

Plastic Source Reduction Working Group

Meeting #2 Agenda

January 9, 2020
9:00 a.m. to 3:00 p.m.

Department of Health, EHA Conference Room
2827 Waimano Home Road #100
Pearl City, HI 96782

Our objective continues to be the fulfillment of the purposes assigned by Act 254. We seek to achieve the highest consensus possible and conclude our work by October 15, 2020. All agenda times are approximate. We will take detours and breaks as needed. To preserve a full record of the deliberations all meetings will be recorded. URL for the Plastic Source Reduction Working Group:
<http://health.hawaii.gov/shwb/plastic/>

9:00a **Welcome**

- Today's Work
- Brief reintroductions
- Recap of Meeting #1
- Six Meeting Plan (Attachment-A)
- Carryovers
 - Finalize charter signatures
 - Definitions for Working Group glossary
 - ACCORD 3.0 Website for Studies and Reports

9:45 **A 15-Year Working Group “Envisioning” Exercise for the State of Hawai‘i’s Plastics Source Reduction**

- Assume:
 - More, but not unlimited, money to work on the problems
 - Some of Hawai‘i’s plastics source problems have been resolved over the first 5 years
 - Some off-shore national and international plastic sources have been reduced over the next 15 years
 - In 2035 – What is noticeably different if we are touring an international delegation around the state? What would we show them and what would they see?
- What are the key gaps, potholes, and roadblocks on the way to reasonable success?

10:45 Break

11:00 **Exercise: Your Very Best Ideas for Actions the State of Hawai‘i Can Take in the next 5-Years**

- Category 1: Reducing plastics in the State’s waste streams
- Category 2: Recovering plastics from the State’s waste streams
- Category 3: Reuse in the food service industry
- Category 4: Recycling and creating value-added products to innovate

12:00p Lunch Break

1:00 Discussion: Review of the Seven Specific Tasks in Act 254

- Formulate a plan for reducing and recovering plastic from the Hawai‘i waste stream;
- Develop strategies to encourage plastic reduction and reuse in the food service industry, such as reusable container incentive programs for customers;
- Provide recommendations to encourage reuse, reduction, recycling, and recovery of waste and create value added products to innovate and responsibly manage the life cycle of existing resources;
- Consult with each county that has already enacted ordinances related to single-use plastics such as plastic bags and polystyrene foam containers and develop recommendations for the implementation of a uniform, statewide policy for these items that can replace existing county ordinances and provide businesses with laws that are consistent throughout the State;
- Consult with stakeholders to develop appropriate exemptions to address concerns of health and safety, lack of suitable alternative products on the market, and lack of infrastructure;
- Evaluate potential life-cycle and environmental implications of replacing plastic packaging with alternative products; and
- Submit a report of its findings and recommendations, including recommendations for pilot projects for Hawai‘i businesses to phase out single-use plastic packaging, promote reuse, and find sustainable alternatives for packaging, as well as any proposed legislation, to the legislature no later than twenty days prior to the convening of the regular session of 2021.

1:45 Possible Adjunct Symposium on Technical and Scientific Issues

2:00 Organization, Purposes, and Launch of Initial Permitted Interaction Groups (PIGs)

- PIG #1 – Tasks 1-3 (Attachment-B)
- PIG #2 – Task 4 (Attachment-C)
- PIG #3 – Tasks 5-6 (Tentative) (Attachment-D)

2:30 Public Comment Period (Until Finished)

3:00 Adjourn

If you require an auxiliary aid or accommodation due to a disability, please contact (808) 586-4226 (voice/tty) or email Lane Otsu at lane.otsu@doh.hawaii.gov. For more information, contact DCAB at (808) 586-8121.

Attachment-A

Six-Meeting Plan for Act 254 Working Group

This describes the general trajectory for the Working Group. It is subject to change and modification as the Working Group moves along

Mtg	PURPOSE	OUTPUTS	SCHEDULE	NOTES
1	Get introduced, get organized, lay foundation, and set tone.	Charter Reliable data Glossary of terms	Nov 14, 2019	Completed with a few carry over tasks to be completed at Meeting #2.
2	Identify a “collective ambition” (vision) and frame possible long-term objectives.	Vision statement with a 15-year timeframe Gaps, speed bumps, and potholes on the road and the objectives they suggest Initial 1st pass at best ideas for Act 254 tasks 1-7 Establish Permitted Interaction Groups 1 and 2	January 9, 2020	Set up permitted interaction Groups (PIGs) 1, 2, and 3.
PIGs #1 and #2 to bring forward proposals on Tasks 1-4 for Meeting #3				
3	Review specific draft proposals on Tasks 1-4 and achieve the highest levels of consensus possible initial recommendations for the full Working Group to consider.	Draft recommendations on 1-4	May 14, 2020 <i>(Proposed)</i>	
PIG #3 to bring forward proposals on Tasks 5-6 from Act 254				
4	Review specific draft proposals on Tasks 5 and 6 and achieve the highest levels of consensus possible on initial recommendations for the full Working Group to consider.	Recommendations on 5-6	June 18, 2020 <i>(Proposed)</i>	
DOH to do a first draft of the Working Group’s Report				
5	Review draft report and achieve highest level of consensus possible.	Second draft of the Working Group report and recommendations.	August 13, 2020 <i>(Proposed)</i>	
6	Final voting on Working Group Report.	Approval of draft	September 24, 2020 <i>(Proposed)</i>	

Attachment-B

Permitted Interaction Group #1 On Reducing, Recovering and Recycling *ACT 254 - Tasks 1, 2, and 3*

Proposed Purpose

Based on preliminary thinking and brainstorming at meeting #2, meet and formulate preliminary proposed plans for:

1. Reducing and recovering plastic from the Hawai'i waste stream;
2. Encouraging plastic reduction and reuse in the food service industry, such as reusable container incentive programs for customers;
3. Encouraging reuse, reduction, recycling, and recovery of waste and creating value added products to innovate and responsibly manage the life cycle of existing resources;

Bring forward such other additional ideas as the PIG may wish to recommend to the Working Group for accomplishing the above.

Proposed Membership

To be determined

Proposed Deadline

Proposed recommendations to be considered at Meeting #3, May 2020.

Logistics and Support

- DOH – SHWB
- Facilitation Team

Attachment-C

Permitted Interaction Group #2 On County Ordinances *ACT 254 - Task 4*

Proposed Purpose

Further review the ordinances enacted in the four counties related to single-use plastics such as plastic bags and polystyrene foam containers and develop recommendations for the implementation of a uniform, statewide policy for these items that can replace existing county ordinances and provide businesses with laws that are consistent throughout the State. Develop such other additional ideas as the PIG may wish to recommend for accomplishing the above.

Proposed Membership

To be determined

Proposed Deadline

Proposed recommendations to be considered at Meeting #3, May 2020.

Logistics and Support

- DOH – SHWB
- Facilitation Team

Attachment-D

Tentative

Permitted Interaction Group #3 On Proposed Exemptions

ACT 254 – Tasks 5 and 6

Proposed Purpose

Based on the work of PIGs #1 and #2 and informed by discussions at Meeting #3, prepare proposed recommendations for exemptions to address health, safety, lack of suitable alternative products, and lack of infrastructure and potential life-cycle and environmental implications of replacing plastic packaging with alternative products, and develop such other additional ideas as the PIG may wish to recommend to the Working Group for accomplishing the above.

Proposed Membership

To be determined

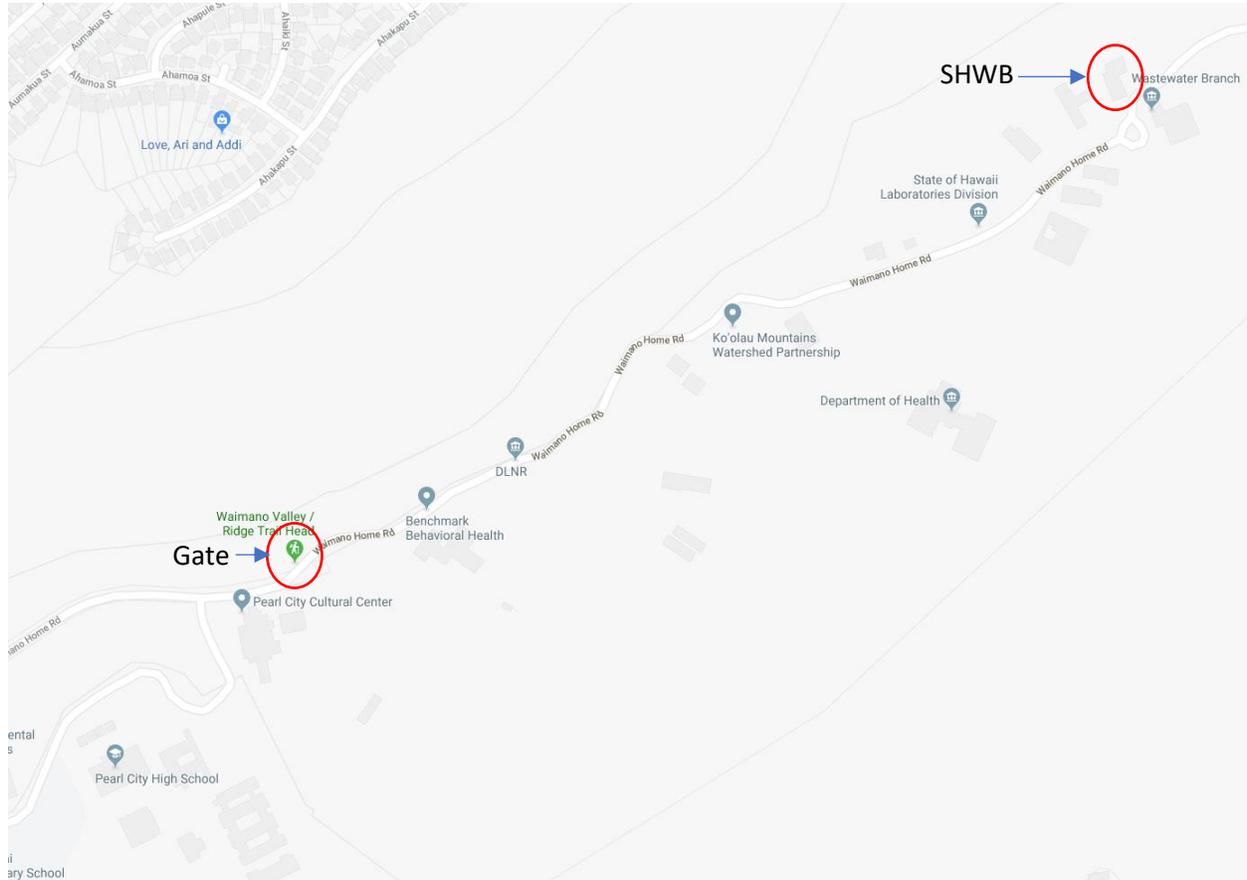
Proposed Deadline

Proposed recommendations to be considered at Meeting #4, June 2020.

Logistics and Support

- DOH – SHWB
- Facilitation Team

Directions to Solid & Hazardous Waste Branch (SHWB): 2827 Waimano Home Road, Pearl City



We're at the very top of Waimano Home Road—past the Pearl City Cultural Center.

There is a security gate next to the Waimano Valley/Ridge Trail Head, stop for the guard and he/she may ask to see your ID.



Once you go through the gate, keep driving all the way up (0.8 miles) to get to our building. Once you reach the top (circle with flag pole), take a LEFT. There's two buildings, the Solid & Hazardous Waste Branch is in the short (one story) building. You can park wherever there's an open spot.



Overflow parking is available in the vacant lot below our building:



Charter of Commitments

Plastic Source Reduction Working Group

I. Purpose.

This document describes the purpose and procedures of the Plastics Source Reduction Working Group (“WG”). The Charter serves as a “Terms of Reference” document and is intended to help us meet our aspirations and schedule and engage in disciplined and productive discussions. It is flexible and can be amended, modified, or abandoned by a simple majority of WG signatories.

II. Mission.

As mandated by Act 254 and expanded and clarified by the WG, and enabled by the Department of Health’s Solid and Hazardous Waste Branch (“SHWB”), the WG brings together representative stakeholder groups to:

1. Formulate a plan for reducing and recovering plastic from the Hawaii waste stream;
2. Develop strategies to encourage plastic reduction and reuse in the food service industry, such as reusable container incentive programs for customers;
3. Provide recommendations to encourage reuse, reduction, recycling, and recovery of waste and create value added products to innovate and responsibly manage the life cycle of existing resources;
4. Consult with each county that has already enacted ordinances related to single-use plastics such as plastic bags and polystyrene foam containers and develop recommendations for the implementation of a uniform, statewide policy for these items that can replace existing county ordinances and provide businesses with laws that are consistent throughout the State;

5. Consult with stakeholders to develop appropriate exemptions to address concerns of health and safety, lack of suitable alternative products on the market, and lack of infrastructure;
6. Evaluate potential life-cycle, fiscal, functionality, and environmental implications of replacing plastics with alternative products; and
7. Submit a report of its findings and recommendations, including recommendations for pilot projects for Hawaii businesses to phase out single-use plastic packaging, promote reuse, and find sustainable alternatives for packaging, as well as any proposed legislation, to the legislature no later than twenty days prior to the convening of the regular session of 2021.

III. Membership.

Representative stakeholder interest groups were identified in Act 254 and invited to be represented. Members of the WG are the signatories at the end of this document.

IV. Organization and Coordination.

The WG will be logistically managed by SHWB staff and facilitated by Peter S. Adler, PhD and Layla Kilolu of The *ACCORD3.0 Network* (www.accord3.com). Substantive representation and participation at the table for DOH will be handled by others.

The job of the SHWB staff and the ACCORD facilitation team is to help the WG address the tasks requested in Act 254 and come to the highest possible consensus on recommendations to the Legislature. The SHWB staff and facilitation team will help the WG prepare for meetings, identify and prioritize critical issues, and organize working materials, so that the WG's purposes are accomplished and summarized in a final report.

More specifically, the team can be expected to:

1. Ensure that a reasonably diverse range of knowledgeable perspectives is brought to bear on discussions.
2. Ensure that no single group or person is allowed to hijack or dominate discussions or to disadvantage the expression of other perspectives.

3. Encourage all members of the WG to articulate their questions, concerns, and suggestions to inform a thorough and defensible effort.
4. Remain impartial on the substance of the issues being discussed while proactively ensuring that all WG members collectively prioritize which issues are most important to discuss and resolve.
5. Ensure that members of the WG understand that they cannot use Adler, Kilolu, and the SHWB staff to advance any pro- or con- advocacy agendas.
6. Encourage members of the WG to work together, build and maintain cohesion, and work towards the highest levels of congruent, fact-informed conclusions that can be achieved.
7. Encourage the fullest disclosure and exchange of information vital to accomplishing the WG's goals.

V. Spirit of the Process.

For WG Members, this is a collaborative and non-adversarial process to address challenging issues. It will not pit one orientation or faction against others. Instead, it will involve mutual inquiry and collective dialogue where each member is guided by the following principles:

- We will be rigorous and tough on the problems;
- We will be easy and collegial with each other;
- We will stay focused on the best data and evidence available understanding that much data remains incomplete or not yet available; and
- We are willing to modify personal and collective views when the cumulative evidence points in a different direction than you thought.

By signing this Charter, we commit to these principles of interaction.

VI. Rules of the Road.

1. **KNOWLEDGE.** WG members have been invited for their diverse types of knowledge, experience, and expertise in areas related to plastics. All members are willing to exercise their expertise and work collaboratively with others.
2. **VOLUNTEERS.** All members of the WG serve as volunteers and commit to serve for an expected six meetings in 2019 and 2020. Homework between meetings is expected.
3. **COLLABORATION.** The WG is a cooperative and, to the extent possible, evidence-based inquiry. This means that each member is willing to work with others they may disagree with towards the common goal of answering the questions it was formed to address. This requires substantive, procedural, and social introspection and a willingness to assume good intentions when disagreement arises.
4. **CIVILITY.** Candor is prized along with the courtesies and etiquettes conducive to high quality deliberation. This means sharing airtime; not monopolizing discussions; focusing on factual information; listening to others; remaining patient; and staying on topic.
5. **WILLINGNESS TO ASSUME RESPONSIBILITIES.** Members of the WG may be asked to present materials, recruit speakers, research issues, help draft sections of a final report, or perform other tasks for the project. While every effort will be made to distribute workloads and respect individual members' availabilities, the success of the effort depends on all members having their oars in the water. All members so agree.
6. **ALTERNATES.** While every effort will be made to schedule briefings and meetings at a time convenient to most members, continuity of learning will be important. It is understood that WG members may have to miss a meeting or two and may send an alternate. Each member agrees to keep alternates up to speed and ready to function as full members in their absence. Alternates will be expected to inform the standing member of that meeting's discussions so that the member will be fully prepared for the next meeting.
7. **BETWEEN MEETINGS.** As needed, the WG may organize Permitted Interaction Groups ("PIGs") in which the WG may designate two or more board members, but less than the number of members that would constitute a quorum, to tackle specific

tasks between meetings and report back to the full WG.

8. **LOCALE.** All WG meetings will be held on Oahu. Travel for Neighbor Island members will be procured by SHWB staff.
9. **OPEN MEETINGS.** The WG's meetings will be noticed and conducted pursuant to HRS Chapter 92. Observers and attending members of the public will be offered time for brief comments at the end of each meeting.
10. **DOCUMENTATION.** A court reporter may serve as the project's official documentarian. A website for meeting minutes and other documents will be established.
11. **PUBLIC COMMENT.** WG members and the Project Team agree to withhold public comments on social media and other personal evaluations of other members and their views and positions until the project is completed. This means not blogging. However, it is understood that WG members will need to keep their own constituencies informed of the issues and options under consideration.
12. **PUBLIC STATEMENTS.** No member of the WG will speak on behalf of the WG except facilitator Peter Adler. Adler will not characterize the substance of the deliberations other than to describe progress with the process.
13. **FACILITATOR INDEPENDENCE AND NEUTRALITY.** Peter Adler and Layla Kilolu of *The ACCORD3.0 Network* commit to remaining independent and neutral on the issue of plastic source reduction. The work of coming to substantive conclusions rests entirely on the WG. Adler and Kilolu will adhere to the guidelines for mediators promulgated by "Mediation Rules, Procedures & Protocol Of Dispute Prevention & Resolution, Inc." and the mediator guidelines of the State of Hawai'i Judiciary.¹
14. **FINAL REPORT.** The discussions of the WG will build on each other and all members agree to keep up and stay informed. No decisions will be final until votes have been taken at Meeting #6. Each member of the WG who wishes will be afforded the opportunity to write a personal concluding statement regarding the process and the decisions and recommendations made. Personal statements will be limited to a

1. ¹ <https://dprhawaii.com/dpr-rules/>) and https://www.courts.state.hi.us/services/alternative_dispute/selecting/guidelines/introduction

maximum 1,500-word count and will be made available as an annex to the Final Report.

15. DATA. All WG members are encouraged to bring relevant social, economic, and environmental data and pertinent empirical studies to the table. The purpose of bringing data to the WG is to help accumulate a body of evidence that informs the topic of plastic source reduction in Hawai'i. From high to low, the WG will afford credibility and weight to:

- Meta Studies
- Individual peer reviewed studies from reputable journals
- *PLOS ONE* studies in which editors have evaluated research on the basis of scientific validity, rigorous methodology, and high ethical standards.
- Unpublished but publicly available data sets
- Other information and data

16. MUTABILITY. These rules are intended to be implemented with flexibility and may be expanded or changed by the WG by a majority votes.

VII. Decision Making.

There will be numerous smaller and larger decisions to be made by the WG. Procedural decisions may range from the locations, dates and times of meetings to matters of research and the formation of task-specific PIGs. Substantive decisions may range from the priority of issues to be discussed and recommendations as to future studies and methodologies that should be provided to relevant decision makers following the life of the WG.

Wherever possible, the WG will operate by the highest consensus possible. Full consensus decisions are those everyone in the WG can support, or at a minimum, for which there is “no objection.” The Facilitators may call for straw votes of those voting members who are present, which will be recorded. However, all final and concluding decisions will be deferred until Meeting #6 with all WG members present. Nothing will be considered “final” until a bundle of recommendations has been voted on.

VIII. Schedule.

With flexibility, and subject to revisions, the WG will meet for six meetings at dates and times to be established commencing on November 14, 2019.

IX. Inquiries.

Inquiries about the project and the process may be directed to: Peter S. Adler, PhD at padleraccord@gmail.com. Adler can also be reached at 808-888-0215.

<i>Signatures</i>	<i>Date</i>	<i>Organization</i>
_____ Lene Ichinotsubo	_____	Department of Health
_____ Catherine Gewecke	_____	Department of Land & Natural Resources
_____ Clifford Inn	_____	Department of Land & Natural Resources
_____ Chris Tatum	_____	Hawaii Tourism Authority
_____ Allison Fraley	_____	County of Kauai
_____ Sanne Berrig	_____	County of Hawaii
_____ Tamara Farnsworth	_____	County of Maui
_____ Justin Gruenstein	_____	City & County of Honolulu
_____ Danielle Bass	_____	Office of Planning

<i>Signatures</i>	<i>Date</i>	<i>Organization</i>
_____ Dooraee Shin	_____	Surfrider Foundation
_____ Nicole Chatterson	_____	Zero Waste Oahu
_____ Rafael Bergstrom	_____	Sustainable Coastlines Hawaii
_____ Lauren Zirbel	_____	Hawaii Food Industry Association
_____ Victor Lim	_____	Hawaii Restaurant Association
_____ Sherry Menor-McNamara	_____	Chamber of Commerce Hawaii
_____ David Thorp	_____	American Beverage Association
_____ Adrian Hong	_____	Island Plastic Bags, Inc.
_____ Bruce Iverson	_____	Reynolds Recycling, Inc.

Plastic Source Reduction Working Group
 Terms and Definitions
 Meeting #2

Term	Proposed	Dictionary	Statute / Administrative Rules
Biodegradable	Capable of being decomposed naturally overtime.	Capable of being broken down especially into innocuous products by the action of living things (such as microorganisms). <i>(Merriam Webster.com)</i>	"Bioconversion" means the processing of the organic fraction of the waste stream through biological or chemical means to perform composting or generate products including, but not limited to, fertilizers, feeds, methane, alcohols, tars, and other products. This term includes, but is not limited to biogasification, acid hydrolysis, pyrolysis, and fermentation. This term does not include any form of incineration or methane gas extraction from a municipal waste landfill. <i>(Hawaii Administrative Rules §11-58.1-03)</i>
Carbon neutral	Means that a city or state is removing as much carbon dioxide from the atmosphere as it's putting in. The net amount of carbon emissions is zero. This can be achieved through carbon offsets like carbon sequestration or planting trees. www.npr.org/2019/06/18/724343789/going-zero-carbon-is-all-the-rage-but-will-it-slow-climate-change	Having or resulting in no net addition of carbon dioxide to the atmosphere. <i>(Merriam Webster.com)</i>	None found
Compostable	<p>(as it applies to food service ware): all materials in a product or package that will break down, or otherwise become part of usable compost (e.g., soil-conditioning material, mulch) in an appropriate * composting program or facility. Compostable disposable food service ware includes ASTM-standard paper and bio-plastics (plastic-like) products that are clearly labeled so that any compost collector and processor can easily distinguish the ASTM-standard compostable material from non-ASTM standard compostable plastic. (* industrial or commercial would be preferable qualifiers as technical specifications are reflected by that term)</p> <p>This definition of compostable is loosely derived from Section 20-62 of Hawai'i County Code 1983 (2016 Edition, as amended).</p>	Compost: A mixture that consists largely of decayed organic matter and is used for fertilizing and conditioning land. <i>(Merriam Webster.com)</i>	<p>"Compost" means a relatively stable, decomposed, organic, humus-like material, generated by a composting facility, that is suitable for landscaping or soil amendment purposes. <i>(Hawaii Revised Statutes §342G-1)</i></p> <p>"Composting" means a process in which organic solid wastes, such as biosolids (sewage sludge), green or yard waste materials, manures, and non-treated wood chips and shavings, are biologically decomposed and stabilized under controlled conditions to produce a stable humus-like mulch or soil amendment. This term includes the processing of organic and non-treated wood waste materials for the generation of wood chips or other materials that can be used as soil amendment, planting mixes, mulches for horticultural and agricultural applications, landfill cover, and land reclamation. The process of composting under methods approved by the department is a recycling activity. Land application of</p>

			uncomposted organic solid waste shall not be considered an approved solid waste management activity except as a portion of the United States Department of Agriculture-Soil Conservation Service approved Land Improvement, Soil Stabilization or Reclamation Plan. <i>(Hawaii Revised Statutes §342G-1)</i>
Dunnage	loose materials used to support and protect cargo in a ship's hold; also, padding in a shipping container, (in the context of the PSRWG) packing material that may legally be discarded by a cargo ship beyond a prescribed distance from nearest land according to the International Convention for the Prevention of Pollution from Ships (MARPOL).	Loose materials used to support and protect cargo in a ship's hold. <i>(Merriam Webster.com)</i>	None found
Fresh water based	"That which is based in habitats or ecosystems consisting of waters with a dissolved inorganic ion concentration of less than 0.5 parts per thousand, which may include (but is not limited to) habitats such as rivers, streams, lakes, springs, wetlands, etc."	Fresh water: water that is not salty, also water that is considered suitable for consumption. <i>(Merriam Webster.com)</i>	None found
Greenhouse gas footprint		Greenhouse gas: any of various gaseous compounds (such as carbon dioxide or methane) that absorb infrared radiation, trap Heat in the atmosphere, and contribute to the greenhouse effect. <i>(Merriam Webster.com)</i>	"Greenhouse gases" means the air pollutant defined as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. <i>(Hawaii Administrative Rules §11-60.1-1)</i>
Land-based	material originated from land and ended up in waterways and the ocean, typically from being littered or being blown out of trash cans or washed away by rain/storms.	Located on or living on the land. <i>(Oxford Learner's Dictionaries)</i>	None found
Life cycle		A series of stages through which something (such as an individual, culture, or manufactured product) passes during its lifetime. <i>(Merriam Webster.com)</i>	None found
Marine debris	Means any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment. <i>(based on NOAA definition)</i>	The series of stages in form and functional activity through which an organism passes between successive recurrences of a specified primary stage. <i>(Merriam Webster.com)</i>	None found
Marine based	In the context of marine debris, "marine-based" infers the point of origin of any debris or pollution/discharge that is 1) accidentally introduced into the marine environment from a commercial, recreational or military ship, or from a stationary or drifting barge, platform or rig that is situated off shore, or 2) purposely introduced into the marine environment from the aforementioned types of vessels and structures during normal operation in accordance with	Marine: of or relating to the sea. <i>(Merriam Webster.com)</i>	None found

	the International Convention for the Prevention of Pollution from Ships (<i>MARPOL Standards</i>).		
Marine safe	Means that an item is not harmful to marine life if it ends up in the ocean.	Marine: of or relating to the sea. (<i>Merriam Webster.com</i>) Safe: free from harm or risk. (<i>Merriam Webster.com</i>)	None found
non-point source pollution	Generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrologic modification. Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse source. (<i>U.S. EPA</i>)	Pollution resulting from many diffuse sources. (<i>Wikipedia</i>)	"Nonpoint source pollution" means water pollution that does not originate from a point source. "Point source pollution" means pollution from any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture. (<i>Hawaii Revised Statutes §342E-1</i>)
Persistent organic pollutants	"Persistent organic pollutants (POPs)" are toxic chemicals that adversely affect human health and the environment around the world. Intentionally produced chemicals currently or once used in agriculture, disease control, manufacturing, or industrial processes. Examples include PCBs, which have been useful in a variety of industrial applications (e.g., in electrical transformers and large capacitors, as hydraulic and heat exchange fluids, and as additives to paints and lubricants) and DDT, which is still used to control mosquitoes that carry malaria in some parts of the world. Unintentionally produced chemicals, such as dioxins, that result from some industrial processes and from combustion (for example, municipal and medical waste incineration and backyard burning of trash). (<i>EPA</i>)	A hazardous organic chemical compound that is resistant to biodegradation and thus remains in the environment for a long period of time. (<i>lexico.com</i>)	None found
Plastic	A material consisting of any of a wide range of synthetic or semi-synthetic organic compounds that are malleable and so can be molded into solid objects. Plastics are typically organic polymers of high molecular mass and often contain other substances. They are usually synthetic, most commonly derived from petrochemicals, however, an array of variants are made from renewable materials such as polylactic acid from corn or cellulose from cotton linters. (<i>Wikipedia</i>)	Any of numerous organic synthetic or processed materials that are mostly thermoplastic or thermosetting polymers of high molecular weight and that can be made into objects, films, or filaments. (<i>Merriam Webster.com</i>)	None found
polyfluoroalkyl substances	per- and polyfluoroalkyl substances. "...PFAS are a class of highly fluorinated organic compounds, which translate into fluorine molecules attached to carbon chains of varying lengths."(Thompson, 2019). PFAS are biopersistent, which heightens the risk to living things since they never go away. Studies link PFAS to ulcerative colitis, thyroid disease, high	Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS,	None found

	cholesterol triggering other health impacts, as well as kidney and testicular cancer. PFAS are not naturally occurring, however a 2018 meta-analysis by the Environmental Working Group states that 99.9% of Americans have some level of PFAS in their bloodstream. (Thompson, 2019)	GenX, and many other chemicals. (<i>epa.gov</i>)	
Recovery	means to divert material from disposal for the purpose recycling, or bioconversion. (<i>Based on definition of "recovered material" in Hawaii Revised Statutes §342G-1</i>)	To obtain from an ore, a waste product, or a by-product. (<i>Merriam Webster.com</i>)	"Recovered material" means material that has been diverted from disposal for the purpose of recycling or bioconversion. This term does not include those materials that are generated and normally reused on-site for manufacturing purposes. (<i>Hawaii Revised Statutes §342G-1</i>)
Recyclability	means that something can be made into another product and reused in that new form.	To process material or substances (such as liquid body waste, glass, or cans) in order to regain material for human use. (<i>Merriam Webster.com</i>)	"Recycling" means the collection, separation, recovery, and sale or reuse of secondary resources that would otherwise be disposed of as municipal solid waste and is an integral part of a manufacturing process aimed at producing a marketable product made of postconsumer material. (<i>Hawaii Revised Statutes §342G-1</i>)
Renewable resource		Renewable: Capable of being replaced by natural ecological cycles or sound management practices. (<i>Merriam Webster.com</i>)	None found
Reuse	To use again for its original intended purpose. (<i>Merriam Webster.com</i>)		None found
Single use	A product that is designed and made to be used only once (even though it may be able to be reused) and is then thrown away, recycled or destroyed	Designed to be used once and then disposed of or destroyed. (<i>google.com</i>)	None found
Sustainability	See statutory definition	Of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged. (<i>Merriam Webster.com</i>)	"Sustainability" means achieving the following: 1. Respect of the culture, character, beauty, and history of the State's island communities; 2. Striking balance between economic, social, community, and environmental priorities; and 3. Meeting the needs of the present without compromising the ability of future generations to meet their own needs. (<i>Hawaii Revised Statutes §226-2</i>)
Zero waste	A framework for responsible production and consumption through source reduction in order to minimize pollution, conserve resources, and support social and environmental justice. Following source reduction, zero waste calls for reuse, recycling and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.	Generating little or no waste. (<i>Merriam Webster.com</i>)	None found

Plastic Source Reduction Working Group
County Plastic Bag Ban Comparison Chart

	Prohibitions	Implications for Plastic Source Reduction
County of Hawai'i Ordinance No. 12-1	Businesses shall not provide plastic checkout bags to their customers.	
County of Maui Ordinance No. 3587	<p>(a) Businesses are prohibited from providing plastic bags to their customers at the point of sale for the purpose of transporting groceries or other goods.</p> <p>(b) Nothing in this chapter shall preclude a business from making reusable bags or recyclable paper bags available for sale or without charge to customers at the point of sale for the purpose of transporting groceries or other goods.</p>	
County of Kaua'i Ordinance No. 885	<p>(a) All retail establishments shall provide only the following as checkout bags to customers: recyclable paper bags, biodegradable bags and/or reusable bags.</p> <p>(b) Nothing in this ordinance shall preclude any retail establishment from offering checkout bags for sale to customers.</p>	

Prohibitions		Implications for Plastic Source Reduction
<p>City & County of Honolulu—Ordinance 12-8 <i>Effective July 1, 2015, this ordinance prohibits businesses from providing plastic checkout bags and non-recyclable paper bags to their customers at point of sale for the purpose of transporting groceries or other merchandise</i></p>	<p>Businesses shall be prohibited from providing non-biodegradable plastic and non-recyclable paper bags to their customers at the point of sale for the purpose of transporting groceries or other merchandise. Nothing in this article shall preclude a business from making reusable bags, bags made of biodegradable plastic or recyclable paper bags available for sale or without charge to customers at the point of sale for the purpose of transporting such items.</p>	
<p>City & County of Honolulu—Ordinance 14-29 <i>Effective July 1, 2015, this ordinance amends the plastic bag ban to include a new definition for “compostable plastic bag” to apply a standard to the decomposition of compostable plastic bags. The amendment also included a revision to the definition of “plastic bag.”</i></p>	<p>Businesses shall be prohibited from providing non-biodegradable plastic and non-recyclable paper bags to their customers at the point of sale for the purpose of transporting groceries or other merchandise. Nothing in this article shall preclude a business from making available to customers, with or without charge, at the point of sale:</p> <ol style="list-style-type: none"> 1) reusable bags, compostable plastic bags, or recyclable paper bags available for sale or without charge to customers at the point of sale for the purpose of transporting groceries or other merchandise; or 2) non-recyclable paper bags to protect or transport prepared foods, beverages, or bakery goods. 	

Prohibitions		Implications for Plastic Source Reduction
<p>City & County of Honolulu—Ordinance 17-37 <i>This is the most current bill. Effective July 1, 2018, this ordinance amends the plastic bag ban. Businesses are required to charge customers a min. of \$0.15 per reusable, compostable plastic, or recyclable paper bag they provide to customers at the point of sale for the purpose of transporting groceries or other merchandise. Effective January 1, 2020, plastic film bags with a thickness of 10 mils or less shall no longer be considered “reusable bags,” and compostable plastic bags shall no longer be provided.</i></p>	<p>Except as provided in subsections (b) and (c), businesses shall be prohibited from providing plastic checkout bags and non-recyclable paper bags to their customers at the point of sale for the purpose of transporting groceries or other merchandise.</p> <p>Businesses may provide, at the point of sale, reusable bags, compostable plastic bags, or recyclable paper bags to customers for the purpose of transporting groceries or other merchandise provided that they charge the customer a minimum of 15 cents per bag.</p> <p>Nothing in this article shall be interpreted as prohibiting businesses from providing non-recyclable paper bags, with or without charge, to protect or transport prepared foods, beverages, or bakery goods.</p> <p>After January 1, 2020, compostable plastic bags shall no longer be provided at the point of sale for the purpose of transporting groceries or other merchandise.</p>	

Notable Definitions				
	County of Hawai'i Ordinance No. 12-1	County of Maui Ordinance No. 3587	City & County of Honolulu	County of Kaua'i Ordinance No. 885
Biodegradable			means a substance that can be broken down in the environment by natural processes. (Ord. 12-8)	
Biodegradable bag				means a bag that (1) contains no polymers derived from fossil fuels; and (2) is intended for single use and will decompose in a natural setting at a rate comparable to other biodegradable materials such as paper, leaves, and food waste. The Department of Public Works shall promulgate rules identifying bags meeting this definition. These rules shall also set forth an application process whereby a retail establishment can obtain determination whether a bag is a biodegradable bag.

Notable Definitions				
	County of Hawai'i Ordinance No. 12-1	County of Maui Ordinance No. 3587	City & County of Honolulu	County of Kaua'i Ordinance No. 885
Checkout bag				means a bag that is provided by a retail establishment at the check stand, cash register, point of sale or other point of departure for the purpose of transporting food or merchandise out of the establishment. Checkout bags does not include bags provided solely for produce, bulk food, or meat at a produce, bulk food or meat department within a grocery store, supermarket, produce or meat market or other similar retail establishment.

Notable Definitions				
	County of Hawai'i Ordinance No. 12-1	County of Maui Ordinance No. 3587	City & County of Honolulu	County of Kaua'i Ordinance No. 885
Compostable plastic bag			means a checkout bag that is provided to a customer for the purpose of transporting groceries or other retail goods, that meets current ASTM D6400 Standard Specifications for compostability and that is labeled: With the Biodegradable Product Institute ("BPI") logo as meeting the ASTM standard for compostability; and With "Compostable" on both sides of the bag in either green color lettering that is at least one inch in height, or as otherwise specified; or within a green color band that is at least one inch in height in order to be readily and easily identifiable." (Ord. 14-29)	
Non-biodegradable			means a substance that cannot be broken down in the environment by natural processes (Ord. 12-8)	
Non-recyclable paper bag			means a paper bag that is not a recyclable paper bag. (Ord. 12-8)	
Plastic bag	means a bag that is made from noncompostable plastic or compostable plastic, and is not specifically designed and	means a bag that is made from noncompostable plastic or compostable plastic, and is not specifically designed and manufactured for multiple re-use.	means a bag that is made from non-biodegradable plastic, and is not specifically designed and manufactured for multiple re-use; (Ord. 12-8)	

Notable Definitions				
	County of Hawai'i Ordinance No. 12-1	County of Maui Ordinance No. 3587	City & County of Honolulu	County of Kaua'i Ordinance No. 885
	manufactured for multiple re-use.			
Plastic checkout bag	means a carryout bag that is provided by a business to a customer for the purpose of transporting groceries or other retail goods, and that is made from non - compostable or compostable plastic and not specifically designed and manufactured for multiple re -use.		means a bag that is made from non-biodegradable plastic, and is a carryout bag that is provided by a business to a customer for the purpose of transporting groceries or other retail goods, and is made from [non-compostable] plastic and not specifically designed and manufactured for multiple re-use; (Ord. 14-29) (Ord. 17-37)	
Plastic film bag			means a plastic bag made out of thin flexible sheets of plastic with a thickness of 10 mils or less:	

Notable Definitions				
	County of Hawai'i Ordinance No. 12-1	County of Maui Ordinance No. 3587	City & County of Honolulu	County of Kaua'i Ordinance No. 885
Recyclable paper bag		means a paper bag that: (1) is one hundred percent recyclable, (2) contains a minimum of forty percent post-consumer recycled content, and (3) displays the words "Reusable" and "Recyclable" in a highly visible manner on the outside of the bags.	means a paper bag that: (1) is one hundred percent recyclable, (2) contains a minimum of forty percent post-consumer recycled content, and (3) displays the words "Reusable" and "Recyclable" in a highly visible manner on the outside of the bags. (Ord. 12-8)	means a bag that meets all the following requirements: (1) contains no old growth fiber; (2) is one hundred percent (100%) recyclable overall and contains a minimum of forty percent (40%) post-consumer recycled content; and (3) displays the words "Reusable" and "Recyclable" in a highly visible manner on the outside of the bag.

Notable Definitions				
	County of Hawai'i Ordinance No. 12-1	County of Maui Ordinance No. 3587	City & County of Honolulu	County of Kaua'i Ordinance No. 885
Reusable bag	means a bag that is specifically designed and manufactured for multiple re-use and is (1) made of cloth or other machine washable fabric or (2) made of paper specifically designed for multiple and long-term use.	means a bag that is specifically designed and manufactured for multiple re-use and is (1) made of cloth or other washable fabric, or (2) made of durable material suitable for reuse.	means a bag with handles that is specifically designed and manufactured for multiple reuse and is made of: (1) cloth or other washable fabric; or (2) durable material suitable for reuse, including plastic that is at least 2.25 mils thick. (Ord. 12-8) After January 1, 2020, plastic film bags shall no longer be considered to be "reusable bags." (Ord. 17-37)	means a bag with handles that is specifically designed and manufactured for multiple reuse and is made of cloth or other machine washable fabric and/or is made of a durable material at least 2.25 millimeters thick and suitable for reuse.

Plastic Source Reduction Working Group
County Bans on Polystyrene Comparison Chart

Prohibitions		
County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457	Implications for Plastic Source Reduction
Food vendors are prohibited as of July 1, 2019, from providing food to a customer in disposable food service ware that is made from polystyrene foam.	Food providers shall not sell, use, provide, or offer the use of polystyrene foam food service containers.	
	Polystyrene foam food service containers shall not be sold, used, provided, or offered for use at any County facility, County authorized concession, County sponsored, or County permitted event or County program.	
	Polystyrene foam food service containers shall not be offered for sale or sold in the County.	

Requirements	
County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457
<p>Required use of recyclable or compostable food service ware: -As of July 1, 2019, all food vendors using any disposable food service ware shall use a suitable recyclable or compostable product. -As of July 1, 2019, all county facility users shall use a suitable recyclable or compostable product for disposable food service ware.</p>	

Exemptions		
Subject of Exemption	County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457
Food packaged outside Hawai'i	Foods packaged outside the limits of the County of Hawai'i;	
Ice chests, foam coolers	Coolers and ice chests that are intended for reuse; and	Polystyrene foam coolers and ice chests specifically designed and manufactured for multiple reuse
Meat trays, eggs	Packaging for raw meat, fish, and eggs that have not been further processed.	Polystyrene foam food containers used for raw or butchered meats, poultry, fish, or eggs unless provided for consumption without further food preparation (e.g. sashimi and poke)
Undue hardship	County facility users and food vendors. <ul style="list-style-type: none"> • The director may exempt a food vendor or County facility user from the provisions of this article, in a situation where compliance with the terms of this 	Packaging in situations unique to the food provider where compliance with this chapter would cause significant hardship and there is no affordable alternative to polystyrene foam food service containers provided the food provider applies for an

Exemptions		
Subject of Exemption	County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457
	<p>article would result in undue hardship. The exemption shall be in place for a period of time not to exceed one hundred eighty days.</p> <ul style="list-style-type: none"> • Undue hardship includes, but is not limited to, situations unique to the food vendor or County facility user that generally do not apply to other persons in similar circumstances. • Emergency supplies or services procurement. 	<p>exemption and such exemption is granted by the director</p>
Emergency situation	<p>The mayor may exempt County facility users and food vendors from the provisions of this article, in a situation deemed by the mayor to be an emergency that necessitates such exemption in order to preserve the public peace, health, and safety. The exemption shall be in place until the mayor determines that the emergency situation has ceased and the exemption is no longer needed to preserve the public peace, health, and safety.</p>	<p>Packaging in any situation deemed by the County to be an emergency requiring the immediate preservation of life, health, property, safety, or essential public services. This exemption shall be in place until the emergency has ceased or the mayor has determined the exemption is no longer applicable to the situation.</p>
Protective packaging		<p>Foam blocks or pieces used as protective packaging during shipping (e.g., packing peanuts)</p>

Exemptions		
Subject of Exemption	County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457
No reasonable alternatives		Packaging in situations unique to the type of food where there are no reasonable alternatives to polystyrene foam food service containers provided the food provider applies for an exemption and such exemption is granted by the director

Notable Definitions:		
	County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457
Compostable	means all materials in the product or package will break down, or otherwise become part of usable compost (e.g., soil-conditioning material, mulch) in an appropriate composting program or facility. Compostable disposable food service ware includes ASTM-standard bio-plastics (plastic-like) products that are clearly labeled so that any compost collector and processor can easily distinguish the ASTM-standard compostable plastic from non-ASTM standard compostable plastic.	means materials that are able to undergo biological decomposition or become part of usable compost in a safe and timely manner either in an appropriate composting program or facility or in a home compost pile or device. To qualify as compostable, such food service containers must meet ASTM Standard D6400 for Compostable Plastics as amended
Disposable food service ware	means disposable food containers that are commonly disposed of after a single use, that are used, or are intended to be used, to serve or transport prepared, ready-to-consume food or beverages. This includes but is not limited to: -Service ware for takeout foods and/or leftovers from partially consumed meals prepared by a food vendor; and -Containers that are intended for single use, such as cups; bowls; plates; trays; cartons; or containers that are hinged, lidded or clamshell.	
Food packaging	means all food-related wrappings, bags, boxes, containers, bowls, plates, trays, cartons, cups, lids, or drinking utensils, in which food or beverage is placed or packaged on the retail food establishment's premises, and which are not intended for reuse. Food packaging does not include forks, spoons, knives, straws, stirrers, or single-service condiment packages.	
Food provider	means any vendor, business, organization, entity, group, or individual operating in the County which provides prepared food for public consumption on or off its premises and includes without limitation any store, shop, sales outlet, restaurant, grocery store, supermarket, delicatessen, caterer, catering truck or vehicle; and any organization, group or individual which provides food in conjunction with services.	means any entity or person providing prepared food for consumption within the County including any store, shop, sales outlet, restaurant, bar, pub, coffee shop, cafeteria, caterer, convenience store, liquor store, grocery store, supermarket, delicatessen, food truck, catering vehicle or cart or roadside stand
Food service container		means all plates, trays cups bowls cartons and hinged or lidded containers clamshells on or in which any foods or beverages are placed or packaged or intended to be placed or packaged and designed for one-time use

Notable Definitions:		
	County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457
Food service ware	includes plates, bowls, cups, lids, straws, stirrers, forks, spoons, knives, napkins, trays and other items primarily designed for use in consuming food.	
Food vendor	means any retail food establishment.	
Polystyrene foam	means a thermoplastic petrochemical material utilizing the styrene monomer, which may be marked with resin symbol #6, processed by any number of techniques including but not limited to fusion of polymer spheres (expandable bead polystyrene), injection molding, form molding and extrusion-blow molding (extruded foam polystyrene), sometimes referred to as "Styrofoam," a Dow Chemical Company trademarked form of polystyrene foam insulation. In food service, polystyrene foam is generally used to make cups, bowls, plates, trays, clamshell containers, meat trays and egg cartons intended for a single use. "Polystyrene foam" does not include solid hard polystyrene.	means blown polystyrene and expanded and extruded foams that are thermoplastic petrochemical materials utilizing a styrene monomer and processed by techniques including fusion of polymer spheres expandable bead polystyrene injection molding foam molding and extrusion blown molding extruded foam polystyrene. Polystyrene foam does not include clear or solid polystyrene-oriented polystyrene
Prepared food	means food or beverages, which are served, packaged, cooked, chopped, sliced, mixed, brewed, frozen, squeezed, or otherwise prepared for consumption by a retail consumer on the premises of a retail food establishment, including, but not limited to, beverages, ready to eat, and takeout food. "Prepared food" does not include raw, butchered meats, fish and/or poultry unless provided for consumption without further food preparation. For example, sashimi and poke shall be considered to be prepared food.	means any food or beverage prepared for consumption using any cooking, packaging, or food preparation technique including chopping, slicing, mixing, brewing, freezing, or squeezing and or otherwise prepared for consumption
Recyclables	means material that has reached the end of its current use and is processed into material utilized in the production of new products. For the purpose of this article, recyclable materials will include only those types of plastic being accepted in the Hawai'i County Recycling program.	means used or waste materials that can be treated or processed to be made suitable for reuse whether in their original form or with minimal alterations. For the purposes of this chapter recyclable materials do not include polystyrene foam.

Notable Definitions:		
	County of Hawai'i Ordinance No. 17-63	County of Maui Ordinance No. 4457
Retail Food Establishment	<p>means any sales outlet, store, shop, vehicle, or other place of business which sells or conveys foods or beverages to consumers, which foods or beverages are contained, wrapped, or held in or on food packaging. "Retail food establishment" shall include, but not be limited to, any place where food is prepared mixed, cooked, baked, smoked, preserved, bottled, packaged, handled, stored, manufactured, and sold or offered for sale, including, but not limited to a: restaurant; drive-in; coffee shop; cafeteria; short-order café; delicatessen; luncheonette; grill; sandwich shop; soda fountain; bed and breakfast; inn; tavern; bar; cocktail lounge; nightclub; roadside stand; take-out prepared food place; industrial feeding establishment; catering kitchen; mobile food preparation unit; commissary; grocery store; public food market; produce stand; food stand; or any other place in which food and drink is prepared for sale or for service on the premises or elsewhere; and any other establishment or operation where food is processed, prepared, served, or provided to or for consumers for charge.</p>	