

Date: July 1, 2017

To: Seattle City Council

From: Mami Hara, General Manager and CEO, Seattle Public Utilities

Re: Seattle Bag Ban Update

Background

In 2011, Seattle City Council passed Ordinance Number 123775 banning the distribution of single-use plastic and bio-degradable carryout bags. In 2016, Council passed Ordinance Number 125165, making several revisions to Seattle's bag regulations, including requiring compostable bags to be properly labeled and tinted either green or brown, and disallowing the distribution of non-compostable plastic bags that are tinted green or brown. New reporting requirements were established in Section 2 of Ordinance 125165 and read:

The Director of Seattle Public Utilities shall evaluate at a minimum:

- a) the waste and litter reduction benefits of the City's bag ban program,
- b) strategies to increase bag ban compliance in all stores,
- c) the effectiveness of this ordinance in reducing the number of non-compostable bags contaminating the waste stream, and
- d) strategies to address the impacts of loose plastic bags on curbside recycling.

The evaluation shall be presented in a report to the City Council that recommends any changes in the bag ban program, pass-through charges, or other provisions that are needed to improve program effectiveness. The report should be submitted annually to City Council from 2017 to 2021 no later than July 1 of each year. Based on these reports, the Council may take further action to achieve City waste-reduction goals.

This memorandum serves as our 2017 report to the City Council.

To prepare this report, SPU was assisted by research conducted by Public Service Clinic student consultants Elise Evans, Allison Fina, and Chuong Pham of the Evans School of Public Policy and Governance, University of Washington, herein referred to as Evans School Student Consultants.

Evaluation

a) The waste and litter reduction benefits of the City's bag ban program.

The "waste" (garbage) benefits of the City's bag ban program can be documented through the SPU's residential waste composition study. This study is conducted on approximately a 4-year rotational basis, and was last done in 2014. Categories used to separate and measure materials include a separate category for clean shopping and dry cleaner bags.

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As documented in the Seattle Bag Ban Update Report provided to Council in 2016, between 2010 and 2014, the amount of plastic bags in residential garbage declined from 262 tons to 136 tons, a nearly 50% decrease over a four-year period. Decreasing the quantity of plastic bags shipped for landfilling also reduces the problem of plastic bags blowing around at the landfill site that need to be captured by fencing, cleaned up by employees, and risk becoming litter.

Plastic bags have been found to be a significant contributor to litter in the environment. There are numerous activities and programs in Seattle that address litter or are impacted by litter, such as street cleaning, catch basin inspections and cleaning, litter abatement and collection, and Adopt-a-Street. However, to date we have not found any relevant composition studies or other information that would establish a base-line and provide a means of measuring reductions in plastic bag litter in Seattle because of the bag ban. Implementation of an adequate study is likely cost prohibitive.

Regardless of the lack of specific measurement tools, we know that there has been a significant reduction in use of plastic carryout bags in Seattle. On-site visits and surveys in 2016 and 2017 show that the vast majority of grocery stores, pharmacies, and clothing stores visited are not providing customers with thin plastic carryout bags as they were prior to the bag ban. While many convenience stores continue to provide plastic carryout bags and there is much work to be done to improve their compliance, many other convenience stores are compliant.

We can assume that when fewer plastic carryout bags are provided to customers, fewer also become litter, just as fewer end up in the garbage. Benefits are many, including less marine debris, fewer bags clogging storm drains, and fewer bags to clean up through handpicking and street cleaning. However, we are currently unable to quantify the specific benefits.

Carry-out Bag on Seattle Storm Drain

SPU next steps:

- Continue to look for examples of plastic bag ban related litter studies conducted elsewhere to consider their findings and potential for replication in Seattle. SPU will also consider collaborative efforts to document litter reduction strategies.
- Continue to have a separate category for plastic shopping bags in SPU's periodic residential waste composition study and consider further refinements to that category prior to the next scheduled study.

b) Strategies to increase bag ban compliance in all stores.

SPU is using the new bag requirements passed in 2016 and effective July 1, 2017 to "refresh" our outreach, engagement, and enforcement of all the bag regulations. Contacting retailers about the new requirements allows SPU staff to reengage with retailers on the existing requirements as well.

The first step of this outreach is to inform retailers of the new requirements, while also reminding them of the existing requirements. Steps taken to date include:

- Revised SPU Bag Requirements website and created new outreach materials.
- Provided information through multiple emails to Seattle's Bag and Packaging Stakeholder Group listserve and informed them of stakeholder meeting to be held in March 2017 (about 350 recipients).
- Mailed Bag Requirements letter and information to 6,000 retail/grocery sites in February 2017. (Attachment A)



- Held stakeholder meeting in March 2017 to review existing bag regulations and upcoming changes.
- Mailed bag requirements summary postcard to 6,000 retail/grocery sites in April 2017. (Attachment B)
- Provided information and resources to key retail trade organizations.
- Provided information on current requirements and upcoming changes at numerous business-oriented events, along with other outreach materials on packaging, recycling, and composting requirements.

SPU's strategy is to focus our efforts in the latter half of 2017 on large- and mediumsized grocery stores and begin efforts with produce stores, smaller groceries, and ethnically-owned grocery store, continuing that effort into 2018, to ensure that these stores have eliminated use of green-tinted plastic produce and other prohibited bags. The Evans School Student Consultants visited 49 retail stores and found that about 20% of them continued to provide single-use plastic carryout bags. They visited 17 grocery stores representing all the major chains and several independent stores and found that only 35 percent (6 grocery stores) were currently using green tinted plastic bags while approximately 24 percent (4 grocery stores) were still using plastic carryout bags. A summary of their site visits is included as Attachment C.

Focusing on large- and medium-sized grocery stores first will allow SPU to quickly ensure compliance with the tinting restrictions, as well as address plastic carryout bag compliance issues. Stores will first be mailed a notice that inspections are upcoming in their area. Stores will then be visited and provided assistance and information, in conjunction with recycling and composting requirement outreach visits. Non-compliant locations will receive a follow-up visit that may begin the enforcement process.

Convenience stores present a greater challenge. There are many of them and roughly half may be compliant with the thin plastic carryout bag ban, while the other half is not. The Evans School Student Consultants visited 9 convenience stores and found that approximately 56 percent (5 convenience stores) were still using plastic carryout bags. Special culturally competent outreach materials and approaches will be needed to succeed with convenience stores. SPU's intent is to report more specifically on our strategy in the 2018 Bag Ban Update Report and begin this work with convenience stores in the latter half of 2018 and continue in 2019.

Documenting the degree of compliance will be possible through information gathered through the outreach strategy described above combined with periodic surveys and site visits, such as those conducted by the Evans School Student Consultants in 2017 and a SPU staff intern in 2016.

SPU next steps:

- Continue to use new ordinance requirements to refresh and relaunch Seattle bag requirements outreach and education.
- Implement outreach, education, and enforcement strategies, with focus on groceries beginning July 2017, continuing in 2018.
- Develop and include in 2018 Bag Ban Update Report to Council the strategy and materials for focus on convenience stores in late 2018, continuing in 2019.
- Document compliance through these efforts and through future periodic surveys and site visits by Evans School Student Consultants, if available.



c) The effectiveness of this ordinance in reducing the number of non-compostable bags contaminating the waste stream.

Non-compostable plastic bags are a contamination problem in the compostable waste stream.

SPU has participated with the Washington Organics Contamination Reduction Workgroup (WOCRW) to examine compost contamination issues and seek solutions. WOCRW, through surveys, confirmed that plastic bags are considered the most prevalent contaminant by compost facilities and recycling educators throughout the region. Some people are mistaking green tinted plastic bags as being compostable and are putting food scraps in these bags into their organics cart. Eliminating green tinted plastic produce and other bags in Seattle will help this situation. There is also a problem with clear tinted bags contaminating compost, which will continue to be addressed through public outreach and education. Compost facility representatives have expressed support for plastic bag bans as

potentially limiting the number of bags that can be mistakenly put into the compost cart. They have also acknowledged that plastic film will continue to be a problem and that it is possible to remove larger pieces of plastic film with special equipment, though it is costly to do so. Some contaminants, such as glass and small hard plastics are much more difficult to remove. SPU has no means to determine the impact of Seattle bag regulations at compost sites as other programs without similar regulations also deliver to those facilities, and the compost facilities do not conduct detailed incoming composition studies due to costs.



Plastic Contamination at a Compost Facility

However, SPU will be able to measure the impact of our regulations through our residential organics composition studies that are conducted on a four-year rotating schedule. These studies examine what materials are placed within curbside organics carts. The last studies were conducted in 2012 and 2016 (results pending). To effectively measure this impact, the material categories used in the study need to be expanded and revised in the future.

Point of interest. Seattle's new bag requirements regarding green tinting of compostable bags and banning the green tinting of non-compostable plastic bags, such as produce bags, has drawn interest by many entities for similar legislation or for developing new products. Several companies have expressed intent to market green-tinted compostable produce bags with special instructions on them. The instructions will be how to use the compostable produce bag to collect food scraps for placing in the organics cart. These bags may be offered in some Seattle stores by the end of 2017.

SPU next steps:

- Continue to work with the Washington Organics Contamination Reduction Workgroup to address plastic film and other contamination issues.
- Add categories to SPU's future residential organics composition studies to include categories such as green tinted plastic bags containing food scraps, clear plastic bags containing food scraps, other plastic packaging containing uneaten food, and compostable bags. This will also assist SPU's efforts to understand when food is wasted and how to prevent food waste.

d) Strategies to address the impacts of loose plastic bags on curbside recycling.

SPU participated in the Department of Ecology stakeholder group that developed a report titled

Optimizing the Commingled Recycling Systems in Northwest Washington. The report finds that plastic bags, when included in single stream recycling programs, create significant problems and costs at the material recovery facilities receiving and sorting materials. They clog screens designed to separate containers from paper. To unclog screens, equipment must be shut down several times a day and employees must hand cut the plastic bags from the equipment, which is a difficult and dangerous job. Plastic bags also contaminate other commodity streams, especially paper. Bags that are successfully sorted for recycling are typically too dirty and contaminated for domestic markets and are typically exported to Asia.



Plastic Wrapped Around Sorting Screens at Materials Recovery Facility

Seattle's bag regulations assist this situation by reducing the number of single-use plastic carryout bags that might otherwise be put into the recycling cart. Even so, our recycling composition studies from 2010 and 2015 (draft) show an increase in plastic bags and packaging in the recycling stream. The plastic bag and packaging category includes far more types of bags and film than just plastic carryout bags, so a clear assessment of the impact of the bag ordinance cannot be made. To minimize the impact of single plastic bags at the material recovery facility, SPU instructs customers to "bag" plastic bags within another plastic bag. This message is included in our recycling instructions that are widely distributed. Bagged bags have a greater chance of being pulled off the sort line by material recovery facility employees before entering screening equipment, where they are a problem. However, not everyone bags their bags, many of the bagged bags are not pulled off the front of the sort line, and bags of bags may be breaking open during the transportation and pre-sort line handling.

An alternative to curbside collection of plastic bags is to return bags to retailer collection programs. Bags collected in these programs stay cleaner than curbside collected bags and can be marketed and recycled domestically. Some retailers provide bag collection at their retail locations and some of these participate in the Wrap Recycling Action Program (WRAP). This program provides an online tool for customers to find stores providing bag collection and assists retailers with signage, best management practices and other tools and resources. WRAP has partnered with the Sustainable Packaging Coalition's *How to Recycle* label for plastic bags. This label is now available for use on flexible packaging that qualifies as compatible with other collected bags and film plastics in WRAP program. WRAP program participants accept a wider range of bag and film materials than are accepted in Seattle's curbside program. Increasing the availability and use of bag recycling through retailer programs would reduce the quantity of bags in curbside recycling and increase the ability to recycle those bags domestically.



SPU next steps:

- Continue to emphasize that bags placed in recycling carts must be bagged.
- Consider if revisions to categories used in future residential recycling composition studies are warranted. It may be useful to separately categorize bagged bags from single bags for instance.
- Continue to pursue expanded retailer bag take back programs. SPU and others in the region have begun discussions with the WRAP program and retailer organizations about expanding WRAP participation throughout Seattle and the region.
- Explore what would be required for plastic bags from curbside collection to be processed domestically.

Summary of Next Steps

Waste and Litter impacts

- Continue to look for examples of plastic bag ban related litter studies conducted elsewhere to consider their findings and potential for replication in Seattle. SPU will also consider collaborative efforts to document litter reduction strategies.
- Continue to have a separate category for plastic shopping bags in SPU's periodic residential waste composition study and consider further refinements to that category prior to the next scheduled study.

Strategies to increase bag ban compliance in all stores

- Continue to use new ordinance requirements to refresh and relaunch Seattle bag requirements outreach and education.
- Implement outreach, education, and enforcement strategy with focus on groceries beginning July 2017, continuing in 2018.
- Develop and include in 2018 Bag Ban Update Report to Council strategy and materials for focus on convenience stores in late 2018, continuing in 2019.
- Document compliance through these efforts and through future periodic surveys and site visits by Evans School Student Consultants, if available.

Non-compostable bags contaminating the compost stream

- Continue to work with the Washington Organics Contamination Reduction Workgroup to address plastic film and other contamination issues.
- Add categories to SPU's future residential organics composition studies to include categories such as green tinted plastic bags containing food scraps, clear plastic bags containing food scraps, other plastic packaging containing uneaten food, and compostable bags. This will also assist SPU's efforts to understand when food is wasted and how to prevent food waste.

Impacts of loose plastic bags in curbside recycling stream

- Continue to emphasize that bags placed in recycling carts must be bagged.
- Consider if revisions to categories used in future residential recycling composition studies are warranted. It may be useful to separately categorize bagged bags from single bags for instance.
- Continue to pursue expanded retailer bag take back programs. SPU and others in the region have begun discussions with the WRAP program and retailer organizations about expanding WRAP participation throughout Seattle and the region.
- Explore what would be required for plastic bags from curbside collection to be processed domestically.

Recommendation to Council

We have no recommendations for further Council action regarding the bag ban program, passthrough charges, or other provisions to improve program effectiveness at this time.

Attachment A



City of Seattle Seattle Public Utilities

January 24, 2017 Subject: Seattle Bag Requirements

Please help Seattle and your customers prevent unintentional pollution from plastic bags.

This letter is to inform you that the City Council recently passed Ordinance 125165 which bans the use of green- and brown-tinted non-compostable plastic bags. It also requires compostable bags to be labeled and tinted green. Effective July 1, 2017, no retail store or service in the City of Seattle will be able to use or provide non-compostable single-use plastic bags that are tinted green or brown for customers to bag products in stores, as carryout bags or for home delivery. Also, made permanent in the law is the \$0.05 fee required to be charged to customers requesting large paper bags.

Please plan ahead as you restock replacement bags so that you will be in compliance on or before July 1, 2017. All Seattle businesses must stop using green- or brown-tinted single-use plastic bags that are not compostable by July 1, 2017.

The City Council passed this requirement to help reduce confusion caused by green-tinted plastic bags that are not compostable. Because compostable bags are usually green, residents mistake green plastic bags, like those sometimes used for produce in grocery stores, as compostable. This confusion has created contamination issues at local composting facilities and harms the quality of locally produced compost. Plastic bags mistakenly put into the compost container are very expensive and difficult to remove from the compost, and some break into pieces that cannot be removed. These become a source of plastic pollution in the environment. This new requirement restricts green tinting to compostable bags and prohibits the use of misleading labels on any bag, such as "biodegradable," "degradable," and "decomposable."

Summary of Seattle's Bag Requirements:

- Prohibits all Seattle stores from providing customers with single-use plastic carryout bags.
- Continues the requirement that retail stores charge a minimum of 5 cents for paper carryout bags of 1/8 barrel (882 cubic inches) or larger.
- Prohibits all Seattle retail stores from providing customers with polyethylene plastic or other non-compostable plastic film bags that are tinted green or brown.
- Prohibits all Seattle retail stores from providing customers with film bags that are labeled with the term "biodegradable," "degradable," "decomposable," or any similar terms that in any way imply that the product will break down, fragment, biodegrade, or decompose in a landfill.

Enclosed you will find additional information and resources that you can use to learn about the Seattle bag requirements and inform your employees and customers.

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- Page 2 of 2 -

Thank you for your cooperation and assistance in addressing plastic pollution through the elimination of non-compliant plastic bags. Seattle residents and businesses alike love our beautiful city and surrounding nature—and take pride in our environmental achievements. As a local business, your effort makes a big difference and is greatly appreciated.

If you need further assistance, please call the Green Business Program at the number below.

Sincerely,

Sego Jackson Strategic Advisor Waste Prevention and Product Stewardship Seattle Public Utilities

For additional information contact SPU Green Business Program: GreenBusiness@seattle.gov 206-343-8505

Seattle Public Utilities Bag Requirements website: http://www.seattle.gov/Util/EnvironmentConservation/OurCity/ReduceReuse/PlasticBagBan

NOTICE

Stakeholder Meeting planned for March 1st, 2017. SPU has scheduled a stakeholder meeting for retailers, groceries, and bag manufacturers to come together and discuss the new legislation, the resources the City of Seattle is making available to stores, and bag options from various suppliers and manufacturers. If you are interested in attending the Stakeholder Meeting scheduled for the afternoon of March 1st in downtown Seattle, please contact the SPU Green Business Program to RSVP and receive more details.

> SPU Green Business Program GreenBusiness@seattle.gov 206-343-8505

Seattle Public Utilities 700 5th Avenue, Suite 4900 PO Box 34018 Seattle, WA 98124-4018

Green Business Program (206) 343-8505 Customer Service Contact Center (206) 684-3000 TDD (206) 233-7241

http://www.seattle.gov/util

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Bag Requirements



What the City of Seattle Law Requires:



Seattle Stores:

- May not provide customers with single-use plastic or compostable carryout (shopping) bags, or bags labeled "biodegradable," "degradable," "decomposable" or similar.
- May not provide customers with plastic bags (such as produce bags) that are tinted green or brown.
 Stores can provide approved compostable bags, and they must be colored green or brown.
- May provide customers with any size recyclable paper or reusable carryout bags. Stores must charge a
 minimum paper bag fee of 5 cents for large 1/8 barrel paper bags (paper bags 882 cubic inches or larger).
 - Paper bag charges must be shown on customer receipts. Sales tax applies. Stores keep the paper bag fee.
 - > The large paper bags for which customers are charged must contain at least 40 percent postconsumer recycled fiber, and the minimum recycled fiber content must be printed on the outside of the bag.
 - > Recycled fiber content and labeling is encouraged for all paper bag sizes.
 - > Stores may provide smaller paper bags free or charge customers for them.
- Plastic bags 2.25 mil or thicker are considered reusable bags. Stores may provide them free or charge the customer for them.



Exemptions & Information

Exemptions from the Ban:

- Customers using state or federal food assistance program vouchers or benefits cards are exempt from the 5-cent large paper bag fee.
- Plastic bags used in stores for bulk items or to protect vegetables, meat, frozen foods, flowers and similar items are exempt. Plastic bags cannot be green or brown tinted.* Approved compostable bags are permitted for these purposes.
- Plastic or approved compostable bags used for take-out orders of prepared food from restaurants are allowed.
- Plastic dry-cleaner, newspaper and door-hanger bags are allowed but cannot be tinted green or brown.*

Encouraged:

Choose Reusable Bags

 Single-use bags are wasteful. They also often end up blocking storm drains, littering our streets, polluting our waterways, contaminating compost, and creating more trash.

Bags Still Allowed



Where Does it Go?

206-684-3000

*Requirement is effective July 1, 2017

Seattle Dublic Utilities

For more information: www.seattle.gov/plasticbagban

Attachment B



Seattle

Public
 Utilities
 700 5th Avenue, Suite 4900
 PO Box 34018
 Seattle, WA 98124-4018

For interpretation services please call 206-684-3000. 如治口算服務結定 206-684-3000. 통역 서비스를 원하시면 206-684-3000 빈으로 전회해 주십시오. Wikil adeegyada turjubaanka fadlan wac 206-684-3000. Para sa servicios de traducción, por favor llame al 206-684-3000. Para sa servicios ong tagapagpaliwang, tumawag sa 206-684-3000. Muón yêu câu dịch vụ thông dịch xin gọi số 206-684-3000.

For additional information contact SPU Green Business Program: GreenBusiness@seattle.gov 206-343-8505 Seattle Public Utilities Bag

Requirements website: seattle.gov/PlasticBagBan

Choose Reusable Bags!



PRESORTED STANDARD U.S. POSTAGE PAID SEATTLE, WA PERMIT NO. 6000

Attachment C

The Evans School Student Consultants surveyed 49 retail stores in Seattle, including nine convenience stores, 17 grocery stores, 11 clothing stores, and nine pharmacy stores.

Nearly 80% of stores surveyed did not provide plastic carryout bags. About 20% of stores surveyed were non-compliant and were providing plastic carryout bags.

About 67% of all stores surveyed were fully compliant with the ordinance. Those stores did not provide plastic carryout bags and did charge a minimum of five cents for large paper bags. About 12% were partially compliant, due to not consistently charging customers the minimum of five cents per large paper bag, though they were not providing plastic carryout bags.

Figure 1 Overall Compliance Levels



About 56% of convenience stores surveyed and 24% of grocery stores surveyed were still using plastic carryout bags.

Figure 2 Percentage of each store category surveyed using plastic carryout bags



Percentage of Each Store Category Surveyed

Table 1 shows the type of stores surveyed and their level of compliance with the ordinance, by Council District.

Table 1. Results of Seattle Business Site Visits by Council District

	Council	Full	Partially	
NAICS Type	District	Compliance		Non-compliant
Convenience	District	Compliance	Compliant	X X
		0		^
Convenience	1	×		
Family Clothing Stores	1	×		
Rx & Drug	1	X		
Supermarkets & Grocery	1		×	
Supermarkets & Grocery	1	X		
Convenience	2			X
Family Clothing Stores	2			X
General Line Gorcery Merchant Whole			X	
Other General Merchandise Store	2	X		
Rx & Drug	2	X		
Supermarkets & Grocery	2			X
Supermarkets & Grocery	2	X		
Supermarkets & Grocery	2	X		
Family Clothing Stores	3	X		
Family Clothing Stores	3		X	
Rx & Drug	3	X		
Rx & Drug	3	X		
Supermarkets & Grocery	3			X
Supermarkets & Grocery	3			X
Family Clothing Stores	4	×		
Family Clothing Stores	4	×		
Supermarkets & Grocery	4	0	×	
	4	×	^	
Supermarkets & Grocery	4	x		
Supermarkets & Grocery		Ň		
Convenience	5			×
Family Clothing Stores	5	×		
Family Clothing Stores	5	X		
Rx & Drug	5	X		
Supermarkets & Grocery	5	X		
Supermarkets & Grocery	5	X		
Supermarkets & Grocery	5	X		
Supermarkets & Grocery	5			X
Women's, Childrens, and Infants Cloth		X		
All other General Merchandise Stores	6	X		
Convenience	6	X		
Convenience	6		X	
Convenience	6			X
Convenience	6			X
Family Clothing Stores	6	X		
Convenience	7	X		
Family Clothing Stores	7		Х	
Rx & Drug	7	X		
Rx & Drug	7	X		
Rx & Drug	7	×		
Rx & Drug	7	×		
Supermarkets & Grocery	7	×		
Supermarkets & Grocery	7	×		
Supermarkets & Grocery	7	x		
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