

# Model Food Waste Prevention and Recycling Act

## Purpose and Use of this Model Law

Approximately 40% of the food generated in the United States every year goes uneaten. As a result, food waste represents a significant component of our waste stream. According to the U.S Environmental Protection Agency, food waste is the single largest component of municipal solid waste. Most of this food waste ends up in landfills where it breaks down to produce climate altering methane. In fact, landfills are the third-largest source of methane emissions globally. While methane only accounts for about 11% of greenhouse gas emissions, it lasts much longer and traps significantly more heat in the atmosphere than carbon dioxide does.

On top of the environmental consequences, all this food waste has social and economic impacts as well. Much of this food could be donated to those who need it. One in seven Americans, many of which are children, are food insecure, meaning that they have limited or uncertain access to adequate food. What's more, throwing food away doesn't just deprive those in need, it also amounts to wasting all the time and energy spent growing the food in the first place. All the water, labor, fertilizer, and energy we use to produce and transport the food is lost the second we throw it in the trash.

But it doesn't need to be this way. We can make food waste a thing of the past. Food Waste Prevention and Recycling Laws have emerged as a policy tool aimed at reducing food waste, addressing food insecurity, and growing important food waste recycling systems like composting and anaerobic digestion. The best policies slowly ban the disposal of food waste from landfill and incinerators, while also requiring businesses, institutions, and individuals to find alternative avenues for managing the food waste they create.

This model legislation is designed to be a comprehensive Food Waste Prevention and Recycling Policy that can be implemented in any state. This model legislation does the following:

- (1) Phases Out Food Waste from Landfills and Incinerators. The law slowly bans the disposal of food waste from landfills and incinerators. The law targets large generators of food waste (grocery stores, hospitals, schools, prisons, and other large institutions) first, before slowly ramping down over time to capture smaller generators, before eventually applying to everyone.

This phased-in approach is necessary to allow for development of the hauling and processing infrastructure necessary to manage the food waste once it is no longer eligible for disposal. Under the new law, instead of throwing out food, everyone will have to reduce the amount of food waste they generate and donate excess edible food to food rescue organizations like food banks and food pantries, to the maximum extent practicable. For the food that isn't edible, generators must arrange for their food waste to be sent to farms for use as animal feed or organic recycling facilities. Alternatively, they can recycle the food waste on-site through either composting or anaerobic digestion.

- (2) Requires Source Separation to Keep the Food Waste Recycling Stream Free of Contamination. For many people, compliance with the law will mean utilizing an organic recycling program, such as a composting or anaerobic digestion facility to manage the food waste they generate. With any recycling system, the earlier you separate the targeted material from all other waste, the better the system functions. This is called source separation.

If not properly separated, inorganic food packaging such as containers, bags, produce stickers, and wraps may contaminate the compost or digestate. This creates operational problems for organic recycling facilities and leads to contamination in the final compost or digestate, which poses a risk to human health and the environment when it is used as a soil amendment or fertilizer on farmland.

To address contamination, the law requires all food waste generators to separate all food waste from all other forms of inorganic solid waste, including packaging, at the point of generation, when utilizing a composting or anaerobic digestion service. The law also charges the state environmental department to provide educational resources on the importance of source separation.

- (3) Carves Out a Limited and Specific Role for Depackager Facilities. A significant amount of food waste is packaged. While most of this packaging can be easily and efficiently separated from the food at the point of generation, some items like ice cream and yogurt containers cannot. Depackagers are a mechanical means of separating food waste from inorganic packaging such as glass, plastic, and metals. While convenient, there are significant concerns about the quality of material produced by depackaging systems and the role they have in increasing contamination in

compost and soil amendments. To balance concerns over contamination and the impact of heavily packaged food waste that cannot be source separated on-site, the law allows for large volumes of heavily packaged organics to be mechanically separated prior to recycling through depackaging.

- (4) **Ban the Use of Sewage Sludge and Sludge-Derived Compost and Digestate from Being Used As A Fertilizer.** Composting and anaerobic digestion are processes designed to take food waste and process it to create a material that can be spread on gardens and farmland to enrich soil without the need for industrial fertilizers. Some operations allow for sewage sludge, also known as biosolids, from wastewater treatment plants to be mixed into the system. This toxic sludge is known to contain high levels of per and polyfluoroalkyl substances (PFAS), a class of highly toxic chemicals that are linked to significant health problems. They are dubbed "forever chemicals" because of their inability to break down naturally. Spreading sludge or sludge-derived material on farmland is a major source of PFAS contamination. This law will ban that practice.
- (5) **Requires Robust Reporting to Empower the State Environmental Department.** The law also has significant reporting requirements for all the major players in the food waste recycling system. Reporting is a key component of any new law and regulatory program. The reporting requirements in the law are designed to give the state environmental department the information that is necessary to improve the system and find those violating the law.
- (6) **Emphasis on Education and Outreach.** Transitioning from a system where food waste is simply thrown out to one where it is separated, collected, and put to productive use requires time and energy. This is especially true because a significant amount of food waste is packaged in inorganic material like plastic that must be separated from the food waste before it can be composted or digested. Some people may want to start composting at home as a way to comply with the law, which can be daunting without clear and accessible information. What's more, many people may want to donate excess edible food but don't know where to look. To make sure the transition to this new system is as seamless as possible, the model law places an emphasis on education and outreach.

## Section 1: Definitions

- (a) "Anaerobic digestion" means the breakdown of organic matter by microorganisms in the absence of oxygen to produce digestate and biogas.
- (b) "Biogas" is a gas resulting from the operation of anaerobic digester that is composed primarily of carbon dioxide, hydrogen, and methane.
- (c) "Composting" means the processing of food scraps for soil application using a method of accelerated biological decomposition of organic material under controlled or uncontrolled conditions.
- (d) "Compost" means a stable material produced by the controlled biological decomposition of organic matter through composting.
- (e) "Digestate" means the solid and/or liquid residual material remaining after organic material has been processed by an anaerobic digestion facility.
- (f) "Excess edible food" means edible food that is not sold or used by a designated food waste generator and is still safe to be consumed but is being disposed of by the generator, but shall not include unpackaged fresh meat, fish, or poultry, food damaged by pests, mold bacteria, or other contamination, food subject to governmental or producer recall due to food safety, and food returned to a supplier.
- (g) "Depackaging facility" means a solid waste facility that mechanically separate pre-consumer and/or post-consumer food waste from inorganic packaging material such as plastic, glass, and aluminum.
- (h) "Depackager slurry" means the organic material produced by a depackaging facility as a result of the mechanical separation of food scraps from inorganic packaging.
- (i) "Designated food waste generator" means a person, business, or institution, who:
  - (1) beginning two years after the passage of this act, generates at a single location, an annual average of two tons per week or more of food waste;
  - (2) beginning four years after the passage of this act, generates at a single location, an annual average of one ton per week or more of food waste;
  - (3) beginning six years after the passage of this act, generates at a single location, an annual average of 1/2 ton per week or more of food waste;and

- (4) beginning nine years after the passage of this act, generates any amount of food waste.
- (j) "Food rescue organization" means a religious organization, not-for-profit organization, or other organization that provide food for free to needy individuals, including, but not limited to, a food pantry, food bank, soup kitchen, or community-based organization that provide food for free to needy individuals.
- (k) "Food scraps" means material, including excess edible food that cannot be donated to a food rescue organization, that is derived from processing or discarding food material produced from human or animal food production, preparation and consumption activities, and edible food that is not donated. "Food scraps" does not include cooking oil, yellow grease from residential sources, any food identified in regulations promulgated by the Department, any food which is subject to recall or seizure due to the presence of pathogens, biomedical waste, hazardous waste, sludge or septage or nonorganic material.
- (l) "Food waste" means any excess edible food or food scraps that are not sold or consumed.
- (m) "Heavily packaged food scraps" means food scraps, that, as determined by the department, packaged in non-organic packaging in a manner that renders it unable to be physically and economically separated at the point of generation.
- (n) "Intermediary facility" means a facility that is not located at the point of generation, but is authorized to manage food scraps, such as a transfer station, prior to subsequent acceptance by a compost facility, anerobic digestion facility, or agricultural operation. "Intermediary facility" does not include depackaging facilities.
- (o) "Large-scale designate food waste generator" means any designated food waste generator that:
- (1) beginning January 1, 2025, generates at a single location an annual average of two tons per week or more of food waste; and
  - (2) beginning January 1, 2027, generates at a single location an annual average of one ton per week or more of food waste;

- (p) "Organics recycler" means a food rescued organization, agricultural operation, compost facility, or anaerobic digestion facility that diverts or recycles food waste from disposal in a landfill or incinerator.
- (q) "Point of generation" means the location where waste is initially produced.
- (r) "Physical Contamination" or "Physical Contaminants" means human-made inert material contained within compostable material, compost, digestate, or depackager slurry, including, but not limited to, glass, metal, and plastic.
- (s) "Single location" means contiguous property under common ownership, which may include one or more buildings.
- (t) "Soil amendment" means any material added to a soil to improve its physical properties, such as water retention, permeability, water infiltration, nutrient levels, drainage, and aeration.

## **Section 2: Food Waste Management Requirements**

- (a) It is the policy of the state to support the solid waste management hierarchy by prohibiting the disposal of food waste in landfills and incinerators to ensure a more sustainable, integrated approach to food waste management.
- (b) Effective January 1, 2025, all designated food waste generators are prohibited from sending food waste to a landfill or incinerator, and instead shall:
  - (1) To the maximum extent practicable, reduce the volume of food waste produced at the point of generation;
  - (2) To the maximum extent practicable, separate excess edible food from all other solid waste, and arrange for the donation of the excess edible food to a food rescue organization in accordance with the applicable laws, rules, and regulations related to food donation; and
  - (3) Separate all food scraps from all other inorganic solid waste at the point of generation, and transfer, or arrange for the transfer, of food scraps to a facility that can manage the material in accordance with the following priority of uses:
    - (i) Agricultural use, including consumption by animals;
    - (ii) Composting or anaerobic digestion and subsequent use as a soil amendment, which may include energy recovery at a composting or anaerobic digestion facility; and
    - (iii) Anaerobic digestion not followed by land application.

- (c) A designated food waste generator may petition the department for a temporary waiver from some or all the requirements of this section. The petition must include evidence of undue hardship based on:
  - (1) Information that demonstrates that even though the generator is listed as a designated food waste generator by the department, the generator fails to produce the requisite amount of food waste in tons per week based on an annual average;
  - (2) An inability to identify an intermediary facility, compost facility, anerobic digestion facility, or agricultural operation with sufficient capacity to accept the generator's food scraps; and
  - (3) Any other factors required by the department.
- (d) A waiver granted pursuant to subsection c. of this section may not exceed one year in duration.

### **Section 3: Use of Depackaging Facilities to Manage Food Scraps**

- (a) All designated food waste generators are required to separate food scraps from all other inorganic solid waste at the point of generation. However, if a designated food waste generator produces a large volume of heavily packaged food scraps, the generator may transfer, or arrange for the transfer, of heavily packaged food scraps to be sent to a depackager facility for mechanical separation.
- (b) The designated food waste generator may not commingle heavily packaged food scraps with other forms of food waste that are required to be separated from all other solid waste, at the point of generation.
- (c) A depackager's facility that accepts heavily packaged food scraps is responsible for managing the heavily packaged food scraps in a manner that ensures they are eligible for the following priority uses:
  - (1) Agricultural use, including consumption by animals;
  - (2) Composting or anerobic digestion and subsequent use as a soil amendment, which may include energy recovery at a composting or anerobic digestion facility; or
  - (3) Anerobic digestion not followed by land application.
- (d) Depackaging facilities are required to report to the department on a monthly basis:
  - (1) The amount, in tons, of heavily packaged food scraps received;
  - (2) The name and address of the designated food waste generator, intermediary facility, or hauler that delivered the heavily packaged food scraps;
  - (3) The amount, in tons, of slurry generated from processing heavily packaged food scraps;

- (4) The name and address of the end-user of the slurry generated from processing heavily packaged food scraps;
- (5) The amount, in tons, of packaging material generated from processing heavily packaged food scraps;
- (6) The final disposition of the packaging material generated from processing heavily packaged food scraps; and
- (7) Any other information required by the department.

#### **Section 4: Food Scraps Transporter Requirements**

Any waste transporter that collects and hauls food scraps, including heavily packaged food scraps, from a designated food waste generator is required to:

- (a) send food waste to organics recycler or intermediary facility;
- (b) Take all reasonable precautions to not deliver food waste to a landfill or incineration facility;
- (c) Keep food scraps separate from all other solid waste, including heavily packaged food scraps; and
- (d) Report to the department any load of food scraps from a designated food waste generator that was not separate from all other solid waste at the point of generation, with the exception of heavily packaged food scraps that is eligible for mechanical separation through a depackaging facility in accordance with Section 3 of this act.

#### **Section 5: Intermediary Facilities**

- (a) Any transfer facility or other intermediary facility that accepts food scraps must keep food scraps separate from all other solid waste.
- (b) Any intermediary facility that accepts food scraps must transfer, or arrange for the transfer, of all food scraps to a facility that can manage the material in accordance with the following priority of uses:
  - (1) Agricultural use, including consumption by animals;
  - (2) Composting or anaerobic digestion and subsequent use as a soil amendment, which may include energy recovery at a composting or anaerobic digestion facility; or
  - (3) Anaerobic digestion not followed by use as a soil amendment for land application.
- (c) After January 1, 2032, if a transfer station or other intermediary facility receives food scraps that were not separated all other forms of inorganic solid waste at the point of generation, the intermediary facility must report the hauler or designated food waste generator responsible for producing that load to the department.



## **Section 6: Landfills and Incineration Facilities**

- (a) Landfill facilities and incineration facilities must take all reasonable precautions to not accept food waste from designated food waste generators who are prohibited from landfilling or incinerating food waste.

## **Section 7: Use of Sludge and Sludge-Derived Products as Fertilizer or Soil Amendments**

- (a) The department may not license use or sale of sludge or sludge-derived products as a fertilizer or soil amendment unless:
  - (1) The sludge or sludge-derived product is tested for all per-and polyfluoroalkyl substances that can reasonably be quantified by a laboratory certification; and
  - (2) The sludge or sludge-derived product does not contain any per-and polyfluoroalkyl substances.

## **Section 8: Large-Scale Designated Food Waste Generators Reporting Requirements**

- (a) All large-scale designated food waste generators must submit an annual report to the department on or before March 1 of each year, beginning in 2025, in a format acceptable to the department.
- (b) The annual report must include, at a minimum, the following information:
  - (1) The amount of edible food donated and name(s) of the food relief organization(s);
  - (2) The amount of food scraps transferred for agricultural use, including use as animal feed;
  - (3) The amount of food scraps recycled by composting or anerobic digestion;
  - (4) The name of any transporter used for food scraps;
  - (5) The name of the intermediary facility, depackager facility, agricultural facility, compost facility, and anerobic digestion facility where food scraps were processed;
  - (6) A description of any on-site treatment systems where food scraps were processed;
  - (7) The amount, in tons, of heavily packaged food scraps sent to a depackager facility;
  - (8) A description of the types of heavily packaged food scraps sent to a depackager facility; and
  - (9) A description of any implementation issues, such as contamination, inconsistent pick-ups, odors, et., and actions taken to address those issues.

## **Section 9: Food Waste Management Facility List**

- (a) The Department will maintain a list of all intermediary facilities, depackager facilities, and organic recycling facilities authorized to manage food waste and make an updated list available on or before August 1 each year, beginning in 2024.

## **Section 10: Food Waste Transporter List**

- (a) The department will maintain a list of all transporters and haulers that handle food waste and make an updated list available on or before August 1 each year, beginning in 2024.

## **Section 11: Education and Outreach Requirements**

- (a) The department shall develop and make available educational materials to assist designated food scrap generators with compliance with this act.
- (b) The Department shall develop education materials on food waste minimization, food waste diversion techniques, at home composting, source separation, proper food waste storage and management, food waste donation requirements and policies, and any other materials the department deems necessary.
- (c) The Department shall develop and maintain a publicly available list of all continuously operating food rescue organizations and organic recycling facilities in each county to assist designated food waste generators with compliance with the requirements of this act.
- (d) The department shall work with municipalities, food rescue organizations, and organic recycling facilities to disseminate the educational materials described in this section so they may be further distributed.

## **Section 12: Rules**

- (a) The department shall, after one or more public hearings, promulgate rules and regulations necessary to implement the provisions of this title, including, but not limited to:
  - (1) A methodology the department will use to determine who is a designated food waste generator;
  - (2) Requirements for the waiver process;
  - (3) A list of all compost facilities, anerobic digestion facilities, depackaging facilities, and food rescue organizations located in the state, and within 25 miles of the boarder of the state;
  - (4) A list of heavily packaged food scraps that cannot be physically or economically separated from all other solid waste, including packaging, at the point of generation;
  - (5) The volume of heavily packaged food scraps that enables a designated food waste generator to utilize a depackaging facility

to mechanically separate heavily packaged food scraps from all other solid waste, including packaging;

- (6) Reporting requirements for depackaging facilities;
- (7) Standards and methodologies used to determine the level of physical contaminants in depackager slurry;
- (8) Physical contamination standards for depackager slurry used as animal feed;
- (9) Physical contamination standards for depackager slurry intended for use as a soil amendment; and,
- (10) Physical contamination standards for digestate and compost derived from depackager slurry intended for use as a soil amendment.