for a national bottle bill was introduced in the US Congress, and has been separated from the broader "Break Free From Plastic" legislation, to improve its chances of adoption.

LASAN conferred with an industry association recently. The association representatives said the majority of recycled PET is now used for the manufacture of thermoform products, not bottles. (Thermoforming is a manufacturing process where a plastic sheet is heated until it reaches a temperature at which it is pliable; it's then molded and trimmed as a usable product. Examples of thermoform packaging include the clear, rigid containers used for salads and baked goods.
<https://www.plasticsunlimited.com/capabilities/thermoforming/>)

Recycled PET (rPET) supply:

Some industry beverage and bottling associations contend there is an insufficient supply of rPET to achieve more than 50% pcr in beverage containers by 2030 (as is required by AB 793). But much of the *potential* supply of rPET is not collected or is diverted for uses other than as feedstock for bottles, as discussed below.

“Last year (2019), 1.77 billion pounds of PET bottles were collected and sold to reclaimers.

The U.S. PET bottle recycling rate declined by a percentage point to 27.9% in 2019 (compared to 28.9% in 2018), *though the amount of RPET used to make new bottles increased (emphasis added).*

Research showed that from 2017 to 2019 the amount of RPET going into bottles was up 41%. The growth was offset by a 16% drop in RPET going into the thermoform and sheet market during that time, however. <https://resource-recycling.com/plastics/2020/12/02/pet-bottle-recycling-rate-drops-in-us/>

According to the National Association for PET Container Resources (NAPCOR), “...out of the total recycled PET resins produced in the US from post-consumer bottle waste in 2018, only 25% was used to produce new bottles. The remaining 75% was consumed in other end-markets such as fibre, sheet, and strapping.” LASAN notes that fibre, sheets and strapping are “down-graded” uses of rPET and these materials will not be accepted in its revised blue bin program.

“Similarly, only 37% of US recycled HDPE resins from PCR bottles was converted into new bottles in 2018. Other common applications are pipe, lumber/ decking, lawn/garden, automotive, and film/ sheet, as stated by the American Chemistry Council (ACC) and the Association of Plastic Recyclers (APR).”

NAPCOR continues: “It is anticipated that AB 793’s bottle-to-bottle focus may increase sourcing competition among the recycled end-markets, which would mean that the manufacture of new bottles would be emphasized. Bottles are usually more valuable and an increase in their production could also encourage the development of more food-grade plastics.

Reaching near \$300/tonne above virgin PET resin on the West Coast, such is the demand for food grade material by major beverage brands with pledges to reach levels of 25-50% R-PET content in their bottles by 2030.

With demand outstripping supply, the bottle-to-bottle market has become a high value application. This legislation will now drive the demand for recycled content from all producers.”

<https://www.icis.com/explore/resources/news/2020/10/21/10565676/insight-california-mandate-seeks-to-develop-market-for-recycled-plastic>

Per a 2015 joint report from the Natural Resources Defense Council (NRDC) and As you Sow: “A growing amount of rPET is being purchased domestically. U.S. reclaimers increased purchases of recovered PET by 219 million pounds, raising rPET purchased for domestic recycling from 45 percent of U.S. recycled PET collection in 2009 to 66 percent in 2011. One reason is the growth of new bottle-to-bottle processing plants that have recently opened, such as CarbonLITE Industries, which opened a large facility in Riverside, California, in 2011. The plant processes 2 billion used bottles, or 100 million pounds of PET, annually into food-grade material for recycled bottles. Nestlé Waters NA and PepsiCo are major customers of CarbonLITE. The company has announced plans to open a second plant in Abilene, Texas, in 2015.”

<https://www.nrdc.org/sites/default/files/consumer-goods-packaging-report.pdf>

Generally, virgin plastic is less expensive than rPET, and increased competition for food-grade rPET will increase the cost of that feedstock. LASAN was not able to determine the anticipated average cost increase for a beverage container with 75% pcr, or the percentage increase. But the profitability of the beverage industry is not a source of concern, even if the following estimate is overly optimistic: “The global carbonated beverages market size was valued at USD 406.89 billion in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 5.1% from 2020 to 2027.”

<https://www.grandviewresearch.com/industry-analysis/carbonated-beverages-market>

2 Adopt an ordinance that bans in Los Angeles :

- a. The bottling and sale of water that is packaged in plastic bottles, including that sold in vending machines, if said bottles are not routinely refilled/reused by the vendor and/or manufacturer;**
- b. The sale/use/provision of water that is packaged in plastic bottles on City property and at City-permitted / City-sponsored events, including catered events not open to the public.**
- c. The sale outside the City of Los Angeles of any water, regardless of packaging type, if the water was obtained from City of Los Angeles sources.**

Pre-packaged water of all sizes and types, including purified water, mineral water, carbonated or sparkling water, and electrolyte-enhanced water products, is subject to the ordinance.

Rationale for item a. - banning the bottling and sale of water packaged in bottles: Water is available from water fountains and bottle fillers, can be carried in reusable containers owned by individuals, and is also packaged in aluminum cans and glass bottles.

There is no need to introduce additional plastic water bottles into Los Angeles.

It takes water to manufacture plastic bottles; water is consumed to carry water, in effect. Per the Water Footprint Calculator:” It takes 22 gallons of water to make one pound of plastic. In fact, it

takes at least twice as much water to produce a plastic water bottle as the amount of water contained in the bottle.” <https://www.watercalculator.org/footprint/the-hidden-water-in-everyday-products/>

California is in a drought. Devoting precious water to make plastic water bottles is an extreme form of indulgence. “We are in worse shape than we were before the last drought, and we are going to be in even worse shape after this one,” said Jay Lund, co-director of the Center for Watershed Sciences at University of California at Davis. <https://calmatters.org/environment/2021/05/unprepared-california-drought-2021-lessons-learned/>

Per the environmental organization 5 Gyres: “Three million water bottles are used every hour in the US, but less than 30% are recycled. 5 Gyres’ designates these as “some of the world’s west plastic items, from an environmental and toxic chemical perspective.



Financial Costs: According to some estimates, bottled water is almost 2,000 times the price of tap water, with a gallon — obtained from combining single-serve water bottles — costing almost three times the national average for a gallon of milk. <https://www.medicalnewstoday.com/articles/327395#pros-and-cons-of-bottled-water>

Environmental costs: The bottling, refrigeration, and transportation processes associated with water, as well as the disposal of plastic bottles after use, cause a wide range of adverse environmental effects far greater than those of tap water. For example, 4 billion pounds of plastic were used in the US in 2016 to bottle water. “This process required an estimated energy input equal to approximately 64 million barrels of oil.” <https://www.medicalnewstoday.com/articles/327395#pros-and-cons-of-bottled-water>

Water is heavy, so large amounts of electricity are used to pump water to Los Angeles. The City of Los Angeles still relies upon natural gas and coal, so all electricity usage generates CO2 emissions. Utilizing additional energy to package (bottle) water is unnecessary and unjustified.

Eliminating plastic bottles as packaging for water would reduce plastic usage, reduce associated fossil fuel consumption and energy for manufacturing, would reduce the amount of plastic bottles

that are disposed of as trash instead of being recycled. Disposed plastic can leach harmful chemicals that pose risks to groundwater. There is no question that reducing overall usage of non-essential plastic packaging such as water bottles would confer local (and global) benefits.

Discussion

Bottled offers the illusion of “safer, purer” water when compared to tap water, but that’s not the case: “Bottled water is marketed as though it’s cleaner than tap, but numerous studies show it’s definitely not cleaner,” explained Sherri Mason, the author of an extensive 2018 study on bottled water and a sustainability researcher at Penn State Erie, The Behrend College. <https://www.eatthis.com/bottled-water-dangers/>

Bottled water purchases by lower-income residents: The number of water vending machines and bottled water stores located within lower-income neighborhoods in Los Angeles can be perplexing, but the following excerpts offer explanations.

“When people assess whether bottled water is affordable, they compare it to the other bottled drinks they typically buy—not to tap water. The short answer is that poor people see it as healthy and affordable compared to other bottled beverages, according to my interviews with low-income Americans.” <https://journals.sagepub.com/doi/pdf/10.1177/1536504214545752>

“From October through December 2013, 1,230 (Los Angeles County) participants completed the Water Consumption Survey (86% response rate); the authors included 1,171 participants in the final analysis. Hispanic and African-American participants accounted for the largest proportions (38% and 37%, respectively). Overall, 48% of participants reported drinking tap water daily compared with 58% who reported drinking bottled water daily. The health belief model constructed of perceived health risks (that is, perceived threats) significantly predicted why survey participants did not drink tap water. Other results revealed several misconceptions about tap water fluoridation and differences in beliefs about tap water safety according to income level.

Conclusions: Fluoridated tap water is a low-cost, ecologically friendly resource that provides health benefits seldom found in bottled water. However, mistrust about the quality and safety of tap water may make those in low-income communities more vulnerable to the effects of not receiving adequate fluoride and thus at higher risk of developing caries. Future interventions should encourage tap water use by dispelling misconceptions and educating low-income people in urban areas of LAC about the health benefits of fluoridated tap water and the safety of its sources. In addition, patient encounters could be an opportunity for pediatric dentists, general dentists, and other health care providers to reinforce the health benefits of tap water fluoridation and its use.” <https://pubmed.ncbi.nlm.nih.gov/30979398/>

In 2018, LADWP supplied approximately 160 billion gallons of clean water to 4 million people in the City of Los Angeles, all for less than half a penny per gallon. LADWP staff tested for over 200 constituents in the water and performed more than 120,000 tests on samples taken throughout the city to ensure the highest water quality. While the cost of bottled water runs about \$1.22 a gallon, on average, LADWP’s tap water costs less than half a penny per gallon. <https://www.ladwpnews.com/plans-to-install-refurbish-200-hydration-stations-in-los-angeles-announced-at-5th-annual-tap-water-day-la/>

Note: During the 5th Annual “Tap Water Day” in 2019, the Los Angeles Department of Water and Power (LADWP) announced plans to install or refurbish 200 drinking water stations city-wide for the enjoyment and health of all residents and visitors to the city, in advance of the 2028 Olympics, as part of LA’s Green New Deal.

Rationale for item b. - banning the sale/use/provision of water that is packaged in plastic bottles on City property and at City-permitted / City-sponsored events, including catered events not open to the public.

The purpose is to ensure that the City “walks the talk” by minimizing its own plastic usage. Information signs about the policy can be displayed at the designated events to provide information about why (plastic) bottled water is not only not necessary, but also ill-advised.

Rationale for item c.- banning the sale outside the City of Los Angeles of any water, regardless of packaging type, if the water was obtained from City of Los Angeles sources.

California is experiencing a drought, water is a public resource, bottled water is not a necessity, and the water needs of Angelenos should be prioritized over private-sector for-profit businesses.

3. Direct the Los Angeles Department of Water and Power (LADWP)/Recreation and Parks (RAP) and the General Services Department (GSD) to publish online, on their individual websites, a map of all publicly-accessible water fountains that indicates which have bottle fillers, and a list of the fountains, with addresses and hours of public accessibility, and to publicize publicly-available applications (apps) that provide the locations of water fountains/bottle fillers.

Rationale for item d. - publishing and maps and addresses of water fountains and bottle fillers:

The purpose is two-fold: To discourage the use of water sold in plastic bottles, and to assist the public and city employees in refilling their own reusable bottles.

4. Direct LASAN, City Attorney, CAO, other departments to engage with the Los Angeles County Economic Development Corporation, the California’s Statewide Commission (Statewide Commission) on Recycling Markets and Curbside Recycling, the Commission’s Centralized Market Development Unit, UCLA’s Luskin Institute and the beverage industry regarding development of a beverage bottle return and refill infrastructure, regardless of bottle materials, with a goal of a minimum of 10% of all beverage bottles being refilled within 5 years.

Rationale for refill recommendation: Refillable beverage bottles were the norm - when glass was container material of choice, but *plastic* bottles can also be refilled. What has largely vanished is the local collection, washing, and return infrastructure: “Today less than 1 percent of packaged soft drink volume is sold in refillable bottles.”

<https://www.container-recycling.org/index.php/refillable-glass-bottles/53-facts-a-statistics/glass/428-the-decline-of-refillable-beverage-bottles-in-the-us>

Discussion

The current incarnation of California’s Bottle Bill disincentivizes refills, but AB 962 would address that by allowing refillable bottles to be integrated into the state’s recycling system for beverage containers. “Instead of being crushed and recycled, they would be washed and refilled by beverage producers, simultaneously creating jobs and reducing waste.” The bill passed the California Assembly on May 20, 2021 and was referred to the Senate Committee on Environmental Quality.“

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB962

A team of experts is needed to plan a local refill infrastructure, and a focus on entry-level jobs is essential.

The organization Oceana estimates the environmental benefits of refills: “...just a 10% increase in the share of soft drink beverages sold in refillable bottles could decrease marine plastic pollution by 22%.Refillable systems continue to exist in 94 countries and still account for more than 30% of beverages sold in major markets, including Germany, Mexico, Indonesia, and the Philippines. While corporate innovation plays an important role in reducing plastic waste, governments are needed to jump-start the transition to refillables and plastic-free alternatives. Chile recently did just that, passing an ambitious law that Oceana advocated for.The law requires all stores – including large supermarkets, many of which did not sell refillables – to actively display, sell, and receive refillable bottles. Single-use bottles will only be permitted if they contain recycled material that was collected in Chile.” <https://oceana.org/blog/how-reusable-bottles-and-containers-can-help-save-ocean>

C. LABELING

1. Adopt an ordinance that bans the use of:

- a. **Chasing arrows and the word “recyclable” on products/packaging made of any material/s that are sold in Los Angeles unless the products/packaging have been certified as recyclable by LASAN and/or a third-party certification/testing program selected/designated by LASAN.**

Note: CA SB 343, the “Truth in Labeling Law” co-authored by Senators Ben Allen, D-Santa Monica, and Steve Glazer (D-Contra Costa), would require that companies meet certain standards before being able to apply the “chasing arrows” recycling symbol or other recyclability claims, unless approved by CalRecycle standards. It also prompts CalRecycle to produce a list of commonly recycled items.their products. The bill was signed by Governor Newsome in October of 2021.

<https://eastcountytoday.net/truth-in-labeling-bill-to-prohibit-chasing-arrow-symbol-on-unrecyclable-products/>

b. The word “compostable” on products and packaging made of any material/s that are sold in Los Angeles unless the products/packaging have been certified as compostable by LASAN and/or a third-party certification/testing program selected/designated by LASAN.

c. The use of the word “flushable” on products made of any material/s in Los Angeles unless said products have been certified as flushable by LASAN and/or a third-party certification/testing program selected by LASAN.

Rationale for item a-regulating use of the chasing arrows and word “recyclable”

It is well documented that most consumers assume that the chasing arrows symbol (with the resin number in the center) signifies that an item can be recycled.

<https://calpirg.org/blogs/blog/cap/stop-using-chasing-arrows-products-arent-recyclable>

These Resin Identification Codes (RIC) were developed by the Society of the Plastics Industry (SPI) in 1988.

<https://www.packaginglaw.com/index.php/ask-an-attorney/why-are-chasing-arrows-still-used-ric>

The word “recyclable” appears on some products - such as Amazon’s M-9 mailer padded mailer. A City-contracted MRF refutes this claim and also reports it was unable to obtain information about the cushioning material shown here:



Photo by JORDAN STEAD

Lightweight cushioning inside Amazon's new recyclable mailer.

<https://www.aboutamazon.com/news/sustainability/the-big-ideas-and-tiny-details-behind-amazons-new-recyclable-mailer>

If a local MRF will not accept a product for recycling, that product is not recyclable in Los Angeles and will be disposed of as trash. Los Angeles has the right to restrict misleading/inaccurate

advertising that impacts its recycling program and costs. The City has the right to ensure that consumers - residents and businesses - can make fully-informed purchasing decisions; this should result in reduced contamination in both blue and green bins.

Any reduction in the amount of disposed trash is beneficial. Extending the useful life of nearby landfills would avoid/delay the need to haul trash to more-distant landfills. This in turn would reduce the potential for increased fuel usage and vehicle emissions. Banning this type of packaging serves a legitimate local purpose. Per the US EPA: "Municipal solid waste (MSW) landfills are the third-largest source of human-related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2019. The methane emissions from MSW landfills in 2019 were approximately equivalent to the greenhouse gas (GHG) emissions from more than 21.6 million passenger vehicles driven for one year or the CO₂ emissions from nearly 12.0 million homes' energy use for one year."

Per a post on the website of Californians Against Waste, SB 343 (Allen) has passed the California legislature and the Governor's signature is expected. SB 343 would reserve use of the "chasing arrows" for products and packaging that are in fact recyclable. As Senator Allen noted: "It's already illegal to label an item 'recyclable' when it's really not, so manufacturers shouldn't be able to put the recycling symbol on items that aren't actually recyclable in the real world. By forcing truth in labeling, SB 343 will reduce contamination in the recycling stream and improve the sorting process, thereby saving cities and ratepayers money while empowering consumers to make more informed decisions." <https://www.cawrecycles.org/recycling-news/tfkr6ag7h5b8kjjach3lkfch3p747y>

Rationale for item b. -regulating use of the word "compostable"

Plastic products labeled "compostable" must be processed at commercial/industrial composting facilities. The City of Los Angeles does not own or contract with such facilities, so these items must be disposed as trash in Los Angeles. In addition, industrial composters contacted by LASAN do not want and do not process compostable plastics (also called "bioplastics"), because they break down much more slowly than green waste (grass clippings, etc.) and there is no market for them. The industrial composters that receive these items dispose of them as trash. With the organics diversion mandates of SB 1383, composting facilities are under increased pressure to move green waste through their facilities more quickly.

Per CalRecycle, for a product to be labeled "compostable," it must "disintegrate by 90% within 90 days of being at a commercial facility. In addition, it must create zero toxicity during the degradation (break-down) process." <https://www.calrecycle.ca.gov/plastics/degradables/labeling>

As with the word "recyclable," the City has the right to require accurate advertising on products that could negatively impact its green waste program and could increase contamination levels, product (mulch) quality and processing costs. And consumers have the right to make informed purchasing decisions. Los Angeles must comply with the organics diversion mandates of SB 1383. The capacity of organics processing facilities should not be taxed with the introduction of

materials that are not actually compostable. A reduction in disposed waste benefits all Los Angeles residents.

LASAN staff are engaged in discussions with multinational companies that are actively testing the biodegradability and compostability of products. LASAN will continue this investigation and evaluation and will update the City Council as necessary.

Legislative Update: In October 2021, Governor Newsom signed AB 1201. The bill (which amends Sections 42356, 42356.1, and 42357 of, and to amend the heading of Chapter 5., commencing with Section 42355) of Part 3 of Division 30 of, the Public Resources Code, relating to solid waste), regulates use of the terms “compostable,” “home compostable,” “biodegradable,” “degradable,” or “decomposable” on plastic products.

https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=20210220AB1201&firstNav=racking

Rationale for item c. -regulating use of the word “flushable”

“Wipes” of all types -baby wipes, disposable wipes, flushable wipes - are usually made from plastic fibers (#1 PET or #5 PP - Polypropylene), or a combination of those, or a combination of PET and regenerated cellulose. The plastic portion can introduce microplastic particles into sewer systems and then into wastewater influent. Regenerated cellulose is derived from plants but is chemically treated, resulting in a material (fiber) that is part natural, part artificial.
<https://www.textileschool.com/448/man-made-regenerated-cellulose-fibres/http://www.rrwatershed.org/wp-content/uploads/2021/04/007-AB-818-Fact-Sheet.pdf>

Cleansing and diaper wipes shouldn't be flushed - even if labeled "flushable" - because they'll clog sewer systems, per a study by Ryerson University in Ontario. 101 single-use products, 23 of which were labeled as “flushable” by the manufacturer, were tested. The study showed that not one “fell apart” or disintegrated and was able to “disperse safely.” Results showed that not one single wipe was able to fall apart or disperse safely. Wipes can affect not only household plumbing, but also municipal sewage infrastructure. And the microplastics obviously and negatively impact the environment.
<https://www.ryerson.ca/content/dam/water/Research/FinalReport-FlushablesApril1.pdf>

Removing the word “flushable” could reduce clogs and damage to sewage treatment equipment and reduce maintenance and repair costs to the City.

Discussion

Per the California Water Environmental Association (CWEA): “There are currently no statutory requirements for wet wipes products to be labeled with information about their intended disposal, and many wet wipes that are supposed to go into the trash end up being flushed and contribute to system problems and microplastic pollution. Compounding the problem is the increasing popularity of “flushable” wipes, which look and feel the same as other wipes and create consumer confusion about how to properly dispose of the products intended to be disposed of in the trash. Information gathered by the State of California indicates that in the last decade, the number of

sewer spills have decreased by over 55%; however, the percentage of sewer spills related to wet wipes have increased 35% in the same time. In fact, the improper disposal of wet wipes in sewers over this same time period has resulted in over 1.2 sewer spills per week for which public agencies could have been liable for \$350 million in fines for such violations.”

- 2 Adopt an ordinance that requires “full-disclosure” labeling on all products and primary packaging (also called “consumer packaging,” which is the packaging that is in direct contact with a product) sold in Los Angeles. Products and packaging that contain no recycled-content must display that fact in a prominent location (other than the bottom of the product or package) in at least 12-point font; this is the prescribed text: “Contains no recycled content. Contains only virgin materials.”

Example of Full Disclosure Labels Based on the Proposal:

Foam women’s sneakers. Manufactured in the US. Upper made of 95% woven fabric (#1 plastic) from US-sourced fossil fuel, 5% EVA (ethylene-vinyl acetate). Sole made of 100% polyvinyl chloride (PVC) from US-sourced fossil fuel. Shoelaces made of cotton. Sneakers are non-recyclable in Los Angeles, please donate. Sneakers packaged, shipped in 100% paperboard boxes manufactured in China, with at least 85% post- consumer recycled content, paper sourced in China. Box is recyclable. Product:package ratio* is 90%:10% by weight.

*This is intended to help consumers identify over-packaged products.

Rationale for full disclosure labeling: Los Angeles consumers (residents, businesses, and institutions) have the right to detailed information about the products and packaging they purchase, including whether items are recyclable, refillable, compostable, the country of origin, if fossil fuels were used in the manufacture, and where they were sourced, so they can make informed decisions. Better purchasing decisions can lead to reduced trash generation when consumers select recyclable, compostable, refillable items instead of items that must be disposed of as trash. Per the US EPA, municipal solid waste landfills are a primary source of greenhouse gas emissions. Selecting products with domestic versus non-domestic content generally means reduced transportation-related emissions.

- 3 **Adopt an ordinance that requires that all synthetic items that are derived from fossil fuels (including but not limited to synthesized polymers such as Polyester, Acrylic, Nylon, Spandex, Polyamide, and Acetate), including but not limited to clothing, textiles, and home goods that are intended to be cleaned (washed) by hand or in a washing machine, have a permanent label that displays this information in at least 10-point font: "This item sheds plastic microfibers when washed. Wastewater treatment plants cannot screen/capture all microfibers, so some are discharged into the ocean."**

Rationale for label recommendation: Consumers have the right to detailed information - including the environmental impacts - about the products and packaging they purchase, so they can make informed decisions. Many consumers may not be aware that synthetic fibers

are derived from fossil fuels, or that items made from these fibers shed microplastics when washed, or the scope of the problem. A prominent label could help reduce purchases of these items and ocean plastic pollution. Although wastewater (sewage) treatment plants remove some microplastics, they do not remove all of them. Better labeling could result in a reduction in microplastics discharged by the Hyperion Treatment Plant, thus reducing local ocean plastics pollution and impacts to marine life.

Per Surfrider: "...a 2016 study pioneered by Patagonia Outfitters and conducted by the Bren School of Environmental Science & Management found that a single fleece jacket shed up to 250,000 microfibers during a single wash." <https://www.surfrider.org/coastal-blog/entry/plastic-microfibers-recent-findings-and-potential-solutions>

4. Assess an environmental impact fee on all synthetic items that are derived from fossil fuels (including but not limited to synthesized polymers such as Polyester, Acrylic, Nylon, Spandex, Polyamide, and Acetate), including but not limited to clothing, textiles, and home goods, and that are intended to be cleaned (washed) by hand or in a washing machine, to fund design, development, and installation of potable reuse infrastructure and membrane filtration system (like reverse osmosis) that can address microplastics in wastewater and generate drinking water.

Rationale for environmental impact fee on synthetic items

Fees are intended to disincentivize the purchase and use of products that cause environmental harm. Washable synthetic items shed microplastics when washed, and sewage treatment facilities cannot remove all the microplastics. A reduction in the usage of these synthetics would reduce fossil fuel usage and microplastics, which harm the local marine environment and marine life.

Discussion

The Surfrider Foundation offers this discussion on microplastics:

"Potable reuse facilities could be a great solution to the plastic microfiber problem, while simultaneously helping to solve water availability issues. These facilities would be built next door to traditional wastewater treatment facilities, yet would take additional filtration steps to get the water to drinking level quality. These additional filtration methods include pasteurization; ultrafiltration; reverse osmosis; and UV light disinfection with advanced oxidation (currently occurring at a Pilot Project and Demonstration Facility by VenturaWaterPure). Ultrafiltration should catch all plastic microfibers as the filters are 0.1-0.02 microns in size, blocking even the smallest referenced microfiber at 3 microns. Finally, reverse osmosis eliminates the threat of microfibers as the filter blocks all particles larger than a water molecule from passing through, and is even able to block pharmaceuticals. More research is needed to see where microfiber filtration and capture could best be placed in this process, yet these additional steps pose a potentially great solution to a variety of

environmental problems, including water shortages, wastewater discharge concerns, and more. The Surfrider Foundation is very interested in this potential solution to microfiber pollution and will be investigating the potential solution at a deeper level to explore opportunities for policy development and advocacy.

A study found that wastewater treatment facilities generally remove 95 to 99 percent of microfibers, yet even the small percentage that sneaks through can mean the release of 65 million plastic microfibers daily. The Great Lakes Water Authority's conventional wastewater treatment plant participated in this assessment to see what options for filtration upgrades were available to catch plastic microfibers at their wastewater treatment facility. When looking closely at their system, they found that 55 percent of plastic microfibers were removed during the first step of grit removal. If they were to add filters to this step to effectively capture the majority of microfibers, they estimate a cost of \$250 million. Another option is to treat effluent before disinfection, with a process called tertiary filtration via sand filters. However sand filters have been found to be not very effective at removing microfibers. The study found that the most effective mechanism would be to use a membrane filtration system (like reverse osmosis). During a recent webinar, a representative from the Great Lakes Water Authority estimated that the complete implementation of a membrane filtration system could cost \$900 million or more. It is unlikely that Surfrider Foundation would advocate for these types of upgrades without also encouraging the ability to create potable reuse water infrastructure." <https://www.surfrider.org/coastal-blog/entry/plastic-microfibers-recent-findings-and-potential-solutions>

D. SINGLE-USE/DISPOSABLE AND REUSABLE PRODUCTS, ASSISTING RESTAURANTS IN TRANSITION TO REUSABLE FOODWARE

1. Adopt an ordinance that requires that:

- a. All food and beverage establishments -including cafeterias intended primarily or exclusively for City employees – that operate on City property, within or outside the limits of the City of Los Angeles, provide only reusable foodware (including but not limited to cups, bowls, plates, utensils, and beverage containers, etc.) for all dine-in meals; condiments shall be available only via “bulk dispensers” or reusable containers and not individual disposable condiment packets/containers of any type; all disposable napkins provided to customers shall be made of unbleached paper with at least 30% post-consumer recycled content and shall display a printed message indicating the exact or minimum amount of post-consumer recycled content. The “dine-in” provision applies to restaurants operating in airport terminals, food courts and the equivalent, regardless of whether the restaurants have their “own” designated/exclusive seating areas;**

Large Los Angeles restaurants (26 or more employees) must comply with the mandates of item a) above six months after the effective date for cafeterias/restaurants on City property; all restaurants must comply with the mandates of item a) six months after the effective date for large restaurants.

Rationale for mandate for reusable foodware: Single-use/disposable foodware items are not necessary for dine-in meals, contribute unnecessarily to the waste stream, and cannot be recycled. If made of plastic, they may also leach harmful chemicals when landfilled. If made of paper, they may contain chemicals (PFAS) harmful to humans, and which have been detected in drinking water and groundwater. The paper items cannot currently be processed through the City's green waste program; and when landfilled, they are an organic material that will generate methane, a climate-change gas. Banning these items will benefit the local environment and extend the life of landfills used by the City of Los Angeles.

Discussion

Many restaurants utilize disposable foodware because of the convenience, or because they have not conducted a cost analysis to determine if reusables are less expensive or how quickly they could pay for themselves. Some restaurants may lack sufficient space for manual dishwashing or dishwashers. Staff shortages have been reported and will affect the ability of some restaurants to integrate reusable, washable foodware into current operations.

ReThink Disposable is a program of the Clean Water Action and Clean Water Fund. It works to minimize single-use disposable packaging in food service, in order to conserve resources, prevent waste and ocean litter pollution. ReThink Disposable estimates that food and beverage packaging makes up 67% of litter in commercial streets.

ReThink is also a hands-on technical assistance program: "In addition to hands-on support by ReThink Disposable staff for small food business operators that can total between 15 - 25 hours, some businesses may also qualify for up to \$300 in rebates toward the purchase of reusable food service ware."

<https://www.rethinkdisposable.org/businesses>

ReThink is active primarily in the Bay Area of California, but has worked with about six restaurants in the greater Los Angeles area and would like to expand its work here. The organization also partners with local governments and engages with community groups.

Note: AB 619 (Chiu) ends the requirement that temporary food facilities at community events provide single-use foodware by allowing – but not mandating – vendors at street festivals, county fairs, outdoor concerts, and other community events to serve food and beverages in washable cups, dishes, and utensils. In addition, restaurants may serve food and beverages in reusable containers provided by their customers. The full text is available at this link:

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB619

LASAN contacted about a dozen Los Angeles restaurants in 2020 to inquire about their policies regarding AB 619, since restaurants may - but are not obligated - to utilize customers' reusable (durable) containers. None were familiar with the law. Only one refused to use an LASAN employee's reusable food container. To date, LASAN has not

been able to determine when the Los Angeles County Health Department will publish rules governing AB 619.

The City could promote AB 619 and also confer with ReThink about doing the same when it contacts Los Angeles restaurants. Allowing customers to use their own containers is the least expensive option for restaurants.

2 Adopt an ordinance directing the Bureau of Engineering, Planning Department, Building and Safety and LASAN to establish a working group with internal and external partners to review and revise Los Angeles building codes, space planning guidelines and other mechanisms as needed to facilitate zero waste measures in restaurants, including but not limited to, usage of reusable foodware by restaurants, mandates for dishwashers or sufficient sinks for hand washing, garbage disposals, adequate storage space for reusables, and on-site food waste processing equipment, as well as bins for recyclables and organic waste. Zero waste organizations and publications including but not limited to the Rockefeller Foundation's Zero Waste Design Guidelines should be consulted. Options for shared dishwashing and storage spaces and other equipment within malls, food courts and areas with a high concentration of restaurants should be explored as a means of reducing costs; partnerships with entities such as LAUSD, community colleges and culinary schools should be investigated as possible avenues for storage, washing, etc. Funding sources for building retrofits - to add dishwashers, sinks, storage space, etc. should also be investigated.

3. Adopt an ordinance that requires large Los Angeles restaurants (with 26 or more employees nationally) to:

a. Charge customers a twenty-five cent (0.25) environmental impact fee for each single-use/disposable beverage cup, made of any material; and a five-cent (0.5) environmental impact fee for each single-use/disposable beverage straw, made of any material, with exemptions to be granted for the elderly (65+), those with disabilities/medical conditions that make straws essentials for them. Restaurants that continue to offer single-use/disposable LASAN will make publicly available information explaining the rationale for the environmental impact fees; this explanatory information must be publicly viewable inside each restaurant, whether displayed on menus, signage, etc. The fees are to be retained by the restaurants and are intended to assist with the transition to more sustainable operations based on reusable foodware, installation of dishwashers, etc.;

b. One year after the effective date of this ordinance, large Los Angeles restaurants (with 26 or more employees nationally) must charge customers a one dollar (\$1.00) environmental impact fee for each single-use/disposable food container, made of any material; all restaurants must comply with item c) six months after the effective date for large restaurants;

c. Eighteen months after the effective date of this ordinance, large Los Angeles restaurants (with 26 or more employees nationally) that offer single-use/disposable to-go or delivery foodware must also provide returnable,

reusable to-go and delivery foodware, and the returnable, reusable foodware must constitute 50% of all to-go/delivery foodware that is provided to customers;

d. Twenty-four months after the effective date of this ordinance, large Los Angeles restaurants (with 26 or more employees nationally) must sell/provide/offer only single-use, disposable to-go foodware (cups, lids, plates, bowls, utensils, lids) that contain a minimum of 30% post-consumer recycled content. Information regarding the minimum if not the exact amount of post-consumer recycled content must be publicly viewable inside each restaurant, whether displayed on menus, signage, etc.;

e. All restaurants must comply with each section of this ordinance six months after the effective date of each section for large restaurants.

The ordinance will include a waiver process.

Rationale for mandate for impact fee, mandate for reusable food containers, and post-consumer recycled content:

The environmental impact fee is intended primarily to dissuade customers from accepting single-use/disposable items -straws, cups and containers - for which reusable, affordable alternatives exist. Straws and cups are prioritized because many restaurants already offer discounts to customers who provide their own cups, and straws are often not necessary. The fees are to be retained by the restaurants, to fund the purchase of reusable items and establishment of systems for returning reusables. The mandate for recycled content in single-use/disposable food containers is to help bolster domestic markets for paper collected through recycling programs (most of which is now exported). An increase in the use of reusables will correlated with a decrease in the use of disposable items, most of which cannot be recycled or composted and therefore must be landfilled. A reduction in the amount of material that is landfilled is beneficial to all area residents. Per the US EPA: "Municipal solid waste (MSW) landfills are the third -largest source of human -related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2019. The methane emissions from MSW landfills in 2019 were approximately equivalent to the greenhouse gas (GHG) emissions from more than 21.6 million passenger vehicles driven for one year or the CO₂ emissions from nearly 12.0 million homes' energy use for one year." And organic material, which includes paper food containers and accessories, release methane as they decompose. Methane is a greenhouse gas that's 28 times more potent than carbon dioxide. Landfill gas also contributes to smog, worsening health problems like asthma.
<https://www.epa.gov/lmop/basic-information-about-landfill-gas>

Discussion

The food container fees would become effective a year after fees are imposed for beverage cups and straws, so that the Los Angeles County Department of Health has sufficient time

to promote its rules pertaining to AB 619. Per AB 619, restaurants are allowed to let customers provide their own reusable food (and beverage) containers (the restaurants decide).

The downside to fees is that the restaurants will retain them but may not use them to support waste prevention measures. That is why this policy requires restaurants to phase-in returnable, reusable foodware for to-go and delivery orders. The fees will help support the purchase of the reusables and necessary equipment and/or staff.

Recycled-content in foodware is mandated as a means to support end markets for collected fibers. Food and beverage containers may have recycled-content, whether pre- or post-consumer, but this is not well understood. The Food and Drug Administration (FDA) has no specific guidelines, so the manufacturers of food-contact items with recycled-content must submit recycling, processing, testing information, and the proposed conditions of use (contact with high heat, etc.) to the FDA. The FDA issues a “no-objection letter” if approved. Starbucks hot beverage cups contain recycled content.

Per a Waste and Opportunity 2015 report that was issued jointly with the National Resources Defense Council (NRDC) “...several QSRs (quick service restaurants) have made good strides in using significant levels of recycled content for packaging materials (mostly paper based). McDonald’s uses 33 percent postconsumer recycled content in paperboard sandwich boxes and Starbucks uses 10 percent in coffee cups.” <https://www.nrdc.org/sites/default/files/consumer-goods-packaging-report.pdf>

4. **Direct LASAN to draft a motion to claim unallocated budget (UB) funds for multiple pilot projects designed to assist in reducing plastic pollution, primarily by replacing single-use/disposable foodware with reusable versions; and direct the City Attorney to determine the City’s legal ability establish or help establish cooperative purchasing agreements for reusable/returnable foodware, with said foodware to be used by private-sector, for-profit restaurants, and determine the legality of the City purchasing reusable/returnable foodware itself, for later resale to eligible restaurants at highly-discounted rates.**

Rationale: Reducing the use of single-use/disposable foodware - some of which is plastic - through the substitution of reusable versions, will reduce the generation of plastic that is non-recyclable, due to market conditions. (It will also reduce the use of disposable foodware made of other materials.) Contracting with organizations such as but not limited to Rethink Disposables (<https://www.rethinkdisposable.org/>) is one of the best avenues for providing hands-on assistance to restaurants to facilitate their transition to reusable foodware, particularly smaller businesses. The transition to reusables will be a multi-year task given that there are about 30,000 restaurants in Los Angeles - one-third of all those in California. This scale makes clear why this transition is essential.

A CDC report (https://www.cdc.gov/pcd/issues/2019/18_0278.htm) provides these details about Los Angeles County restaurants: “Countywide, only 26.5% of all restaurants were part of a large chain (a chain with ≥ 20 locations). The restaurants were categorized as 1) quick service (patrons order at counter; meals typically under \$10), 2) fast casual (patrons order at counter; slightly higher price point than quick service), 3) midscale dining (offers sit-down/full table service; typically does not serve alcohol; entrée prices generally $\leq \$20$), 4) casual dining (offers sit-down/full table service; typically serves alcohol; entrée prices generally \$15–\$25), or 5) fine dining (entrée prices are generally $> \$25$). These market segments are recognized industry standards.” In addition to a collaboration with ReThink and/or its equivalent, it will be critical to engage with restaurant industry associations so restaurants can be contacted for purposes of general waste prevention education, and regarding reusables/returnables specifically. Cold-calling is unlikely to be effective.

5. Explore partnerships with LAUSD and the Community College District and other nonprofit/entrepreneurial organizations for development of a take-back, dishwashing, and restocking infrastructure for reusable/returnable foodware (and possibly refillable beverage containers). There are more than 1,000 LAUSD schools, the majority of which are inside Los Angeles and some of which may have kitchens and dishwashers. The task of introducing reusable to-go foodware across Los Angeles is daunting because of the number of restaurants, the need for thousands of drop-off locations, as well as dishwashing and restocking services, all of which are the mainstays of a viable system. Schools, through strategic partnerships with multiple nonprofit organizations, could become physical neighborhood hubs not only for reusable/returnable foodware, but also for the distribution of surplus edible food and small-scale composting operations.

Rationale for partnerships

Disposable foodware is often littered, represents wasted resources, may contain PFAS; paper foodware - an organic item - generates greenhouse gases when landfilled. If made of plastic, the used foodware must be disposed of rather than recycled, due to lack of markets. Disposables must be replaced by reusables (and returnables for to-go/delivery meals), which requires a physical infrastructure (drop-off, pickup, washing, possibly refilling, and return/restocking), education, direct contact with restaurants, and program oversight. Multiple partnerships are the only feasible mechanism by which the use of single-use/disposable foodware can be greatly reduced and a circular system built upon reusables can gain a foothold in a city as large as Los Angeles.

E. HIGHLY-LITTERED ITEMS

- 1. Adopt an ordinance identical to San Francisco’s that establishes a cigarette “cleanup” or environmental impact fee; the San Francisco fee is currently \$1.00/pack; filings and fee payment will be due quarterly; fees will fund the cigarette litter abatement fund.**

Rationale for cigarette environmental impact fee: Per a 2016 UC San Francisco graduate student report:
(<https://repository.usfca.edu/cgi/viewcontent.cgi?article=1936&context=capstone>)

“Approximately 16.2 billion cellulose acetate cigarette filters are littered in California annually. Cigarette filter litter (CFL) creates an annual financial burden of over \$1.27 billion for California; 67% of these costs involve abatement efforts, 26% involve damages to the tourism industry, 4% involve damages created by fires, and 3% involve damages to the fishing industry. CFL also poses unquantifiable damages to human and environmental health in the form of ingestion, toxicity, formation into *microplastics* (emphasis added), and quality of life degradation. Cigarette taxes and fees raise government revenue, but they are politically challenging due to California Proposition 26. Charges and price floors are not subject to Proposition 26 but do not raise government revenue. Locational smoking bans encourage anti-smoking cultural norms and may decrease consumption, although indoor smoking bans may increase littering and outdoor smoking bans are poorly enforced. Raising the minimum cigarette purchasing age should reduce consumption but may take years to reach effectiveness. The enforcement of littering fines is a feasible option to decrease CFL generation.”

Per a 2020 Times of San Diego opinion piece: “Over the last 10 years, Surfrider Foundation has collected more than 2 million butts at monthly cleanups alone.”

- 2 Adopt an ordinance that assesses an environmental impact fee on:**

- a. Mylar™ balloons, and require a warning label on each balloon that advises about the environmental impacts of balloons that are not properly disposed, potential impacts to electrical systems, and that advises users to puncture and dispose the nonrecyclable balloons, and that bans the sale of inflated balloons;**
- b. Latex balloons , and require a warning label on each balloon that advises about the environmental impacts of balloons that are not properly disposed of, and that advises users to puncture and dispose of the nonrecyclable balloons, and that bans the sale of inflated balloons.**

Rationale for the recommended balloon measures: All types of balloons can pose litter risks if not properly disposed, can pose risks to marine life that mistake them for food; animals that eat them can develop internal blockages and starve to death. Even balloon strings pose risks, as they can become wrapped around animals,

restricting their movement and damaging their skin. Natural latex balloons don't biodegrade quickly, so they do not pose reduced risks to animals. Fees and labels may reduce the purchase of these items, which would result in an associated reduction in litter - both on land and in waterways. Reduced usage of metallic balloons could reduce LADWP's costs associated with power outages. A comprehensive search was not conducted, but in September 2020, nearly 2,500 LADWP customers were affected by a power outage caused by a metallic balloon. Litter and power outages are legitimate local concerns.

Discussion

Southern California Edison (SCE) reports there were 222 metallic balloon-caused outages in June of 2020 alone, and that more than one million customers were impacted by such outages in 2020. <https://energized.edison.com/stories/cities-approve-bans-to-deflate-metallic-balloon-problem>

The same SCE site reports that the City of Hermosa Beach has adopted one of the most aggressive policies: "In Hermosa Beach, however, the sale as well as the use or distribution of metallic balloons on public property, like parks and beaches, was banned, effective June 30. Additionally, unlike Glendale, which still permits the sale of latex balloons, Hermosa Beach not only prohibits them from use or distribution at city functions or city-sponsored events but also prohibits their release anywhere within city limits.

F. CORPORATE RESPONSIBILITY

1. Adopt an ordinance to prohibit retailers / distributors / warehouses/ fulfillment centers in Los Angeles from disposing as trash, destroying, or otherwise rendering unusable, returned apparel, including shoes, and require these entities, individually or collectively, to fund a take-back/resale/donation system ("system") that will be designed by an organization/s, selected by LASAN, with take-back/EPR expertise.

Rationale for recommendation:Disposing of still-usable goods is inexcusable from any perspective. This practice generates unnecessary waste which in turn shortens the lifespan of landfills, it is a waste of resources including - at minimum - the energy and water used during the manufacture of such items - and cannot be justified when there are people and organizations in need. 701,000 Los Angeles residents -about 18% of the total - live below the poverty line, a number that is higher than the national average of 12.3%. The largest demographic living in poverty are females 25 - 34, followed by males 35 - 44 and then females 18 - 24. <https://datausa.io/profile/geo/los-angeles-ca>

2. Adopt an ordinance that would prohibit textile and clothing manufacturers, clothing, and textile designers, "cut and sew" and related companies from disposing

as trash, destroying, or otherwise rendering unusable, unused/unsold/excess textiles and/or portions of apparel and apparel, and require these entities, individually or collectively, to fund a take-back/resale/donation system (“system”) that will be designed by an organization/s, selected by LASAN, with take-back/EPR expertise.

Rationale for recommendation: As with item 1., disposing of still-usable goods is unjustifiable, even if those items are textiles or portions of apparel, some of which cannot easily be repurposed. But there are outlets for these goods, and those organization/s with take-back expertise can identify them.

3. Adopt an ordinance that would prohibit online and “brick and mortar” retailers /wholesalers/distributors in Los Angeles from disposing as trash, destroying, or otherwise rendering unusable, returned merchandise and require these entities, individually or collectively, to fund a take-back/resale/donation system (“system”) that will be designed by an organization/s, selected by LASAN, with take-back/EPR expertise.

Rationale for recommendation: As with item 1., disposing of still-usable goods is unjustifiable.

4. Adopt an Ordinance that would require large Los Angeles businesses to comply with procurement requirements that are critical to supporting recycling and local jobs:

a. All copy paper procured must contain 30% domestic-sourced, post-consumer recycled content, and this legend “Contains 30% post-consumer recycled content” must be displayed on all documents printed/copied on the copy paper.

Note: SB 1383 requires municipalities to purchase paper products with 30% pcr, provided they do not cost more than non-recycled products. This mandate is intended to bolster and sustain markets for organic products (including paper).

Rationale:

This recommendation presents challenges and possible conflicts. Paper-making is a water-intensive process and paper is an organic material that generates climate-change emissions when it is landfilled. Per the City’s contracted MRFs, paper (mixed paper and corrugated cardboard, as well as aseptic cartons, which contain a layer of high-grade paper), is sold to international markets, which means climate-change emissions from the transportation of the materials from the US.

30% pcr content: Susan Kinsella, an internally-recognized paper expert and co-founder of the Environmental Paper Network, the printing and writing (P&W) paper market has actually become more vulnerable because of the general downturn in this category, as computers and cellphones generally mean less copying and

printing, plus economic downturns, market reshuffling, and many office-based workers are telecommuting. Per her 2017 survey, papers with 30% post consumer, 50% recycled and 100% recycled are the standard offerings. Although there are some paper mills that are still producing 100% recycled copy paper, she recommends 30% postconsumer recycled content as the minimum for all copy papers. This category is of high quality, best priced (usually some upcharge but not much, although virgin paper is often undercharged so appears to be much cheaper in comparison), most available - especially in large quantities, performs well in copy machines, and worries users less than other options if they are wary of using recycled.

Discussion

More than 30 years ago, when computers (word processors) became common in offices and digital documents were touted, the paperless office was deemed imminent. A recent Los Angeles motion (CF #20-1587) addresses this topic:

"Direct the Departmental Chief Sustainability Officers to report to the Council on the process and feasibility, in their respective departments, for creating truly paperless offices, including, but not limited to a usage assessment of each department, identifying usage categories and the respective percentages for each (e g., draft documents, final documents, personal documents), replacing invoices, identifying all hard copy forms internal to each department and/or division that do not have online digital equivalents, identifying all forms that require wet versus electronic signatures, securely storing key documents digitally, identifying tech-experts in each department to assist with the transition, describing measures to reduce paper and toner usage in the interim, such as requiring employees to print in draft modes, ensuring that all multi-page documents are printed double-sided, creating an implementation plan for the full phase-out, and setting a deadline for implementation."

Kinsella also offered these insights: Some of the 50% recycled copy paper offered through some distributors is 24# weight and is marketed for its heavier "presentation" look and feel, apparently justifying its higher cost. But this means it uses even more fiber than the usual 20# copy paper weight, so that may not represent the best environmental decision, even if it has recycled content. The 100% recycled paper has in the past been even more expensive than the 30% or 50%, and has sometimes had availability issues, though Target is selling 100% recycled

copy paper, and Staples still has its private label. Paper mills said they could ramp up production to meet major demand for 100% recycled. But they also revealed the severe difficulty in obtaining enough high quality recyclable paper to de-ink. This is because single stream (commingled) recycling has degraded the (paper) materials, and high quality office paper discards are not being separated any longer. The high-quality office papers are what P&W paper manufacturers need to make recycled paper. The post consumer materials the mills receive are so degraded/dirty that they require more processing and more and harsher bleaching. These measures increase costs, require less environmentally-preferable chemicals, and therefore beg the question of what is the best choice for environmental impact. Commingled paper usually means only low-end paper products can be made from the mix).

Kinsella also recommended reconsidering commingled recycling program in offices that generate high volumes of high-quality office papers, to address the shortage discussed immediately above. The City should consider whether high-grade copy paper be collected separately in its own facilities.

b. All mulch purchased or obtained must be sourced (processed/manufactured) within Los Angeles County.

Note: SB 1383 requires municipalities to procure annually a quantity of recovered organic waste products. This is necessary because SB 1383 also mandates the diversion of organic materials from landfills.

Rationale: Most California municipalities will have difficulty complying with SB 1383's diversion mandates, which go into effect on January 1, 2022. Many recycLA haulers (RSPs - recycLA service providers) have not yet offered organic material collection programs to their customers. The latter means that additional organic materials that are now landfilled will need to be diverted. Los Angeles has difficulty placing all of the material that is generated through its own mulching operations.

It is reasonable to request Los Angeles businesses to assist with the SB 1383 organics diversion mandates, as these businesses can obtain free mulch from LASAN.

5. Adopt an Ordinance that would enact a local packaging stewardship program, identical to Maine's LD 1541, "An Act to Support and Improve Municipal Recycling Programs and Save Taxpayer Money."

Rationale: While this report includes recommendations pertaining to packaging, (item 4 on Page 8: "Adopt an ordinance that bans in Los Angeles the provision/use/sale of packaging deemed non-recyclable, non-reusable, non-refillable or non-compostable by LASAN and/or third-party entities identified by LASAN"), a more comprehensive approach that incorporates stewardship and

funding mechanisms is preferred. An organization with take-back/EPR expertise can oversee the stewardship program.

6. Adopt an ordinance requiring twenty-five percent (25%) of all plastic bottles sold in full-line supermarkets that sell dry groceries, canned goods, or non-food items and perishable items and have annual revenue \geq \$2 million, and in grocery stores with facilities \geq 10,000 square feet, to be refillable; the applicable plastic bottles and plastic jugs include but are not limited to those used as packaging for beverages of all types, fresh and prepared food, personal care and home care products. The regulated supermarkets and grocery stores must also establish a “refill convenience zone” similar in concept to zones for California’s “Bottle Bill” redemption system. A convenience zone is typically a half-mile radius circle with the center point originating at a supermarket that meets definitions based on Public Resources Code (PRC) 14509.4 and PRC 14562.5.

An organization with take-back/EPR expertise will be selected by LASAN to oversee design and implementation of the convenience zones.

Rationale: Refilling a significant portion of plastic bottles is key to integrating circularity, reducing plastic pollution and holding product manufacturers responsible for the environmental impacts of their products.

The refilling of beverage containers is discussed in detail in Item 3 on Page 18 (check page #) of this document.

7. Adopt an ordinance banning the sale in Los Angeles of meal kits including but not limited to those sold by Blue Apron, Hello Fresh, Fresh and Easy, and equivalent, etc., unless the meal kit manufacturers establish and fund take-back and/or reuse programs for the non-recyclable components of their meal kits, including but not limited to, gel or ice packs and insulating materials; the take-back and reuse plans/programs must be designed and approved by an organization with take-back/EPR expertise that will be selected by LASAN.

Rationale: Meal kits are another manifestation of our desire for convenience, but they generate significant amounts of waste, much of which is not recyclable, including foam insulation, plastic bags, small plastic food containers, and cold packs. As discussed in this report, packaging is critical to protecting products; for meal kits, this means ensuring that foods are temperature-controlled to avoid contamination - and for aesthetic purposes (to avoid discoloration of foods). Any reduction in the amount of material that is disposed of in landfills benefits Los Angeles.

Pressured by consumers, some companies stopped using plastic foam insulation and allowed consumers to return their packaging. The firm Fresh Realm offers a reusable

system. It utilizes “shipping vessels,” -reusable boxes tailored to the prepared foods inside. The boxes are 17-inch-square cubes made of polyurethane that have drawers that maintain the required temperature. They can hold up to four prepared meals or the contents of two meal kits. The boxes are delivered by FedEx. After the food is removed, the customer puts the box back together and uses the provided label to return the box via FedEx. The box is sanitized and used again.

https://www.nytimes.com/2016/08/04/business/a-tantalizing-offering-from-a-meal-kit-service-the-box.html?mc=aud_dev&ad-keywords=auddevgate&gclid=CjwKCAjw4KyJBhAbEiwAaAQbExmh4c_5iQxfWT0lq-eMYRL609jtGQB6h-f6SX4NVQhEvkOGL8AbmBoCQNoQAvD_BwE&gclsrc=aw.ds

8. Adopt an ordinance requiring that by 2024, all clothes washers sold as new in Los Angeles be equipped with a microfiber filtration system with a mesh size of 100 microns or smaller, should Assembly Bill 622 (Friedman) - which mandates the same - not be adopted by the California legislature; direct LASAN to work with LADWP to develop a rebate program to retire washers without these filtration systems, or to retrofit them.

Rationale: A significant portion of microplastics pollution could be eliminated through the wide use of microfiber filtration systems in washing machines. A reduction in the amount of microplastic fibers discharged

G. NATIONAL SWORD IMPACTS / REVISE BLUE BIN PROGRAM / ZERO WASTE LEADERSHIP

The Support Services Division of LASAN completed a report on the impacts of the National Sword initiative. (Attachment #1)

1. Issue a City resolution, drafted by LASAN, that calls for voluntary, uniform curbside programs throughout California (or in Southern California; or, at minimum, among all LARA members), in order to create predictability for markets and manufacturers, and to facilitate outreach and education; this does not imply or call for state control of curbside recycling programs. LARA, or the Los Angeles Regional Authority, is a consortium of 18 large and small member cities in Los Angeles County that was founded by Los Angeles. The members share information and best practices and jointly report their diversion rates to CalRecycle.

Rationale: Uniform programs are recommended by the State Commission on Recycling Markets and Curbside Recycling; they offer predictability for MRFs, manufacturers, and residential and commercial recycling program participants and will help eliminate confusion regarding what is recyclable.

2. Direct LASAN to ensure:

- a. That its policies and programs, including but not limited to collection programs and education, align with the Statewide Commission on Recycling Markets and Curbside Recycling's *Final Report of July 2021* (Attachment #2), and available at <https://drive.google.com/drive/folders/1AkA647BRfk07uBq7nkg7f7WfGou8rvzC>

Rationale: The State Commission conducted extensive research into the state of the recycling industry, markets, barriers, and upstream measures designed to improve recycling. Its report should be considered definitive.

- b. That it publishes and updates annually on its website, for purposes of transparency and to facilitate understanding throughout the Los Angeles community, detailed information about the status of the curbside residential blue bin program including but not limited to the contents and format of the following chart and:

- i. Estimated annual waste generation for Los Angeles collectively, and for the residential and business sectors individually;
- ii. The calculated annual Los Angeles diversion rate as reported through/by the Los Angeles Regional Agency (LARA);
- iii. Detailed information about Zero Waste, including the “how-tos” of waste prevention; the linkage between climate change and landfilled organic material; information about food waste prevention and food donation;
- iv. Information about plastics in general, plastics pollution, the recyclability of plastics products and packaging; local, state, national and global plastic recycling rates should be included, such as in California, less than 15 percent of single-use plastic is recycled, despite robust recycling programs and decades of public education efforts; the vast majority of single-use plastics are landfilled, incinerated, or end up in the environment;
- v. An explanation (environmental, social) about why single-use/disposable items should be avoided;
- vi. Explanations of “compostability,” “biodegradability,” and related terms or links to CalRecycle pages that provide this information;
- vii. Aggregated and per zone/ statistics about and the recycLA Program, including but not limited to that shown in the second chart below:

LASAN 2020 Curbside Blue Bin Data (all numbers in tons except column F)								
A	B	C	D	E	F	G	H	I
Waste shed	Blue bin tons collected by LASAN	Blue bin tons collected by LASAN and landfilled	Tons delivered to MRFs (Materials processing facilities)	Unprocessed: Material rejected by MRF per visual inspections; it is landfilled	Contamination as percentage (%) of materials processed by MRFs	Contamination sent by MRFs to landfills	Total material landfilled by MRFs	Total recycled material (Tons)
EV	48,995.83	10,550.77	98,257.47	-	28.51	54,255.96	75,554.30	22,703.17
WV	48,073.71	10,747.57		-	44.23			
WLA	43,221.03	961.44	41,083.79	1,819.39	21.09	8,664.57	11,445.40	32,419.22
NC			28,834.32	979.3	35.06	10,109.31	11,088.61	18,725.01
SLA	2,762.25	36,735.28	1,258.25	142.14	38.43	483.55	37,360.97	774.7
Harbor	11,638.67	634.81	11,385.22	289.1	30.31	3,450.86	4,374.77	7,934.36
TOTALS	154,691.49	59,629.87	180,819.05	3,229.93	32.9% (average of all waste sheds)	76,964.25	139,824.05	82,556.46
Collected by LASAN:	219,321.36							

Explanation: B + C = total tons collected by LASAN (219,321.36).
The total tons recycled/diverted (82,556.46) are subtracted from total tons collected (219,321.36) to determine total tons sent to landfill (disposed): 136,764.90 tons.
Total tons landfilled as reported by the MRFs (in column H: 139,824.05) is calculated differently from the above, which accounts for insignificantly different totals: 139,824.05 and 136,764.90.
Note: Los Angeles has been reporting its aggregated LARA-member diversion rate to CalRecycle since 2004. LARA, the Los Angeles Regional Agency, is a consortium of 18 Southern California cities. The LASAN website has displayed a 76.4% Los Angeles diversion rate for many years but the current rate is about 60% (per LARA's reporting).
Note to LASAN: Missing data has been requested from MRFs.

Calendar Year	Black	Blue	Green	Grand Total	Diversion
<1/1/18					
2018	1,501,629.80	146,233.63	24,696.80	1,672,560.23	10.22%
2019	1,526,683.06	181,789.21	21,977.63	1,730,449.90	11.78%
2020	1,305,140.70	182,093.21	26,568.75	1,513,802.66	13.78%
2021	543,619.45	77,983.08	14,142.59	635,745.12	14.49%
Grand Total	4,877,073.01	588,099.13	87,385.77	5,552,557.91	12.17%

Rationale for Above Recommendations:

The City must be transparent about the status of its recycling programs and provide baseline information against which individual and collective progress can be measured.

H. CONDUCT A LIFE CYCLE ANALYSIS (LCA) OF CURRENT WASTE MANAGEMENT PRACTICES

1. Direct LASAN to complete an LCA or arrange for this. No options pertaining to policy, technology including Waste-to-Energy, equipment, landfill bans, etc., should be precluded. The LCA should also address hyper-local management/reuse of organic materials/food waste in a system that parallels distributed energy; circular economy goals and zoning; revised building codes/space planning guidelines to facilitate and enhance waste prevention, recycling, etc., including but not limited to the Rockefeller Foundation's Zero Waste Design Guidelines.

Rationale for Above Recommendation:

Although the City has been offering recycling programs – a form of diversion – for three decades, current waste management practices still rely heavily upon landfilling – which is an ancient practice. Recycling alone cannot achieve zero waste.

Several European countries ban landfill disposal and rely upon incineration or waste conversion technologies. Japan, which has a limited land mass, utilizes advanced incineration technologies, pyrolysis and gasification, as the final step in a sophisticated waste management system.

Reusable/repairable/compostable/recyclable items are diverted from the waste stream and managed accordingly. The small remaining mass is incinerated and heat generated through incineration heats community pools. The facilities are so clean and unobtrusive that many are located in residential neighborhoods. The recommendations in this report could take years to

fully implement, meaning that non-recyclable materials will continue to be generated and require disposal. No technologies should be precluded from consideration in the LCA.

I. RMDZ (RECYCLING MARKET DEVELOPMENT ZONE) PROGRAM

The Compliance Group of LASAN's Solid Resources Citywide Recycling Division (SRCRD) completed a report in response to CF# 19-0522 (CalRecycle / Recycling Market Development Zone (RMDZ) / Flexible Revolving Loan Program). See Attachment 3.

J. SUPPORT/INCENTIVIZE LOCAL RECYCLING AND MANUFACTURING /ESTABLISH CITY RECYCLED MANUFACTURING, JUMP START EFFECTIVE REUSE SYSTEMS/JOBS

1. Adopt an ordinance that requires domestic content disclosures for all product bids (and) associated product packaging) submitted to the City of Los Angeles and establishes City preferences and/or other incentives for products and packaging that include domestic, post-consumer recycled-content.

Rationale: The City of Los Angeles purchases millions of dollars of goods and services annually. To support the development of local recycling infrastructure and help sustain markets, it is essential that the City purchase products manufactured in the US. This requires a mandate (specification) for domestic content in products - which the City does not currently have. The City should also utilize specifications requiring higher levels of post-consumer recycled content in many products.

The City's local business preference should not be exempted from the domestic content mandate. About five years ago, the City was purchasing copy paper manufactured outside the US exclusively - specifically in Indonesia (from a company with notorious environmental practices), Thailand, Australia, and Germany. The winning copy paper bid from a distributor headquartered in Los Angeles was "reduced" by 8% under the terms City's Local Business Preference Program. A mandate for domestic content would have precluded the City from buying non-domestic products. In contrast, most large office supply companies, none of which are headquartered in Los Angeles, carry only domestic copy paper.

LASAN has drafted an environmentally preferable purchasing (EPP) ordinance to replace the current ordinance, which recommends but does not mandate EPP attributes in products. The draft ordinance addresses the issues discussed here.

2 Adopt an ordinance that bans the export to foreign countries of plastics from the Port of Los Angeles and ban the sale of Los Angeles residential plastic to other than North American markets.

Rationale for banning plastics exports:

The U.S. produces more than 30% of the planet's total waste products. The waste includes 29.7% of containers and packaging among other things (Bradford, 2018). The total generated waste in the United States increased from 88.1 million U.S. short tons in 1960 to 292.4 million U.S. short tons in 2018.

<https://agecon.unl.edu/impact-china%E2%80%99s-environmental-and-trade-policies-us-plastic-and-paper-waste-exports>

For decades, much of the world relied upon China to accept our “recyclable” materials (more than 40% of plastics and just shy of 40% of paper), without consideration as to what percentage was actually recycled. High-grade plastics (#1 and #2) were directed to large companies, while it was a well-known “secret” that lower-grade plastic items were shipped to poorer provinces - not just in China, but also in other importing multiple countries - where some items were processed (melted) under horrific conditions. Much that could not be used was tossed into rivers. Most of the plastic in our oceans doesn't get dumped there directly, rivers carry it to the sea, with just ten rivers responsible for introducing 90%. They are, in descending order, the Yangtze (the single largest source), the Indus, Yellow River, Hai River, the Nile, the Ganges, Pearl River, Amur River, the Niger, and the Mekong.

Banning exports will require Los Angeles and states and businesses that utilize the Port of Los Angeles to assume greater responsibility for its generated materials, will cease the export of materials that can cause environmental harm and endanger residents in other countries, will increase local supplies and encourage more businesses to utilize recyclables as feedstock. There is always some “spillage” of plastic nurdles - a form of litter. Spillage in the Port almost guarantees that nurdles will enter the ocean, causing pollution and harming marine life.

However, without adequate enforcement - the unintended consequences of an export ban - stockpiling, illegal dumping, increased disposal and incineration- are possible, per this article in Nature: <https://www.nature.com/articles/d41586-021-00541-x>

Given the impacts of China's National Sword initiative, a ban could be viewed as de facto recognition of the state of plastics markets.

Update as of 9/7/2021: Governor Newsom has signed AB 881. This bill would reclassify the export of mixed plastic waste as *disposal*, and allow only plastic that have markets such as polyethylene (PE), polyethylene terephthalate (PET) and polypropylene (PP) to count toward statewide recycling goals.

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=20210220AB881&firstNav=tracking

3. Direct LASAN (its RMDZ program), the City Attorney, the Economic Workforce & Development Department (EWDD) to work with (form a working group comprised of) major economic development organizations including but not limited to the Los Angeles County Economic Development Corporation, CalRecycle's Centralized Market Development Unit, if established (the Unit was recommended by the California's Statewide Commission on Recycling Markets and Curbside Recycling), UCLA's Luskin Institute, and contracted MRFs, to:

- a.** Survey existing regional manufacturers about their current feedstock/s, feedstock specifications and purchase volumes, suppliers (whether domestic, foreign or both), and the possibility of converting from virgin to recycled feedstock; identify barriers

to conversion; assist in providing feedstock samples/streams and identifying suppliers; coordinate and help support pilot projects;

b. Launch pilot programs with small start-up businesses that seek to utilize materials from the City's waste stream into marketable products; identify barriers, assist in providing and coordinate and help support pilot projects; projects should be prioritized based on information about local markets and provided by the MRFs and diversion needs.

c. Allocate funding into uses for major waste stream components such as low-grade plastics (#3, #4, #6, -#7) that lack markets. Uses that can also address other community needs, such as housing, jobs creation and development of low-carbon construction materials, should be prioritized. An annual engineering/environmental competition with a cash purse is encouraged. Plastic that is reused should not create additional plastic pollution through shedding or other means.

Rationale for Above Recommendations:

A more systematic, regional approach is needed to support local recycling and manufacturing and jump start reuse systems and develop jobs as a result.

Economic development programs are undertaken by at least two City departments (EWDD and LASAN) and governed by at least one ordinance (the Local Business Preference program (<https://bca.lacity.org/BIS-Program-and-Local-Business-Preference>)) -and maybe more. LASAN's Industrial Waste Division also interacts with businesses, and LADWP has an economic development group. There are multiple Environmental Justice and diversity and inclusion efforts throughout the City, with economic development and jobs as explicit or implicit goals. Better coordination is needed so that the importance of integrating local feedstocks and regional manufacturing is understood by all involved entities.

Per a recent article in Governing.com: "The nation also needs to create more opportunities for wealth-building among populations who have been historically excluded. The key is to prioritize small-scale manufacturing, and five cities are pointing the way for the nation. Five cities have created models on which other cities can draw. San Francisco is the biggest of the five and must go first, as it was the first city to embrace this concept broadly. In 2010, San Francisco created SF Made (<https://sfmade.org>), a nonprofit organization that supports local manufacturers who create jobs and career pathways for local residents. It provides these manufacturers with educational resources and one-on-one services like real estate placement, connects low-income job seekers with employment and training opportunities, and offers policymakers strategies to help home-grown and scaling small manufacturers and their employees thrive."

https://www.governing.com/community/hardware-handbags-and-hot-sauce-how-small-scale-manufacturing-can-bring-downtowns-back?utm_term=READ%20MORE&utm_campaign=How%20Small-Scale%20Manufacturing%20Can%20Bring%20Downtowns%20Back&utm_content=email&utm_source=Act-On+Software&utm_medium=email

The entities referenced above, MRFs in particular, have information about market conditions and supplies that should guide all discussions and evaluations. A MRF provided the following chart describing Los Angeles' curbside recyclables:

Material	Percentage by Weight (%)	Current Market
Mixed paper	33.84	International
Cardboard	17.91	International
Cartons	0.13	International
Mixed Glass	8.42	Local
Aluminum	0.18	Local
Steel & Tin	2.88	Local
PETE	0.82	Local
HDPE	1.2	Local
Mixed Plastics	4.62	None/landfill
Contamination	30.00	None/landfill
Total	100	

In particular, local opportunities for materials that are now exported must be investigated.

Southern California used to have paper mills; most curbside paper is now shipped overseas. Was China the primary reason for the mills' closures? Are paper mills feasible given California's ongoing drought and the fact that paper manufacturing and recycling is water-intensive? Are there new paper manufacturing technologies that use less water, and/or recycled water? Should we support a switch to papers made from non-tree fibers such as kenaf or other agricultural waste that is generated in California?

Aseptic packaging (cartons) is sold primarily to two countries (Mexico and South Korea)- the high-grade paper layer is very valuable. Usage of this type of packaging is increasing: “The aseptic packaging market is expected to grow by USD 33.04 billion during 2020-2024, according to the latest market research report by Technavio.”

<https://www.businesswire.com/news/home/20200326005594/en/Global-Aseptic-Packaging-Market-2020-2024-Need-for-Increasing-Product-Shelf-life-to-Boost-the-Market-Growth-Technavio>

Can aseptic packaging be recycled locally?

The working group must analyze the available data and consider the positive and negative environmental and jobs impacts, among others, in prioritizing research and pilot programs.

K. OUTREACH/ENGAGEMENT STRATEGY THAT INVOLVES INDUSTRY, PRIORITIZES ENVIRONMENTAL JUSTICE (EJ) COMMUNITIES

The Public Works’ Public Affairs Office (PAO) has begun developing an engagement and outreach strategy for the residential and business communities that prioritizes environmental justice communities.

Rationale for Above Recommendations:

The City must switch its focus from downstream systems – the blue bin –because recycling will not achieve zero waste.

EJ communities already know they are impacted by plastic pollution. The City must engage with these communities and community-based organizations to discuss the City’s policy recommendations and plans for their implementation.

The City must educate about *tangible* methods for practicing waste prevention, from smart shopping to reuse and repair, using reusable water bottles versus purchasing bottled water, while also seeking to reduce blue bin contamination. Educating the public about the safety of municipal water is critically important to reduce reliance upon bottled water; this will require collaboration with LADWP.

It is essential that the business community be involved. Many will be directly involved by the policies recommended in this report, should they be adopted. And the commercial sector’s purchasing and operational practices affect waste generation. These can be improved to result in less waste and reduced plastic usage.

The City will need to produce informational webinars and offer training and presentations on an on-going basis.

Direct, tangible measures that provide immediate benefits should be considered. The City could require that all stores that sell bottled water have to also sell reusable/refillable bottles at a significant discount (based on a City subsidy.). But would stores want to engage in the process of verifying income eligibility, if that is a City requirement? The City could simply buy reusable

water bottles for designated Angelenos living under the poverty line. Distributing the bottles would require collaboration with multiple community groups. The City could request a partnership with Los Angeles County to distribute reusable bottles, straws and food containers via the SNAP program. A partnership that includes LAUSD would provide additional distribution outlets, should LAUSD be interested:

In 2019, LAUSD, the second largest school district, voted to spend \$15 million to retest drinking water outlets, and either fix or replace water fountains where tests come back positive for at least 5 parts per billion (ppb) of lead. LAUSD serves 694,000 students, and has more than 40,000 drinking water fountains to maintain at its 1,322 school sites.

<https://calpirgedfund.org/news/caf/los-angeles-unified-school-district-redoubles-efforts-get-lead-out-drinking-water>

Federal funding for lead pipe abatement in schools is available. Installation of hydration stations during lead abatement would offer an additional benefit and should be investigated if abatement funds are sought.

LAUSD is also installing bottle-filling stations. Per its 2021 “Return to Campus Family Guide:” All drinking fountains have been closed and may not be used. Students should not share water bottles. Students are encouraged to bring individual water bottles from home as an alternative to drinking fountains. *Disposable* (emphasis added) water bottles will be provided as needed.”

<http://laschoolreport.com/just-in-laUSD-remains-a-huge-water-waster-as-state-conservation-efforts-continue-to-slip/>

<https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/4/familyguide.pdf>

A better option to disposable bottles at LAUSD schools is reusables, as per this example:

S'well has provided over 320,000 reusable bottles to NYC public high school students across all five boroughs, hoping to help displace more than 54 million single-use plastic bottles in New York City. S'well has also partnered with the New York City Mayor's Office of Sustainability to launch BRING IT, a movement focused on helping today's youth right to reduce waste through advocacy and action. <https://www.swell.com/bringitnyc>

These recommendations represent a complete overhaul in how the City of Los Angeles deals with plastic pollution, addressing everything from the manufacture, use, sale of products and packaging to their disposal.

Because these recommendations are interrelated, any strategy for communicating, educating and engaging with the public about plastic pollution should be treated as a comprehensive approach and developed holistically. As part of that process, we recommend working closely with a communications firm to help develop an overall Citywide campaign.

Objectives

- Communicate to industry regarding banned materials, alternatives to the banned items/materials, as well as opportunities to participate in a greener circular economy.
- Educate target audiences (see list below) about new rules for recyclable and non-recyclable plastics
- Engage with the environmental justice community regarding the health and environmental impacts of pollution and industrial waste on low-income communities and better alternatives.

Target Audiences

- City Council and City Departments, including but not limited to:
 - Department of Recreation and Parks
 - Los Angeles Public Library
 - General Services Department
 - Mayor's Office of Economic Development
- Industry groups, including but not limited to:
 - Restaurant associations
 - California Grocers Association
 - Business Improvement Districts
 - Plastics producers and manufacturers
 - Sustainable Purchasing Leadership Council
- Environmental Justice groups (list to be provided by City Council)
- Healthcare professionals, including doctors and dentists
- Environmental groups, including but not limited to:
 - Heal the Bay
 - Surfrider Foundation
 - Friends of the LA River
 - Friends of Griffith Park
- Materials Recovery Facilities (MRF)
- RecycLA Service Providers
- Neighborhood Councils
- Schools and parent associations
- Unions, including teachers and retail

Core Messages

- To combat plastic pollution, the City of Los Angeles must make dramatic changes in how this material is produced, used and introduced into Los Angeles, in order to reduce the disposal of plastic materials.
- The City of Los Angeles Blue Bin program is evolving- soon. Some of these possible changes include:
 - The City of Los Angeles will stop accepting plastics #3, #4, #6, and #7 in its blue bins.
 - The City of Los Angeles will phase out and eventually ban polystyrene (if approved).
 - The City of Los Angeles will phase out and eventually ban bio-plastics (if approved)..
 - The City of Los Angeles will phase out and eventually ban non-reusable, non-refillable, and non-recyclable packaging (if approved).
- The City may wish to emphasize that plastics are derived from fossil fuels, the extraction and use of which generates greenhouse gas emissions.
- The City of Los Angeles will provide business opportunities for local manufacturers that wish to utilize recycled materials as feedstock and/or commit to the refilling and reuse of products and materials.

Tactics

- Information about plastics alternatives will be a central component of all outreach
- Develop outreach materials and ensure they are translated into key languages
 - Examples include flyers, brochures, fact sheets, door hangers, etc.
- Develop partnerships with key stakeholders and trusted experts to communicate about the issues. Partnership issues can include:
 - How to transition to a circular economy
 - Tap water safety and accessibility
- Provide tailored educational materials for students and teachers
 - Establish a task force to investigate partnerships with schools so they can function as hubs for some circular economy functions, which could support the creation of entry-level jobs, and for related purposes, such as the distribution of surplus edible food directly to the community.
 - Examples include worksheets, coloring book pages, comic books, etc.
- Provide tailored educational materials for doctors and other healthcare professionals
 - Materials can include information from trusted sources about tap water safety, and the health and human impacts of plastics pollution
- Presentations at select business/industry events to discuss specific new regulations, as well as potential opportunities for manufacturers.
- Host educational booths at sporting events, community fairs, farmers markets, etc. with an emphasis on environmental justice neighborhoods.

- Develop a coordinated social media campaign and provide shareable social media resources to influencers, including City Council
- Targeted door-to-door outreach in high-impact environmental justice neighborhoods
- Develop PSAs for use on local television and radio

Timeline

This campaign will tentatively kick-off in Spring or Summer of 2022.

Analytics

Potential measurements include but are not limited to:

- Number of flyers sent
- Number of booth visits at events
- Number of door-to-door visits in EJ neighborhoods
- Number of partnerships developed

L. RELATED MUNICIPAL CONSIDERATIONS

1. Adopt an ordinance directing the Los Angeles City Employees' Retirement System (LACERS) and other City pension funds and other involved departments, to issue annual reports regarding their progress in reducing investments in fossil fuels. The companies in which investments are held must be included in reports.

Rationale: Per a December 2020 City Council vote, affected departments and funds were to report whether there is a target date for complete divestment of fossil fuel investments.

2. Adopt an ordinance directing the City pension funds and other involved departments to divest from investments in tobacco products and cease sale of tobacco products on City property, including proprietary department property.

Rationale: Cigarettes are littered and cigarette butts contain plastic. The City should not hold investments in companies whose products contribute to plastic pollution and endanger human health.

3. Adopt an ordinance that requires that any business that provides laundering services for City-owned/provided employee uniforms and/or other garments must have plastic filters in the washing machines that are capable of capturing micro-plastics shed by the uniforms/garments.

Rationale: The City should not contribute - even indirectly - to plastic pollution in our oceans. The City should select vendors that can assist in reducing plastic pollution by installing filters in their washing machines.

4. Direct all City departments that develop/issue specifications for City employee uniforms, to consult with unions whose members wear uniforms, and to investigate options for purchasing uniforms that do not contain synthetic fibers/content derived wholly or partially from fossil fuels, such as but not limited to, synthesized polymers such as Polyester, Acrylic, Nylon, Spandex, Polyamide, and Acetate, because these polymers shed microplastic when washed; the City departments should report to Council within 90 days and discuss availability, employee acceptance, cost differential and all other relevant issues.

Rationale: The City should not contribute - even indirectly - to plastic pollution in our oceans. City purchases should seek to reduce plastic pollution.

5. Direct all City departments that develop/issue specifications for reusable (shopping) bags that are often offered to residents/customer as promotional items or gifts, to investigate options for purchasing bags that do not contain synthetic fibers/content derived wholly or partially from fossil fuels, such as but not limited to, synthesized polymers such as Polyester, Acrylic, Nylon, Spandex, Polyamide, and Acetate, because these polymers shed microplastic when washed; the City departments should report to Council within 90 days and discuss availability, employee acceptance, cost differential and all other relevant issues.

Rationale: The City should not contribute - even indirectly - to plastic pollution in our oceans. The City's purchases should seek to reduce plastic pollution. That will likely mean purchasing fewer, more expensive items in lieu of plastic products, that is a justified decision.

M. RELATED LASAN CONSIDERATIONS

1. Direct LASAN to engage/contract with organizations including but not limited to the National Stewardship Action Council (NSAC) and Upstream to review the proposals included in this report, and to design and help implement take-back programs that are adopted by City Council, and offer management/oversight services for take-back programs as needed.

Rationale: The NSAC, Upstream and other organizations can offer take-back program/EPR expertise that the City does not have.

2. Direct LASAN to develop recommendations regarding the creation of a policy unit within LASAN that would be tasked with researching, developing and proposing over-arching, citywide environmental goals such as zero waste, plastics pollution, and related topics -

and necessary implementation steps. This unit would also ensure that LASAN marketing and outreaching supports and prioritizes adopted policies.

Rationale: Since the dissolution of the City's stand-alone Environmental Affairs Department (EAD) in 2008, LASAN has been the City's de facto environmental department. However, generally, LASAN has waited for direction from City Council and the Mayor's Office - via Council Motions and Executive Directives - to develop and recommend policies, rather than proactively offering its own.

LASAN staff who have developed policy recommendations to modify LASAN operations in order to reduce pollution have had no mechanism for presenting these recommendations to other LASAN divisions, much less ensuring they are adopted. For example, modifying specifications to eliminate superfluous packaging and recommending that all-cotton shopping bags be purchased, rather than polyester versions, have been recommended, but the recommending division had no authority to ensure adoption.

N. FUNDING FOR LASAN

Dedicated funding from the City's General Fund is required for the successful implementation of the programs that will result from adoption of the recommended ordinances. The cash reserve in the Citywide Recycling Trust Fund (CRTF) has been dwindling due to the need to cover existing ongoing recycling program obligations and as a result of funding the recycLA program since the program's inception in 2017. It is anticipated that the CRTF would have a shortfall of approximately \$10M by the end of Fiscal Year 2022-23 and will remain in the deficit going forward if the CRTF fund is to continue supporting the recycLA program and the recycLA program's Removing Barrier from Recycling (RBR) incentives. It is also to be noted that the revenue receipts from the recycLA program or the Commercial Solid Waste Collection Franchise have been deposited into the General Fund since the beginning, while the costs to run the recycLA program are expended out of CRTF. With the anticipated shortfall in the CRTF, funding from the General Fund is needed to implement the proposed projects in this report.

Item	Estimated	Estimated
	Low Cost	High Cost
CEQA/Environmental Analyses	\$1,500,000	\$2,500,000
Life Cycle Analysis (LCA)	\$75,000	\$250,000

Purchase reusable water bottles for Angelenos living below poverty line (725,000 x \$1.50 - \$2.25/bottle)	\$1,087,400	\$1,631,250
Purchase reusable foodware for 50,000 City employees (at \$2.50 & \$5.00/each)	\$ 125,000	\$ 250,000
Purchase reusable foodware for restaurants operating on City property (100 restaurants x 200 meals/day x 5 days x \$2.50)	\$ 250,000	\$ 500,000
Purchase dishwashers for LAUSD schools, related plumbing and electrical upgrades, to support use of reusable to-go foodware (1,000 schools x \$7,500 - \$15,000 each); schools could function as hubs for reusable to-go foodware, possibly assist in refill operations	\$7,500,000	\$15,000,000
Total One-Time Costs:	\$10,162,400	\$19,381,250
On-Going Annual Costs:	Estimated	Estimated
	Low Cost	High Cost
Management Analyst I (9184) to conduct plastics inspections/ enforcement, Step 12.	\$ 108,471.60	\$ 325,414.80
Environmental Specialist II (7310-2), Step 12	\$ 114,547.68	\$ 343,643.04 ¹

Public Relations Specialist II* (1785-2), Step 12 (Additional staff is required to develop a zero waste campaign that includes webinar and website content, digital newsletters, and presentations).	\$ 88,030	\$ 264,090.241
Graphic Designer II (1670-2), Step 12	\$ 89,408.16	\$ 268,224.481
Contract with EPR organization to design/ help implement recommended take-back programs	\$ 150,000	\$ 500,000
Contract with organization/s for pilot projects transitioning restaurants to reusable foodware	\$ 250,000	\$ 500,000
Establish cooperative purchasing program for reusable foodware for private sector, and "seed" with initial purchases	\$25,000	\$ 50,000
Totals for On-Going Annual Costs	\$825,457	\$2,251,372

¹ Multiply Step 12 salary by three (3).

Rationale for Above Recommendations:

*Extensive outreach to the residential and commercial sectors is essential to the success of report recommendations. Both sectors need access to education regarding zero waste, which necessarily entails minimizing single-use/disposable products and packaging. Webinars supplemented in-person presentations would be the most cost-effective, but would require additional staffing in the Public Affairs Office (PAO). The PAO provides services to the Commissioners of the Board of Public Works; the Mayor's Office; and all five Public Works Bureaus (Contract Administration, Engineering, Sanitation, Street Lighting and Street Services), yet has only seven (7) employees.

Additional staff is required to develop a zero waste campaign that includes webinar and website content, digital newsletters, and presentations. Additional staff needs are addressed in the following budget summary.

O. CEQA (CALIFORNIA ENVIRONMENTAL QUALITY ACT)

The comprehensive series of actions the City is considering to minimize and/or eliminate single-use plastics require consideration under CEQA. Depending on the action and legal considerations, the City may consider different options to comply with CEQA. Many of the actions under consideration appear to be sufficiently related as to warrant a programmatic vs. project-level review. The May 2014 Program EIR for the *Solid Waste Integrated Regional Plan* (SWIRP) provides an analysis of environmental effects for many of the items under consideration by Los Angeles, that the City could rely on CEQA coverage. However, there are some items that are not considered by that analysis, and some of the comprehensive plastics options do not appear to be directly related to the SWIRP objective of “zero waste discharge”. To comply with CEQA for these items, the City may consider preparing an amendment to the 2014 PEIR if the additional actions would not result in any new or more severe environmental impacts that are described in the SWIRP Program EIR, or the City could prepare a stand-alone new Program EIR.

The City could also consider addressing CEQA compliance for the actions presented in the Comprehensive Plastics Report individually. This approach would allow Los Angeles to introduce some of the actions proposed quickly. CEQA compliance for some could be addressed through addenda to the *EIR for Single-Use Carryout Bag Ordinance* dated May 13, 2013 or from the *SWIRP Program EIR*, while others, if considered on their own, may qualify for Categorical Exemptions under CEQA.

The potential exists for some of the items in the comprehensive plastics report to result in public controversy. For instance, there is likely to be concern among businesses regarding feasibility of implementation, as well as claims that the measures may fall disproportionately on disadvantaged or underserved communities. An outreach process similar to that followed for the 2013 *Single-Use Carryout Bag Ordinance* would help with these concerns. This included initial business and public outreach, support to businesses for the change, pilot testing in specific geographic areas, and selected exemptions to reduce the impact and improve the rollout. For some of the measures in the Comprehensive Plastics Report this process is contemplated through education and phased implementation, but not consistently.

The following CEQA pathways appear viable for different elements of the Comprehensive Plastics Report.

1) Bans on Plastic Bags of All Types: CEQA addendum to the 2013 *Single-Use Carryout Bag Ordinance* EIR

- Plastic produce bags
- Produce in pre-packaged plastic bags
- All plastic shopping bags of any thickness or style in all stores

- Plastic films used for dry cleaner bags

2) Bottled Beverages: Categorical Exemption, or 2014 SWIRP Program EIR with Addendum, IS/MND, or EIR

- Ban water in plastic bottles that are not refilled
- Ban bottled water at City events
- Ban sale of LA-sourced water outside Los Angeles
- Ban plastic in tea bags
- Mandate that 25% of all plastic bottles sold in LA must be refillable
- Mandate that 10% of beverage bottles sold in LA must be refillable within 5 years
- Mandate for post-consumer recycled content in all plastic bottles and leashed lids on beverage containers

3) Disposal Ban on Textiles and Returned Items: Categorical Exemption, or 2014 SWIRP Program EIR with Addendum, IS/MND, or EIR

- Ban disposal of returned apparel
- Ban disposal of unsold, excess fabric scraps/remnants
- Ban retailers (online and brick and mortar) in Los Angeles from disposing of returned items

4) Foodware Measures: Need more information, but appear similar to the *Disposable Foodware Accessories Ordinance of 2021* (Categorical Exemption)

- Mandate reusable foodware for dine-in services (ban single-use disposable foodware for dine-in service)
- Fee for cups and straws and mandate for 30% post consumer recycled content in disposable foodware

5) Promote Reuse/Recycle: Need further information but consistent with 2014 SWIRP PEIR

- Ban non-recyclable packaging
- Ban meal kits unless manufacturers promote take-back or reuse programs for the non-recyclable components
- Require manufacturers to fund take-back programs for non-recyclable components

6) Other Items that require further information for CEQA recommendations

- Ban on bioplastics
- Ban on PFAS
- Clothes washers must have microplastic filtration systems
- Various labelling mandates
- Fee on washable synthetic items
- Mylar balloons
- "Municipal Issues"

For comparison purposes, Los Angeles banned Single-use carryout plastic bags with an EIR; plastic straws-on-request and food accessories-on-request ordinances were Categorical Exemptions; and Los Angeles World Airports (LAWA) approved phasing out single-use plastic

water bottles at Los Angeles International Airport (LAX) and Van Nuys general aviation (VNY) airport by Categorical Exemptions.

P. INSPECTION AND ENFORCEMENT CONSIDERATIONS

One council motion addressed in this report references plastic enforcement in supermarkets; the issue of enforcement could be applied to most of the recommendations found in this document. LASAN will require additional staff to undertake inspection and enforcement activities that result from the adoption of any ordinances recommended in this report.

Note: There are an estimated 40,000 restaurants and grocers in Los Angeles that would require inspections.

Attachments

Attachment 1

Internal LASAN (Support Services Division) Assessment: National Sword Impacts/Status of Recycling Program

Attachment 2

California's Statewide Commission on Recycling Markets and Curbside Recycling Final Recommendations Report

<https://drive.google.com/drive/folders/1AkA647BRfk07uBq7nkg7f7WfGou8rvzC>

Attachment 3

Recycling Market Development Zone (RMDZ) Program

Attachment 4

UCLA's Luskin Center for Innovation; Plastic Waste in Los Angeles County; Impacts, Recyclability, and the Potential for Alternatives in the Food Service

Attachment 5

Governments Adopting Similar Policies/Ordinances

Attachment 1

Internal LASAN (Support Services) Assessment: National Sword Impacts/Status of Recycling Program

LASAN is responsible for the collection of residential solid resources material (recycling and refuse) from over 750,000 single family residences and small apartment complexes (four units or less). LASAN collects recyclables (blue-bin), yard trimmings (green-bin), horse manure (brown-bin), and refuse (black-bin). The collected materials are either directly hauled or transferred (through a transfer station) to a Material Recovery Facility (MRF) or disposal site as appropriate.

To efficiently collect and manage the solid waste, LASAN operates a large fleet of over 700 heavy-duty collection vehicles, throughout six collection wastesheds: East Valley (EV), West Valley (WV), West LA (WLA), North Central (NC), South LA (SLA), and Harbor (HAR). For over 29 years, LASAN has been providing blue-bin recycling collection to its residential customers.

In the early 1990s, following the State's passage of the Integrated Waste Management Act (AB 939), LASAN began to provide residents with yellow bins to collect plastic and glass containers, tin, aluminum, and newspaper. In 1997, the yellow bin program was replaced by the automated single stream commingled 90-gallon blue-bin recycling program, which helped the City achieve 50 percent landfill diversion.

The environmental restrictions in California coupled with labor and economic constraints in the United States (US), and the tremendous growth in the South East Asian economies, in particular China, forced many of the local and regional manufacturing facilities such as paper mills and others to either close or relocate overseas. Over the last twenty years, the growth in demand of recyclable materials by the Chinese economy helped municipalities around the US and in particular cities on the west coast to achieve high diversion rates of collected materials (e.g., plastics, mixed paper, and foam) from landfills.

Under China's 2013 Green Fence initiative, contamination limits in scrap material bales shipped to China were restricted to 1.5%. To meet these new regulations, some MRFs installed new equipment and improved sorting efficiencies by adding more staff and slowing down their sorting lines.

In February 2017, China launched the National Sword Policy. This new policy required all scrap material bales entering China's ports be inspected, and exporters were penalized if the scrap material bales had prohibited or inconsistent materials. This new policy enforced a 0.5% contamination limit on all post-consumer materials imported to China.

Additionally, in July 2017, China notified the World Trade Organization of its intent to ban imports of certain scrap materials (i.e., mixed-plastics, mixed-rigid plastics, mixed-film plastics, mixed-scrap metal and mixed-papers). In February 2018, China further banned all imports of post-consumer mixed scrap materials, and only accepted imported cardboard bales that met their 0.5% or less restriction.

It should be further noted that while several countries in South East Asia, including Indonesia, Vietnam, and the Philippines, have opened their doors to take some of the clean recyclable materials, their Gross Domestic Product (GDP) pales in comparison to the GDP of China, the second largest economy of the world.

The City of Los Angeles is at a crossroads. Recyclable material that once generated over \$6,000,000 per year in revenue and helped offset LASAN's operational costs, is now costing the City over \$12,000,000 annually (~ \$60 per ton).

Table 1: Resin Codes currently accepted in the blue-bin*

Table 1. Resin Codes currently accepted in the blue-bin*

Resin Code	Name/Abbreviation	Examples	Recyclable Uses
1	Polyethylene terephthalate (PETE)	Food and drink containers, cooking oil containers	Soft drink bottles, polyester fibers
2	High density Polyethylene (HDPE)	Milk jugs, shampoo/ cleaning/laundry containers	Bottles, grocery bags, playground equipment
3	Polyvinyl Chloride (PVC)	Packaging for foods, pipes, tubing, spray bottles	Pipe, fencing, non-food bottles
4	Low Density Polyethylene (LDPE)	Squeezable bottles, plastic film, shrink wrap, shopping bags	Plastic bags, containers, molds
5	Polypropylene (PP)	Furniture, toys, good for hot liquids, medicine bottles,	Auto parts, food containers, dishware
6	Polystyrene (PS)	Soft foam, toys, disposable containers/plates/cutlery/cups , jewelry, hard plastic	Toys, insulation
7	Other	Acrylic, Polycarbonate, polylactic fibers, nylon, fiberglass	

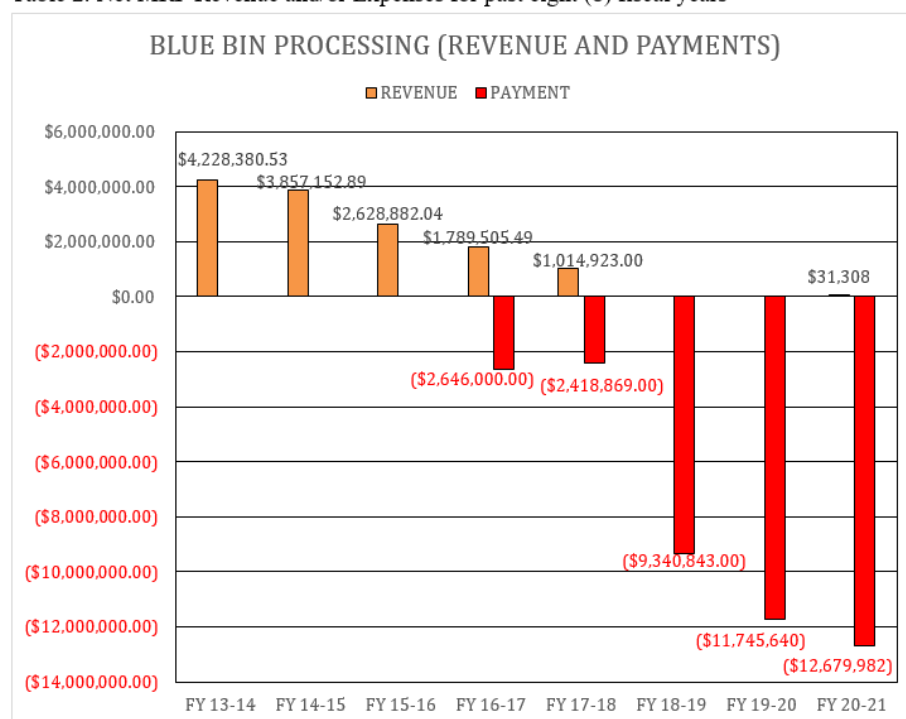
*Information adapted from various sources: calrecycle.ca.gov; learn.eartheasy.com; greenmatters.com

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The City's agreements with the MRFs require them to process and market the materials by sorting, baling, storing, selling, shipping, and disposing unmarketable materials to a local landfill. Up until 2017, these agreements generated revenue for LASAN.

Table 2. Net MRF Revenue and/or Expenses for past eight (8) fiscal years

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Note: Amounts represents the net of revenue that the City received and expenses the City paid.

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Tons to MRFs

Fiscal Year	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Tons to MRFs	198,143	204,949	207,547	227,014	219,488
Total	\$4,237,960	\$3,912,805	\$2,677,022	\$201,101	-\$4,822,504

Table 3. Market for Blue-bin contents (FY 2017-2018) Contamination is plus/minus 0.05% range

Cardboard and mixed fibers make up approximately 51.7% (by weight) of the blue-bin contents; any decline in market values for these materials has a huge impact on the operating costs of the MRF and LASAN.

Table 3. Market for Blue-bin contents (FY 2017-2018)

Contamination is plus/minus 0.05% range

Contents	Percentage by Weight (%)	Current Market
Mixed paper	33.84	International
Cardboard	17.91	International
Cartons	0.13	International
Mixed Glass	8.42	Local
Aluminum	0.18	Local
Steel & Tin	2.88	Local
PETE	0.82	Local
HDPE	1.2	Local
Mixed Plastics	4.62	None/landfill
Contamination	30.00	None/landfill
Total	100	

It is crucial to realize that contamination in the blue-bin has increased over the last several years and this is due to multiple reasons. For example, a greasy pizza box that once was considered a perfect candidate for recycling because the newer paper mills in China were able to process it, is now no longer accepted by the MRFs. Residents also tend to be “wishful recyclers” and place non-recyclable items in the blue bins. Common blue bin contaminants include garden hoses, diapers, organic materials, bottles that are not fully emptied, dirt, yard wastes, and textiles.

Figure 1. Market Price of Cardboard and Mixed-paper

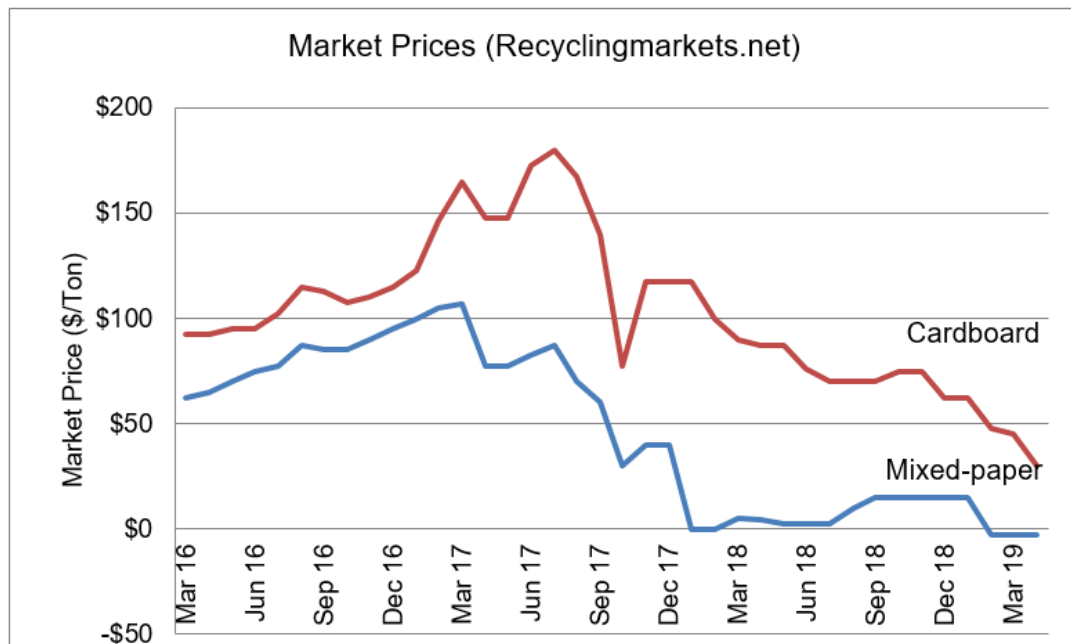


Figure 1. Market Price of Cardboard and Mixed-paper

Adjustment to MRF Agreements

Due to the shift in the commodity market for recovered recyclables, the MRF contracts were modified from the previous revenue generating agreement to agreements where the City now has to pay for such processing services. Table 4 summarizes current City agreements with the MRFs.

Table 4. Current MRF Agreements

<u>Wasteshed</u>	Agreement Type	Contractor	Processor
East Valley	Letter of Agreement	Athens Services	Athens Services
West Valley	Letter of Agreement	City Fibers	City Fibers (North Hills)
North Central	Contract	CR&R	City Fibers (LA)
West LA	Contract	CR&R	Potential Industries
South LA	Contract, started 7/1/21, but not fully executed	CR&R	City Fibers (LA)
			CLARTS
Harbor	Contract	CR&R	Potential Industries

Table 5 shows the current average processing unit cost (\$/ton) and total annual cost for each wasteshed.

Table 5. Total annual estimated processing cost for the City’s blue-bin materials.

<u>Wasteshed</u>	Average Processing Unit Cost (\$/Ton)	Annual Tons (Tons/Year)	Estimated Total Processing Cost (\$/Year)
East Valley	\$60.00	51,590	\$ 3,095,400
West Valley	\$49.00	51,517	\$ 2,524,333
North Central	\$39.00	35,391	\$ 1,380,249
West LA	\$53.00	42,194	\$ 2,236,282
South LA	\$99.00	28,201	\$ 2,791,899
Harbor	\$33.00	10,592	\$ 349,536
Total		219,485	\$ 12,377,699

Note: Average Unit Processing Cost is calculated based on the rates provided by MRFs during FY 2018-2019. The tonnage is based on FY 2017-2018 collection data.

Table 5. Total annual estimated processing cost for the City’s blue-bin materials.
Wasteshed

Note: Average Unit Processing Cost is calculated based on the rates provided by MRFs during FY 2018-2019. The tonnage is based on FY 2017-2018 collection data.

It should be noted that industry experts from the Institute of Scrap Recycling Industries and National Waste & Recycling Association have stated that China’s stringent measures are intended to block importation of any foreign contamination, which means that China will not reopen its doors to scrap imports. The recycling world will have to find a new approach and restructure itself. However, that may take several years to develop.

Achieving Mayor and City Council Goals

To meet the goal of 90 diversion of materials from landfills by 2025, LASAN plans to increase recycling and diversion through implementation of multiple local waste prevention and recycling initiatives. Currently, the blue-bin recycling program collects about 200,000 tons per year. The blue-bin characterization is shown in Figure 2.

Figure 2. City residential blue-bin program characterization.

Approximately 35% of the blue-bin contents are considered contamination and are being landfilled. Many of the items considered contamination could be recyclable, but because of heavy

contamination by organic materials, grease, dirt, and/or broken glass, they are not recovered and are sent to a landfill. LASAN recommends the following to be implemented to sustain the blue-bin program as well as improve the quality of the recyclables.

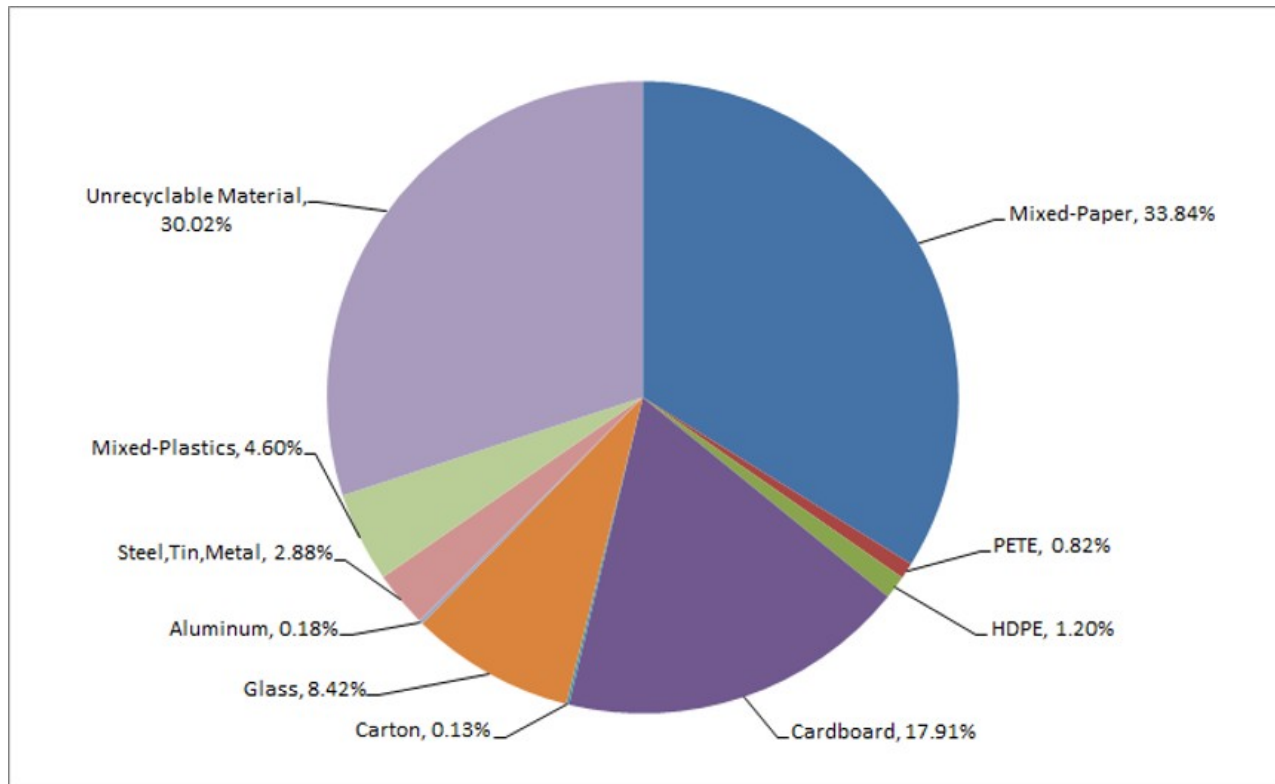


Figure 2. City residential blue-bin program characterization.

Recommendations and Contingency Plans

Glass bottles will not be accepted in the blue-bin because they easily break into smaller pieces and contaminate other recyclables. Glass bottles should be recycled through a State of California permitted recycling center.

Note: The revised and simplified types of materials accepted in the blue-bin will have a minimal impact on the City's diversion rate and its ability to reach its zero waste goal. Plastics numbers 3 - 7 make up a very small percentage of the current blue-bin contents. Removing these materials will result in less contamination, increasing the recyclability and value of the remaining blue bin material.

To ensure City wide consistency the revisions to material accepted in the blue bin will be applicable to all City residential programs.

1. Suspend processing of blue-bin from routes that are highly contaminated
LASAN recommends suspending routes that are identified as highly contaminated from being processed at a MRF. This recommendation will reduce the need to process the material twice

(i.e., first at the MRF and secondly at the landfill), help to improve the overall quality of the recyclables and its marketability, and may decrease total costs due to reduced tonnage to be processed. In addition, the MRFs have expressed that they can no longer accept highly contaminated material without increased compensation. INSERT AS G.3.

2. Develop local and North American recycling markets

LASAN recommends engaging and partnering with CalRecycle, neighboring cities, and large industry leaders to take bold steps to reduce our dependence on foreign markets, reinvigorate local recycling facilities, and pursue North American paper mills that are capable of processing mixed paper and cardboard materials. LASAN will do so without compromising our City's strong commitment to environmental justice.

3. Own and operate MRF facilities

Over the last few years the global recycling prices for paper, and plastics have plummeted, forcing many MRFs to either curtail their operations or close their doors. On May 22, 2019 LASAN was informed by City Fibers, a company that previously processed three of the City's six recycling wastesheds, that it would be invoking Force Majeure, as allowed under its contract, and no longer accept blue bin recyclable material from the City. City Fibers later closed its facilities in West Valley and Downtown Los Angeles.

Since the City is committed to continue recycling, and achieve the Zero Waste goals, it is recommended that LASAN along with Mayor and Council, CAO, and CLA, immediately investigate the ability for the City to own and operate MRFs to process some or all of the City's blue-bin material. This option will provide the City the control and flexibility needed to maneuver through changing and challenging market conditions for recyclables.

Greenhouse Gas Emissions Impact of Revising the Blue Bin Program

LASAN's Regulatory Affairs Division assessed the greenhouse gas (GHG) emission impact of modifying the blue-bin recycling program as it relates to the City's overall commitment to reduce GHG emissions. The estimated increase in GHG emissions associated with this plan is negligible when compared to the total emissions associated with Los Angeles' waste sector.

California's Statewide Commission on Recycling Markets and Curbside Recycling Final Recommendations Report

<https://drive.google.com/drive/folders/1AkA647BRfk07uBq7nkg7f7WfGou8rvzC>

Link to webpage: <https://www.calrecycle.ca.gov/markets/commission>

In the "Commission Reports" section, select "July 1, 2021 Final Recommendations Report"

Attachment 3

Recycling Market Development Zone (RMDZ) Program

RECOMMENDATIONS FOR COUNCIL ACTION

In response to the Los Angeles City Council Motion 19-0522 (Motion), the City of Los Angeles Sanitation and Environment (LASAN) and the Economic Workforce Development Department (EWDD) hereby recommend the Los Angeles City Council:

1. Approve the use of \$520,000 from the General Fund to pilot a flexible, competitive grant program for projects that stimulate local recycling markets.
2. Approve a new position for LASAN to implement the grant program and coordinate research efforts citywide: one Management Analyst. Additional staff time will cost \$150,000 for coordinating and processing the grant program.
3. Designate LASAN as the agency to oversee the grant program and research efforts.

DISCUSSION

City of Los Angeles (City) businesses, nonprofit organizations, and local government agencies are eligible for CalRecycle's Recycling Market Development Zone (RDMZ) loan and business assistance program under the following project categories: Waste Prevention; Reuse; and Recycling, Composting, and In-Vessel Digestion. See Attachment 1 for RMDZ Loan Eligibility Criteria. LASAN screens potential loan applicants, connects them with local resources and incentives, and refers potential borrowers to CalRecycle for eligibility screening and guidance through the loan application process. CalRecycle also connects businesses to state and federal resources when appropriate.

The benefits of the loan program are threefold: provide economic incentives to local manufacturers, advance the goals of California Senate Bill 1383, and promote environmentally sustainable practices by creating local markets for recyclable materials. However, the Los Angeles RMDZ program is not maximizing these benefits. Despite the availability of funds through CalRecycle, few loans are awarded to businesses located within the City under the RMDZ program. Since the City was established as a zone in 1993, 10 loans have been awarded to Los Angeles businesses to date (\$7,610,000 total). At the time of this report, the last loan awarded in Los Angeles was dated October 2003.

LASAN receives inquiries from local, national, and international businesses despite limited staff time and minimal promotion. Between 2018 and 2020, a total of 16 businesses contacted the LA RMDZ program and expressed interest in the loan program. Eight of these businesses were already located within Los Angeles. The remaining eight businesses were interested in relocating to Los Angeles or expanding their existing operations from locations such as San Diego, California and Phoenix, Arizona. Zero businesses were awarded the RMDZ loan during this time.

LASAN staff has identified several barriers to entry for businesses interested in the RMDZ loan based off of feedback from businesses, including:

- Land and property needs exceed availability and affordability of Los Angeles real estate (the primary barrier).
- Access to steady feedstock streams is difficult to attain for businesses without working relationships with RecycLA Service Providers and other key participants in the Los Angeles waste stream.
- Permitting processes are time consuming for businesses who are new to the City of Los Angeles.
- Providing matching funds of 25 percent of the total project and providing acceptable collateral present financial obstacles for businesses.

Proposed business activities and use of funds from these businesses include upcycling post-consumer textiles, recycling plastics 1-7 into building materials, and reclaiming downed trees for lumber—all activities that advance the City's zero waste goals and SB 1383 targets. In addition to diverting valuable resources from landfills, these businesses also provide opportunities for job creation. LASAN and EWDD have identified opportunities beyond the loan program for the City of Los Angeles to complement and achieve the environmental and economic goals of CalRecycle's RMDZ. Below, LASAN and EWDD have outlined their recommendations for pursuing local loan opportunities, conducting further research on manufacturer needs, and establishing a grant program.

See Attachment 2 for more information on LA RMDZ business inquiries during FY 2018-2019, FY 2019-2020, and FY 2020-2021.

OPPORTUNITIES

Local Loan Opportunities

In lieu of establishing a new supplemental local loan program, specific to the recycling community, LASAN and EWDD recommend advertising EWDD's current portfolio of loan opportunities to recyclers and businesses or manufacturers that include recycled materials in their products. LASAN's Management Analyst assigned to the grant program will work closely with EWDD's Business Advance Team. EWDD's Business Advance Team can assist with outreach and forward potential applicants to the LA RMDZ. If businesses are unable to receive funding through CalRecycle, then LASAN can forward businesses to EWDD's Business Advance Team for more information on funding opportunities including:

- Section 108 or CDBG (if jobs component)
- JEDI Zone (if located in JEDI Zone)

- Microloan program

Research Opportunities

In March 2020, LASAN conducted a survey to gauge interest in local loan and grant opportunities. The survey received low response rates. LASAN sees a valuable opportunity for gathering research and identifying potential grant and loan applicants by launching a second iteration of the survey addressing the following: the digital divide by offering an opportunity to return a hard copy of the survey, mitigating cost prohibitive options by including a prepaid postage return by mail envelope, language barriers by offering the survey in both English and Spanish at minimum, and accessibility by offering a wider time frame to receive responses and sending multiple notices across different platforms such as U.S. Mail, email, phone calls, social media, newsletters, etc. The revamped survey will be the responsibility of the Management Analyst assigned to oversee the grant program. Survey results will inform LASAN's grant program and resources and incentives provided by LA RMDZ.

LASAN would also like to investigate the current state of local recycling and any impacts resulting from the COVID-19 pandemic. In addition to gathering business information, it could also be useful to conduct consumer-based market research on local demand for recycled content products. The Management Analyst assigned to the grant program would be tasked with coordinating this effort as well.

See Attachment 3 for the survey that LASAN mailed out in March 2020.

Grant Opportunities

Businesses and manufacturers that express interest in the RMDZ loan are also often attracted to CalRecycle's Greenhouse Gas Reduction Grant and Loan Programs. LASAN and CalRecycle staff direct eligible applicants to these opportunities whenever possible and appropriate. In the last three grant cycles of this award, none of the recipients were located in the City of Los Angeles (<https://www.calrecycle.ca.gov/climate/grantsloans>). See Attachment 4 for overview of grant opportunities. LASAN has observed that businesses are often unable to meet the eligibility requirements or are unable to complete the application during the window CalRecycle offers.

Targeted, local, small-scale grants are a valuable opportunity for businesses to expand their current operations, complete special projects, or sustain their programming while securing long-term funding. Businesses that express interest in the LA RMDZ loan program may instead benefit from a smaller amount of funding with fewer barriers to entry and financial risk. LASAN has outlined a grant program that can supplement, serve as a pathway to, or provide an opportunity for businesses and manufacturers in lieu of the RMDZ loan program.

In order to stimulate local recycling markets, LASAN proposes a flexible, competitive grant program. To pilot this program, LASAN recommends the following: the pilot will award a minimum of five grants ranging from \$5,000 up to \$100,000 each, totaling \$500,000. An additional \$20,000 will be allocated for marketing,

outreach, and market research. Additional staff time will cost \$150,000 for coordinating and processing the grant program. LASAN has outlined the structure of the proposed program below:

Eligibility and Criteria

Eligible applicants shall be:

- Businesses registered with the City of Los Angeles Office of Finance and in good standing
OR
- Nonprofit 501c(3) organizations (except private schools) that operate within and serve the City of Los Angeles.

Applicants must maintain their current services, expand their programming, or implement a project in one of the following areas:

- Waste Prevention
 - § Reduction in feedstock used or waste produced, including packaging.
- Reuse
 - § Prolonging useful life of product via repair, treatment, cleaning, etc.
- Recycling, Composting, and In-Vessel Digestion
 - § Processing feedstock into finished or intermediate products

· Potential uses for grant funding include:

- Machinery and equipment, including vehicles
- Working Capital
- Infrastructure and capital improvements that directly contribute to waste reduction or increase accessibility to waste reduction practices or services

Key Features

While LASAN will continue to inform businesses about CalRecycle's funding opportunities, LASAN's grant program will serve as a more accessible option. In order to remove some of the barriers that businesses face, the grant program will have the following features:

- Grant applications will be accepted on a rolling basis until funding is depleted.

- Criteria, application process, and other barriers to entry shall not be excessively time intensive or otherwise burdensome.
- Priority given to projects that serve frontline environmental justice communities; are led by Black, Indigenous, and Persons of Color (BIPOC); occur in JEDI or CUGU zones; or otherwise advance environmental justice endeavors.
- Aligning the grant criteria with CalRecycle's RMDZ project categories facilitates the grantees' future eligibility for the RMDZ loan.
- The Management Analyst assigned to the grant program will also be responsible for answering questions related to the grant application and receiving and recording all applications.

See Attachment 5 for preliminary Sample Grant Program Announcement

CONCLUSION

Given the economic burden of the COVID-19 pandemic, local incentives and opportunities are especially critical. Establishing programs and opportunities like the proposed Recycled in LA Grant Program, offer benefits to all Angelenos that are threefold: incentivize and support local business; address environmental burdens of solid waste that have existed before and will outlive the COVID-19 pandemic; and the creation of sustainable, local markets for recyclable materials. As a result, LASAN and EWDD recommend that the City of Los Angeles invest in the proposed Recycled in LA Grant Program detailed in this report.

Attachment(s) or Enclosure(s)

1. CalRecycle Recycling Market Development Zone Loan Program Eligibility Criteria
2. LA RMDZ Activity FY 2018-2019, FY 2019-2020, and FY2020-2021
3. CalRecycle GHG Grant and Loan Program Overview
4. LASAN Manufacturer Survey
5. Sample Grant Program Announcement

Attachment 4

UCLA's Luskin Center for Innovation; Plastic Waste in Los Angeles County; Impacts, Recyclability, and the Potential for Alternatives in the Food Service

https://innovation.luskin.ucla.edu/wp-content/uploads/2020/02/Plastic_Waste_in_LA_County.pdf

Attachment 5

Governments Adopting Similar Policies/Ordinances

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Appendix 1. Product/Material/Chemical Bans

Entity	Policy	Scope	Enforcement/Source
City of San Francisco, CA	Plastic, Litter, Toxics Reduction Law	<p>Ban on PFAS chemicals in single-use food service ware.</p> <p>Restricts the distribution of single-use plastic accessories, such as plastic straws, plastic beverage plugs, and plastic stirrers.</p> <p>Compostable food ware must be certified by the Biodegradable Products Institute (BPI)</p>	<p>Effective January 1, 2020</p> <p>Source:</p> <p>https://sfbos.org/sites/default/files/o0294-18.pdf</p>
City of San Francisco, CA	Plastic Bag Reduction Ordinance	<p>All single-use plastic checkout out and pre-checkout bas are prohibited starting July 1, 2020</p> <p>Acceptable checkout bags are:</p> <p>BPI certified compostable</p>	<p>Effective July 1, 2020</p> <p>Source:</p> <p>https://sfenvironment.org/checkout-bag-ordinance</p>

		<p>Paper Bags with recycled content</p> <p>Reusable Bags</p> <p>Charge at least 25 centers per checkout bag.</p>	
City of Malibu, CA	Malibu Municipal Code Chapter 9.24	<p>Prohibited the sale or distribution of polystyrene foam food containers and packaging materials. Prohibited products include, foodware, meat trays, fish trays, packaging materials, etc.</p>	<p>Effective January 1, 2017; the city manager has the primary responsibility for enforcement; the city attorney may seek legal, injunctive, or other equitable relief to enforce this chapter</p> <p>Source:</p> <p>https://www.malibucity.org/DocumentCenter/View/16819/CITY_COUNCIL_-_ORDINANCE_432_-_REGULATING_PLASTICS_STRAWS_STIRRERS_AND_CUTLERY?bidId=</p>
City of Malibu, CA	Malibu City Ordinance No. 432	<p>Ordinance No. 432: Prohibits the use, distribution, and sale of single-use plastic and bioplastic straws, stirrers, and cutlery items in all retail stores and restaurants within Malibu City Limits.</p>	<p>Ordinance No. 432: Effective June 1, 2018; the city manager has the primary responsibility for enforcement of this ordinance</p> <p>Source:</p> <p>http://gcode.us/codes/malibu/?cite=9.24</p>

Culver City, CA	City Ban on Single-Use Plastics	<p>All polystyrene food service ware, retail foam coolers, and foam polystyrene food service ware are banned products in Culver City.</p> <p>Ban on single-use plastic food service ware, such as plastic straws, utensils, stirrers, lid plugs, and food trays</p> <p>Ban on single-use plastic food service ware and requiring food vendors to transition to reusable service ware.</p>	<p>Effective on January 1, 2022 and require food vendors to transition to reusable service ware by January 1, 2023</p> <p>City will charge a penalty fee of \$100 for first-time offenders. The cost of the penalty fee will increase after multiple offenses</p> <p>Source: https://www.culvercity.org/files/assets/public/documents/public-works/polystyrene/waste-reduction-regulations-fact-sheet.pdf </p>
City of Berkeley, CA	Single Use Food ware and Litter Reduction Ordinance	<p>Ban on single-use disposable foodware for on-site dining. Food vendors must use reusables food ware</p> <p>For take-out orders, a \$0.25 charge is</p>	<p>Effective July 1, 2021</p> <p>Enforcement includes a written notice of noncompliance, an offer of technical assistance, or other resources to help businesses comply, and an opportunity to comply or to initiate a request for a waiver</p> <p>Source: https://www.cityofberkeley.info/foodwareordinance/ </p>

		implemented for disposable cups.	
City of Hermosa Beach, CA	Ordinance 19-1398	<p>Prohibits the use, distribution, and sale of polystyrene packaging materials</p> <p>Prohibits the use and distribution of certain single-use plastic products, including plastic beverage straws, plastic stirrers, and plastic utensils</p> <p>Prohibits the distribution and sale of polystyrene meat and fish trays and produce trays, and polystyrene coolers</p> <p>Creates Single Use Plastics Ban and Alternatives Guide that helps businesses find</p>	<p>Effective November 2019; All affected business must achieve compliance before July 1, 2020</p> <p>Source: https://www.hermosabeach.gov/home/showpublisheddocument/13015/637109924431700000 </p>

		sustainable alternatives for plastics	
City of Palo Alto, CA	Disposable Foodware Ordinance	<p>Places a ban on single-use plastic items, such as plastic utensils, straws, drink plugs, stirrers, small plastic food ware items</p> <p>Applies to all food service establishments, including restaurants, bars, delis, grocery stores, food trucks, hotels.</p>	<p>Effective January 1, 2020; Director of Public Works will have primary responsibility in enforcing these regulations.</p> <p>Source:</p> <p>https://codelibrary.amlegal.com/codes/paloalto/latest/paloalto_ca/0-0-0-5214#JD_5.30.060</p>
City of Alameda, CA	Disposable Foodservice Reduction Law	<p>No use of polystyrene in food service ware within food vendors.</p> <p>Single-Use Plastic straws and other plastic accessories are banned.</p>	<p>Effective June 30, 2018</p> <p>The Public Works Director shall have primary responsibility for enforcement of this section. The Public Works Director is authorized to promulgate regulations and take any and all other actions reasonable and necessary to enforce this section.</p> <p>Source:</p> <p>https://library.municode.com/ca/alameda/codes/code_of_ordinances?nodeId=CHIVOFPUA_ARTILIMAPR_4-4DIFOSEWA</p>

State of New York	Senate Bill S8817 Ban PFAS in Food Packaging	Bans PFAS chemicals within all food packaging; prohibits the distribution or sale of food packaging containing PFAS substances	Effective December 31, 2022 Source: https://nyassembly.gov/leg/?default_fld=&leg_videoid=&bn=S08817&term=2019&Summary=Y
State of Connecticut	Act No. 21-191	Prohibiting intentionally added PFAS in food packaging and prohibiting a material used to replace a regulated chemical in package	Effective on December 31, 2023 Source: https://www.sgs.com/en/news/2021/07/safeguards-09421-state-of-connecticut-usa-bans-pfas-in-food-packaging
State of Vermont	Act 69- Ban on Single-Use Plastics	Act 69: Bans the distribution of single use plastic carry-out bags, plastic drink stirrers, and expanded polystyrene items (like cups, trays, take-out containers and egg cartons)	Act 69: Effective July 1, 2020 Source: https://legislature.vermont.gov/Documents/2020/Docs/ACTS/ACT069/ACT069%20As%20Enacted.pdf
State of Vermont	Ban on PFAS in food packaging	Ban on PFAS chemicals from firefighting foam, food packaging,	Effective July 1 2021 Source:

		carpets, rugs, etc.; Imposes restrictions on the use, manufacture, sale, and distribution of items containing PFAS; bans three main types of PFAS (PFHxS, PFHpA, PFNA)	https://legislature.vermont.gov/Documents/2022/Docs/BILLS/S-0020/S-0020%20House%20proposal%20of%20amendment%20Official.pdf
European Union	Chemical Strategy for Sustainability	Bans all PFAS as a group in fire-fighting foam and food packaging; establish an EU-Wide approach and provide financial support under research and innovation programs to find ways to mediate PFAS contamination	Published on October 14, 2020; establishes various sustainability goals for EU countries Source: https://ec.europa.eu/environment/strategy/chemicals-strategy_en
European Union	Single-Use Plastics Directive	Places a ban on any type of single-use plastic product, such as cutlery, plates, straws, beverage stirrers, beverage containers, cups, packets, plastic bags,	Effective July 2, 2019; ban on all single-use plastics in EU by 2021 Source: https://ec.europa.eu/environment/topics/plastics/single-use-plastics_en

		and food containers,	
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Appendix 2. Plastic Bottled Water Regulations

Entity	Policy	Scope	Enforcement/Source
City of San Francisco, CA	Bottled Water Ordinance	Restricts the sale or distribution on City property of drinking water in plastic bottles of 21 ounces or less, set City policy to increase the availability of drinking water in public areas, bar the use of City funds to purchase bottled water	<p>Any person who violates any provision of this law may be punished with administrative finds by the Director of the Department of the Environment in the amounts of:</p> <ol style="list-style-type: none"> 1. Up to \$500 for first violation 2. Up to \$750 for a second violation within a 12-month period; and, 3. Up to \$1,000 for a third and subsequent violation within a 12-month period <p>Source: https://sfenvironment.org/sites/default/files/files/sfe_zw_bottled_water_ordinance.pdf </p>
City of Concord, MA	Plastic Water Bottle Ban	<p>Banned the sale of single-serving PET water bottles of 1 liter (34 ounces) or less on or after Jan 1. 2013</p> <p>Exception during emergencies when availability and quality of drinking water</p>	<p>The first offense is a warning; the second offense is a \$25 fine, and third and each subsequent offense will be a \$50 fine.</p> <p>Source: https://www.huffpost.com/entry/plastic-bottles-banned-concord-massachusetts_n_2395824 </p>

		has been adversely affected	
Barnstable County, Cape Cod, MA	Commercial Single-Use Plastic Water Bottle Ban	Eliminate the sales of non-carbonated, non-flavored water in single-use plastic bottles of less than 1 gallon in size	Effective 2020; however some cities have postponed their enforcement because of COVID-19 Source: https://sustainablepracticesltd.org/bottle-ban
LAX Airport		Single-use plastic water bottles must be replaced with alternatives. implementation of 60 hydration stations throughout LAX; employs a phase-out approach to help current business transition	Businesses with current leases have until June 30, 2030 to comply with changes; new businesses must immediately comply with this policy Source: https://losangeles.cbslocal.com/2021/07/09/single-use-plastic-water-bottles-phased-out-lax-van-nuys-airport-june-2023/
City of London, UK	London Drinking Foundation Fund and Refill London	London Drinking Foundation Fund: Provides almost six million dollars to increase the number of drinking water	Enforced through the help of environmental non-profit organizations, such as Thames Water Source: https://www.london.gov.uk/what-we-do/environment/waste-and-recycling/single-use-plastic-bottles

		<p>fountains across London</p> <p>Refill London:</p> <p>Encourages shops, businesses, and cafes to offer members of the public free tap water refills in order to decrease reliance on plastic water bottles</p>	
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Appendix 3. Labeling Ordinances

Entity	Policy	Scope	Enforcement/Source
State of California	Environmental Advertising: Recycling Symbol	Prohibits corporations from using the chasing arrows recycling symbol on any product or packaging that has not met the state's recycling	<p>CalRecycle will determine if the product meets certain design criteria, such as amount of recycled content and toxic chemicals in the product</p> <p>Source: https://leginfo.legislature.ca.gov/faces/bi </p>

		<p>criteria. These provisions also cover all consumer goods and packaging sold in the state</p> <p>Builds upon California law that prohibits companies from using words like “recyclable” or “biodegradable” without supporting evidence.</p>	IITextClient.xhtml?bill_id=202120220SB343
European Union	Initiative on Substantiating Green Claims	<p>The European Green New Deal states that companies making green claims have to substantiate these against a standard methodology to assess their impact on the environment</p> <p>Also the 2020 Circular Economy Action Plan calls on companies to substantiate their environmental claims using Product and Organization</p>	<p>European Union states have the responsibility of passing policies that mirror the standards of the EU</p> <p>Source:</p> <p>https://ec.europa.eu/environment/eussd/smgp/initiative_on_green_claims.htm</p>

		<p>Environmental Footprint methods</p> <p>Calls on EU to revise consumer law to empower consumers for active participation in green transition</p>	
United States Federal Trade Commission	Green Guides	<p>States that marketers should not make “broad, unqualified, general environmental benefit claims” that are not connected to the substantial evidence.</p> <p>Marketers should make clear and specific claims that highlight the specific benefit to the product</p> <p>Establishes standards that companies should make to use an environmental claim (such as recyclable, recycled content, refillable, compostable, degradable, etc)</p>	<p>States can use these guides to form their own policies on regulating green labeling.</p> <p>Source:</p> <p>https://www.ftc.gov/news-events/media-resources/truth-advertising/green-guides</p>

European Union	Unfair Commercial Practices Directive	<p>Prevents businesses from misleading consumers through untruthful claims and information.</p> <p>Aims to boost consumer confidence and curb the use of unfair business practices, such as deceptive advertising and aggressive marketing decisions</p> <p>Does not provide specific rules concerning environmental claims</p>	<p>Enforced by European Union states; businesses that violate this law can be sued for legal damages.</p> <p>Source:</p> <p>https://ec.europa.eu/info/law/law-topic/consumers/unfair-commercial-practices-law/unfair-commercial-practices-directive_en</p>
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Appendix 4. Highly Littered Items (Cigarettes, Balloons)

Entity	Policy	Scope	Enforcement/Source
City of San Francisco, CA	Cigarette Litter Abatement Fee Ordinance	A fee of \$0.20 is charged for each pack of cigarettes sold in San Francisco to recover the cost of abating cigarette litter from City streets, sidewalks, and other public properties	<p>The Director of the Department of the Environment may suspend a tobacco sales permit and shall commence enforcement by serving a notice.</p> <p>Source:</p> <p>https://sfenvironment.org/sites/default/files/editor-</p>

		Establishes an Environmental Cigarette Abatement Fund,	uploads/zero_waste/pdf/sfe_zw_cigarette_litter_abatement_ordinance_with_amendments.pdf
City of Glendale, CA	Mylar Balloon Ordinance	Prohibits the sale of Mylar balloons, except if they are filled with air only and are affixed to post or decorative structure at the point of sale	<p>If anyone sells, buys, or uses mylar balloons, they will be charged \$100 for the first offense. This fee can escalate to \$500.</p> <p>Source</p> <p>https://www.glendaleca.gov/government/departments/glendale-water-and-power/safety-security/mylar-balloon-ordinance</p>
City of Hermosa Beach, CA	Ordinance 19-1398	<p>Prohibits the sale and distribution of foil, “metalized” or Mylar balloons.</p> <p>Prohibits the use or distribution of foil, “metalized,” or Mylar balloons on public property, including beaches and parks</p> <p>Prohibits the use or distribution of latex balloons at City functions or City-sponsored events.</p> <p>Prohibits the release of latex balloons anywhere in city limits</p>	<p>Effective November 2019; All affected businesses must achieve compliance before July 2020</p> <p>The City Manager is authorized to promulgate regulations and to take any and all other actions reasonable and necessary to enforce this law. The City Attorney can also seek legal, injunctive, or other equitable relief to enforce this law.</p> <p>Source:</p> <p>https://www.hermosabeach.gov/our-government/city-departments/city-manager/environmental-programs/single-use-plastics</p>

State of California	Assembly Bill No. 2450	<p>Prohibits a person from selling or distributing a balloon constructed of electrically conductive material and filled with a gas lighter than air without affixing the balloon to a weight object.</p> <p>Includes a provision that requires mylar balloon manufacturers to include print warnings about the danger of mylar balloons when they come in contact with powerlines.</p>	<p>Any person who violates this law will be guilty of an infraction, punishable by a fine of \$100. Any person who continues to violate this law will be guilty of a misdemeanor.</p> <p>Source: https://www.latimes.com/california/story/2020-10-15/glendale-bans-mylar-balloons-over-power-outages https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB2450 </p>
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Appendix 5. Corporate Responsibility /EPR Program

Entity	Policy	Scope	Enforcement/Source
State of Maine	An Act to Support and Improve Municipal Recycling and Save Taxpayer Money (LD1541)	Establishes a stewardship program for packaging and paper producers.	<p>Funding for program administration begins July 2022</p> <p>Source: https://www.maine.gov/dep/waste/recycle/epr.html </p>

		<p>Producers of packaging and paper products will pay into a fund based on the amount and the recyclability of packaging associated with their products. These funds will be invested in recycling municipalities to cover recycling and waste management costs.</p> <p>Established stewardship organization will also conduct assessment to identify ways to improve recycling infrastructure</p>	
State of Maryland	HB 36: Environment-Packaging, Containers, and Paper Products-Producer Responsibility (Proposed)	A producer of packaging, containers, and paper products to individually or as part of a stewardship organization submit a covered materials and products stewardship plan to Department of Environment	<p>Would be effective on October 1, 2022 and will prohibit producers from selling or distributing their products if they are not part of a stewardship program by October 1, 2024</p> <p>Source: http://mgaleg.maryland.gov/mgawebsite/Legislation/Details/HB0036 </p>
European Union	Circular Economy Action Plan	Provides EU countries with guidance on how to implement producer	EU countries must meet recycling targets (By 2025- 55% recycling of municipal waste). In order to meet these goals, the EU provides

		<p>responsibility programs</p> <p>Establishes a mandatory extended producer responsibility scheme to be created for all packaging by 2025</p>	<p>guidelines on how countries can implement EPR schemes.</p> <p>Source: https://ec.europa.eu/info/news/new-waste-rules-will-make-eu-global-front-runner-waste-management-and-recycling-2018-apr-18_en </p>
Sweden	Extended Producer Responsibility Legislation for Clothing and Textiles	<p>Producers must collaborate with a licensed collection system, whose operator will manage the collection of textiles.</p> <p>Establishments of accessible collection points that are close to residents</p>	<p>Effective on January 1, 2022; sets goal of reusing 70% by 2028</p> <p>Source: https://www.mrw.co.uk/news/wrap-and-retail-back-epr-for-textiles-18-12-2020/ </p>

Appendix 6. Outreach programs for Environmental Justice Communities (Programs funded by EPA Grants)

Entity	Programs	Scope	Enforcement/Source
San Joaquin Valley, CA	Community Water Center	Provides capacity building, organizing support and technical assistance to low-income communities in order to foster community	<p>Must follow grant requirements established by the EPA</p> <p>Source:</p>

		<p>participation in low water decision making</p> <p>Aims to reduce the potential exposure to toxic chemicals in groundwater</p> <p>Addresses the cumulative impacts of pollution in drinking water sources</p>	https://www.epa.gov/environmentaljustice/environmental-justice-grants#california
State of Arizona	Southeast Arizona Health Education Center, Inc	<p>Uses grants to:</p> <ul style="list-style-type: none"> - Conduct home visits to assess drinking water quality] - Install water filters and update water pipes - Educate the public about water quality 	<p>Must follow grant requirements established by the EPA</p> <p>Source:</p> https://www.epa.gov/environmentaljustice/environmental-justice-grants#california
State of Arizona	Friends of the Santa Cruz River	<p>Investigates hazardous substances in community water sources</p> <p>Conduct water sample analyses and household surveys to understand which areas are most affected by negative water quality</p>	<p>Must follow grant requirements established by the EPA</p> <p>Source:</p> https://www.epa.gov/environmentaljustice/environmental-justice-grants#california

Environmental Protection Agency	Public Water System Supervision Grant Program	<p>Established under Safe Drinking Water Act.</p> <p>This grant should be used for:</p> <ul style="list-style-type: none"> - Developing public water systems - Educate consumers about the safety and quality of public water system - Conduct sanitary surveys of public water systems 	<p>Local communities that receive this grant must use it for projects relations to improving water quality</p> <p>Source:</p> <p>https://www.epa.gov/dwreginfo/public-water-system-supervision-pwss-grant-program</p>
Environmental Protection Agency	Water Infrastructure Finance and Innovation Act Program	<p>A federal credit program provided for eligible water and wastewater infrastructure projects</p> <p>Eligible projects include:</p> <ul style="list-style-type: none"> - Drought prevention, reduction, mitigation project - Energy-efficiency projects at drinking water and wastewater facilities 	<p>Eligibility for these funds are determined by the EPA; states and local governments must use this credit for specific water-related projects</p> <p>Source:</p> <p>https://www.epa.gov/wifia/what-wifia</p>