

Solid Waste Authority of Broward County

Task 5 White Paper: Regulatory Requirements and Policy Review

Solid Waste Authority of Broward County
115 South Andrews Avenue, Room 122
Fort Lauderdale, FL 33301

SCS ENGINEERS

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6115 Lyons Road
Coconut Creek, FL 33073
954-354-0664

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1.0 PURPOSE AND SCOPE

The SCS Team was tasked with reviewing regulatory requirements, policies, and best practice trends that may affect or should be considered in the development of the County's future solid waste management strategy. This white paper briefly summarizes the results of our review and includes the following:

- A general review of local, state and national solid waste, zero waste, recycling and organic regulatory trends for best practices, growth in popularity and adoption, and a current and future opinion on the likelihood of application in Broward County.
- A specific review of current ordinances, statutes, rules, regulations (including land uses), and goals at the federal, state, and local levels related to the implementation of solid waste processing and recycling efforts. This includes the identification of regulatory actions or expected regulatory changes affecting the manner in which the System will need to dispose, process, or divert particular waste types.
- An evaluation of implementing economic or regulatory flow control, comparing and contrasting the two options and determining the benefits of implementing either one or both in view of constructing, operating, and funding specific facility types.
- An overview of effectively siting new facilities to meet future processing and disposal needs, including an evaluation of possible community, political, logistical, or regulatory constraints based on the size and type of proposed facilities.

2.0 INTRODUCTION

Broward County (County) entered into an Interlocal Agreement (ILA) in 1987 with 26 of 31 municipal cities, which created the Resource Recovery Board (Board) and Resource Recovery System (System). The ILA expired in 2013, leaving all parties individually responsible to administer contracts for the disposal of their solid waste streams, or enter into a new agreement under new conditions. Legal action ensued after the ILA expiration to liquidate assets gained and distribute funds. On April 7, 2015, Broward County and the Board/System settling parties entered into a settlement agreement, which resolved litigation over the distribution of assets and liabilities resulting from the expiration of the ILA. The settlement agreement included a process for the sale of the Alpha 250 Site, with net proceeds from the sale to be distributed to the cities that are party to the litigation.

On June 14, 2016, the first amendment to the settlement agreement was entered, which delayed the sale of the Alpha 250 site. The purpose of the delay was to allow the cities and Broward County to perform a study of various solid waste and recycling issues. Specifically, the first amendment stipulated that the study evaluate and provide recommendations regarding the following:

1. How a 75 percent County-wide recycling goal may be reached.
2. Whether retaining public ownership of Alpha 250 would facilitate the meeting of that recycling goal or would provide other benefits in connection with solid waste disposal within Broward County.

3. General solid waste disposal issues as determined by the Working Group which may include options regarding flow control and potential governance or contractual structures for collaborative management of solid waste disposal.

In 2018, Arcadis, U.S., Inc., along with Kessler Consulting, Inc., developed the Solid Waste and Recycling Issues Study, (Study) which provided recommendations on various matters, including reaching a 75% countywide recycling goal, retaining ownership of public land for the construction of solid waste or recycling facilities, and other supplemental approaches to solid waste management (WM). In response to recommendations provided in the Study, a Solid Waste Working Group (SWWG) was established, consisting of eight municipal members and one County member, to develop a regional approach to managing solid waste and recycling.

The SWWG worked together to develop an ILA creating the Solid Waste and Recyclable Materials Processing Authority of Broward County, Florida (Authority), which was presented to all municipalities in the County, throughout the Summer of 2023. Twenty-eight municipalities and the County executed the ILA and agreed to participate in the Authority.

One of the Authority's first orders of business was to develop a Regional Solid Waste and Recycling Master Plan (Master Plan) that will serve as the foundation for the future of the Authority. This Memorandum presents a review of current ordinances, statutes, rules, regulations, and goals at the federal, state, and local levels related to solid waste processing and recycling, which can be utilized to develop the Master Plan.

The SCS Team conducted a general review of local, state and national solid waste, zero waste, recycling and organic regulatory trends to provide an opinion on the likelihood of application in Broward County. Based on the regulatory review findings, any regulatory actions or expected regulatory changes that could potentially affect the manner in which the System¹ will need to dispose, process, or divert a particular waste type(s), if any, are discussed in this White Paper.

In addition, a review of solid waste flow control with respect to regulatory flow control as well as economic flow control was conducted. Comparison of regulatory and economic flow control to identify the impacts of implementing one versus the other and potential implications of flow control on future solid waste facilities in Broward County are discussed in Section 3 of this white paper.

An evaluation for siting potential new facilities required to meet Broward County's future processing and disposal needs is being conducted separately as part of Task 4 – Future Needs Assessment.

¹ Defined in the Interlocal Agreement (executed in May 2023) as "Authority Solid Waste, Recovered Materials, and Recyclable Materials, collectively, generated in any of the Parties' jurisdictions and/or from outside of Broward County and identified as acceptable waste to be accepted by the Authority in the Master Plan. This term does not include Hazardous Materials or any waste deemed unacceptable in the Master Plan."

3.0 REGULATORY REVIEW

The SCS Team conducted a review of current ordinances, statutes, rules, regulations, and goals at the federal, state, and local levels related to solid waste management and recycling. The following sections summarize the existing Federal, State, and local legislation and regulations related to solid waste, Zero Waste, recycling, and organics.

3.1 FEDERAL REGULATIONS

3.1.1 Solid Waste

The Federal Government regulates solid waste primarily through the Resource Conservation and Recovery Act (RCRA)² Subtitles C and D and delegates regulatory authority to the states. Subtitle C focuses on hazardous waste, whereas Subtitle D focuses on non-hazardous solid waste requirements. These are the foundational type of regulations that the United States Environmental Protection Agency (EPA) has developed and delegated to the state, which is followed by the Florida Department of Environmental Protection (FDEP).

3.1.1.1 Hazardous Waste

Simply defined, a hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Hazardous wastes are regulated under RCRA Subtitle C, which has strict requirements regarding waste generator data reporting, and the collection, transport, and disposal of such wastes.

Universal Waste

The federal universal waste regulations are found in Title 40 CFR, Part 273³ and apply to the following five types of universal waste:

- Batteries
- Pesticides
- Mercury-Containing Equipment
- Lamps
- Aerosol Cans

EPA's universal waste regulations streamline the hazardous waste management standards for certain categories of hazardous waste that are commonly generated. The streamlined regulations have several positive effects, including promoting the collection and recycling of universal waste, easing the regulatory burden on retail stores and other generators that wish to collect these wastes and transporters of these wastes, and encouraging the development of municipal and commercial programs to reduce the quantity of these wastes going to municipal solid waste landfills or combustors.

² <https://www.epa.gov/rcra/resource-conservation-and-recovery-act-rcra-overview>

³40 CFR Part 273: <https://www.ecfr.gov/current/title-40/part-273>

There are also four types of regulated participants in the universal waste system:

1. Small quantity handlers of universal waste (accumulates less than 5,000 kg of universal waste),
2. Large quantity handlers of universal waste (accumulates 5,000 kg or more of universal waste),
3. Universal waste transporters, and
4. Universal waste destination facilities.

One waste material that has become a significant concern is the management of spent lithium-ion batteries, which are now found in everything from cellphones to electric vehicles (EVs). According to the EPA, most lithium-ion batteries on the market are likely to meet the definition of hazardous waste under RCRA due to their ignitable and reactive characteristics when disposed. Recycling of lithium-ion batteries is encouraged to conserve valuable resources and energy. EPA is working on updating the current universal waste standards specifically to address lithium batteries, separate from the existing universal waste general battery category⁴. The proposed changes to universal waste regulations related to lithium batteries are intended to improve safety standards, manage end-of-life lithium batteries, and promote recycling.

3.1.1.2 Non-Hazardous Waste

Federal guidelines related to development and implementation of State solid waste management plans are provided in Title 40 Code of Federal (CFR) Part 256⁵. The purpose of the State solid waste management plan is to address all solid waste in the State that poses potential adverse effects on health or the environment or provides opportunity for resource conservation or resource recovery. Aspects of solid waste management to be considered in the State plan include resource conservation, source separation, collection, transportation, storage, transfer, processing, treatment, and disposal.

State Subtitle D permit program requirements that must be met for determination of adequacy per RCRA are specified in Title 40 CFR Part 239. The criteria for general compliance standards, locating, designing, operating, groundwater monitoring, and closure requirements for municipal solid waste (MSW) landfills are provided in 40 CFR Part 258, Subparts A through F. Per 40 CFR 239.6.e⁶, all new MSW landfills are required to have a permit prior to construction and operation to ensure compliance with 40 CFR Part 258. Per 40 CFR 239.6.f, all new non-municipal, non-hazardous waste disposal units that receive conditionally exempt small quantity generator (CESQG) waste are required to have a permit prior to construction and operation to ensure compliance with 40 CFR Part 257.

⁴ <https://www.epa.gov/hw/improving-recycling-and-management-renewable-energy-wastes-universal-waste-regulations-solar>

⁵ 40 CFR Part 256: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-256?toc=1>

⁶ 40 CFR Part 239: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-239?toc=1>

3.1.1.3 Solid Waste Management Facilities - Air Quality Regulations

An overview of the air quality regulations promulgated by the EPA under Title 40 CFR that are typically applicable to either existing or new solid waste management facilities such as landfills and resource recovery/waste-to-energy facilities is provided below:

- 40 CFR Part 60 - Standards of Performance for New Stationary Sources⁷: These provisions establish EPA air pollution control standards for new, modified, and reconstructed facilities and are intended to maintain air quality in an area with the use of best emission control technologies to reduce emissions.
 - 40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions
 - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors
 - 40 CFR 60, Subpart Eb, NSPS for Large Municipal Waste Combustors (In January 2024, EPA issued a proposed rule to amend the 40 CFR 60, Subpart Cb and Subpart Eb standards. Final promulgation of the rule is expected in November 2024. For both new and existing municipal waste combustors, the proposed rule requires compliance with more stringent emission standards. Substantial capital costs and increased operating costs are expected to be incurred by facilities to comply with the more stringent standards.)
 - 40 CFR 60, Subpart IIII, NSPS for Compression Ignition Internal Combustion Engines (CI-ICE)
 - 40 CFR 60, Subpart JJJJ, NSPS for Spark Ignition Internal Combustion Engines (SI-ICE)
 - 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste (MSW) Landfills That Commenced Construction, Reconstruction, or Modification on or After May 30, 1991, but Before July 18, 2014
 - 40 CFR 60, Subpart Cf, Emission Guidelines and Compliance Times for MSW Landfills (These provisions are applicable to each existing MSW landfill for which construction, reconstruction, or modification commenced before July 17, 2014. When an affected source subject to 40 CFR 60, Subpart WWW becomes subject to an approved and effective state plan for implementing 40 CFR 60, Subpart Cf, the 40 CFR 60, Subpart WWW regulation is no longer applicable.)
 - 40 CFR 60 Subpart XXX, Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014
- 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants⁸
 - 40 CFR 61, Subpart A, General Provisions
 - 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos

⁷ 40 CFR Part 60: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60?toc=1>

⁸ 40 CFR Part 61: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-61?toc=1>

- 40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories⁹
 - 40 CFR 63, Subpart A, General Provisions
 - 40 CFR 63, Subpart AAAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills
 - 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) – This subpart establishes emission standards and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions.
- 40 CFR Part 98 - Mandatory Greenhouse Gas Reporting¹⁰: The mandatory greenhouse gas (GHG) reporting requires all applicable facilities to develop and maintain a monitoring plan on-site as part of the recordkeeping requirement, monitor GHG emissions, and report annual GHG emissions for each calendar year.

3.1.2 Zero Waste

The term “Zero Waste” refers to a very broad set of guiding principles that envisions altering entire economies by changing product manufacturing and producer responsibilities, consumption practices, regulations, recycling markets, and using other mechanisms to make a society less wasteful. The goal of Zero Waste is to eliminate waste at every level and steer economies towards the target of sending no waste to landfills, combustion facilities, or the ocean. For many municipalities that have adopted Zero Waste as a management strategy, the generally-accepted benchmark to achieve “Zero Waste” is the diversion of 90% of a given solid waste stream from landfilling. The Zero Waste International Alliance (ZWIA) currently defines Zero Waste as *“the conservation of all resources by means of responsible production, consumption, reuse, 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”*.

The federal government regulates waste management primarily through RCRA but does not yet address Zero Waste activities at a national level. No new regulations regarding Zero Waste strategies on a national level have been created. The federal government encourages waste minimization and recycling efforts through EPA grants and other mechanisms, which provides financial assistance to states and municipalities to encourage development of alternative solid waste programs and facilities. Legislation and programs surrounding specifically zero-waste are typically pursued at a local level (county, city, or municipality).

EPA has developed the Managing and Transforming Waste Streams Tool¹¹, which consists of various policies and programs that communities can adopt and implement to promote waste prevention, materials recovery and reuse, and thereby reduce the amount of waste disposed in landfills. This EPA tool can be customized as needed based on the community’s needs, initiatives and capabilities.

⁹ 40 CFR Part 63: <https://www.ecfr.gov/current/title-40/part-63>

¹⁰ 40 CFR Part 98: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-98?toc=1>

¹¹ <https://www.epa.gov/transforming-waste-tool>

3.1.3 Recycling

Minimum recycling/diversion goals are defined and encouraged through Federal programs and State of Florida statutes. Currently, the EPA national recycling goal is to reach 50% by 2030, while the State of Florida recycling goal is 75%.

3.1.4 Organics

For the purposes of this evaluation, “organic waste” is defined as varied combinations of food, soiled paper, vegetative waste, and other organic (carbon-based) materials in the waste stream. The following Federal regulations are applicable to recycling organics including food waste diversion programs and are discussed in the subsections below.

1. 42 U.S.C. 1791 - Bill Emerson Good Samaritan Food Donation Act¹²
2. 7 U.S.C. 3801 Swine Health Protection Act¹³
3. 21 CFR Part 589.2000 Bovine Spongiform Encephalopathy (BSE)/Ruminant Feed Ban Rule¹⁴
4. National Strategy for Reducing Food Loss and Waste and Recycling Organics Policy – June 2024¹⁵
5. United States Environmental Protection Agency Wasted Food Scale¹⁶

3.1.4.1 42 U.S.C. 1791 - Bill Emerson Good Samaritan Food Donation Act

The Bill Emerson Good Samaritan Food Donation Act (Act) was enacted in order to encourage food diversion to people in need by providing donors with protection from civil and criminal liability. Liability protection under the Act is only provided as long as the donor acted in good faith to donate, recover, and distribute food to those in need. However, donated food must meet all quality and labeling standards imposed by Federal, State, local laws and regulations. There are currently no Federal laws that regulate date labeling, except for infant formula. Suggestions provided by the United States Department of Agriculture (USDA) and Federal Drug Administration (FDA) to food manufacturers are related to food quality and freshness, and not safety. Due to lack of federal regulation, and lack of food safety related labeling suggestions, states have enacted their own food date labeling laws. Florida has not enacted food date labeling laws and has not provided for additional liability protections for food donors.

¹² <https://www.usda.gov/sites/default/files/documents/FAQs-GoodSamaritanAct.pdf>

¹³ <https://usswinehealthimprovementplan.com/wp-content/uploads/US-SHIP-Program-Resolutions-Full-2023.pdf>

¹⁴ eCFR :: 21 CFR 589.2001 – Cattle materials prohibited in animal food or feed to prevent the transmission of bovine spongiform encephalopathy

¹⁵ National Strategy for Reducing Food Loss and Waste and Recycling Organics (<https://www.epa.gov/circulareconomy/national-strategy-reducing-food-loss-and-waste-and-recycling-organics>)

¹⁶ From Field to Bin: The Environmental Impacts of U.S. Food Waste Management Pathways | US EPA

3.1.4.2 7 U.S.C. 3801 Swine Health Protection Act (SHPA)

The SHPA regulates food waste containing any meat products fed to swine in order to prevent the transmission of disease. SHPA requires that all food waste containing animal products be heat treated to 212° F or 100° C for at least 30 minutes in order to kill disease causing bacteria.

3.1.4.3 21 CFR Part 589.2000 Bovine Spongiform Encephalopathy (BSE)/Ruminant Feed Ban Rule (BSE Rule)

In order to prevent BSE from being transmitted to cows, goats and other ruminant livestock, the BSE Rule was implemented to prohibit the use of almost all mammalian protein (i.e., animal tissue) in feeds for ruminant animals.

3.1.4.4 National Strategy for Reducing Food Loss and Waste and Recycling Organics Policy – June 2024

The Biden-Harris Administration, along with the EPA, FDA, and the USDA, issued the National Strategy for Reducing Food Loss and Waste and Recycling Organics Policy (National Strategy) in June 2024 to reduce food loss and implement waste and recycling organics policies. Preventing food loss and waste and recycling organic waste will help in reducing the amount of such waste being diverted to landfills thereby reducing landfill methane emissions, in support of the U.S. Methane Emissions Reduction Action Plan.

The goal of the National Strategy is to prevent food loss and waste and increase the recycling of organic waste, such as food, yard, and tree trimmings along the entire food supply chain in order to reduce food loss and waste by 50% by 2030.

Review of the National Strategy identified four objectives and several strategic actions to be implemented by the EPA, FDA and USDA (Agencies) in order to implement the objectives. The four objectives included in the National Strategy are:

1. Prevent food loss.
2. Prevent food waste.
3. Increase the recycling rate for all organic waste.
4. Support policies that incentivize and encourage food loss and waste prevention and organics recycling.

The first two objectives were related to an education campaign to help the public reduce the amount of food purchased, thus reducing food loss as well as food diversion programs. Objectives Three and Four are discussed below as they are related to recycling.

Objective Three – Increase the Recycling Rate for all Organic Waste

Objective Three of the National Strategy is to increase the recycling rate for all organic waste. To achieve this objective, five strategic actions were identified, where Agencies would use grant programs to create a comprehensive organic waste recycling infrastructure which are as follows:

1. Support the development of additional organics recycling infrastructure through grants and other assistance for all communities, especially those that are underserved.
2. Expand the market for products made from recycled organic waste.
3. Enhance support to advance de-centralized (i.e., community-scale and home composting) organics recycling,
4. Build, refine, and share tools and data to aid decision-making about infrastructure investments, waste management policies, and waste management pathway destinations (e.g., composting, anaerobic digestion, landfill).
5. Address contamination in the organic waste recycling stream.

Objective Four – Support Policies that Incentivize and Encourage Food Loss and Waste Prevention and Organics Recycling.

Objective Four of the National Strategy is to develop policies at all levels of government, that incentivize and encourage the prevention of food loss and waste, the redistribution of surplus food, the development of additional organics recycling infrastructure, and expansion of markets for recycled products made from organics and soil amendments made from food and other organic waste. To achieve this objective, two strategic actions were identified, where among other efforts, Agencies would provide assistance to all levels of government for the development of policies encouraging food loss and waste prevention and organics recycling. The strategic actions associated with Objective Four are:

1. Support international policymakers aiming to build more circular economies.
2. Support Federal, Tribal, territory, state, and local policymakers aiming to build more circular economies.

To date, no Federal or State legislation has been advanced in conjunction with the National Strategy, and it is unclear if any potential legislation may result. Monitoring the development after implementation of the National Strategy stemming from the Agencies strategic actions is suggested.

3.1.4.5 United States Environmental Protection Agency Wasted Food Scale

In October 2023, the EPA published Field to Bin: The Environmental Impacts of U.S. Food Waste Management Pathways (Field to Bin Report). The purpose was to investigate the environmental impacts and contributions to a circular economy of eleven common pathways to manage wasted food, from source reduction to composting to landfilling. Based on these findings, the Field to Bin Report presented a new ranking of the eleven common wasted food pathways, from most to least

environmentally preferable. The new ranking, called the Wasted Food Scale and is shown in Figure 1, replaced the EPA’s previous food recovery hierarchy that was developed in the 1990s.

Figure 1. EPA Wasted Food Scale



The intent of the Wasted Food Scale is to provide stakeholders, which includes farms, food businesses, waste managers, individual consumers, and policymakers, with advice on how to reduce the environmental impacts of wasted food. Currently it is unknown if any mandates will stem from the new Wasted Food Scale. Monitoring food waste policies developed in consideration of the new Wasted Food Scale, at the Federal, State and local levels is suggested.

3.2 STATE REGULATIONS

Laws and programs surrounding waste management are typically handled at the state and local level. The construction, operation, and maintenance of solid waste processing facilities must be in accordance with various Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.). The SCS Team conducted a review of State of Florida legislation applicable to solid waste processing, Zero Waste, recycling and organics processing in the State and a summary of the review findings applicable to Broward County are provided below.

1. Chapter 62-701, F.A.C. Solid Waste Management Facilities¹⁷
2. Chapter 62-709, F.A.C. Criteria for Organics Processing and Recycling Facilities¹⁸

¹⁷ <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-701>

¹⁸ <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-709>

3. Chapter 62-730, F.A.C. Hazardous Waste¹⁹
4. Chapter 62-212, F.A.C. Stationary Sources – Preconstruction Review²⁰
5. Chapter 62-213, F.A.C. Operation Permits for Major Sources of Air Pollution²¹
6. Chapter 62-296, F.A.C. Stationary Sources – Emission Standards²²
7. Chapter 403, F.S. Environmental Control²³
 - I. Part II Electrical Power Plant and Transmission Line Siting
 - II. Part IV Resource Recovery and Management
 - a. Chapter 403.706, F.S. Local Government Solid Waste Responsibilities
 - III. Part V Environmental Regulation

3.2.1 Chapter 62-701, F.A.C. Solid Waste Management Facilities

The intent of Chapter 62-701, F.A.C., Solid Waste Management Facilities, is to establish standards for the construction, operation, modification, and closure of solid waste management facilities to minimize their threat to public health and the environment. Section 62-701.300, F.A.C. also includes prohibitions on specific types of wastes allowed in solid waste facilities, including the following:

- Hazardous wastes
- PCBs
- Biomedical waste
- Lead-acid batteries
- Used oil and oily waste
- Yard trash in a Class I landfill, except as may be allowed pursuant to Section 403.708(12)(c), F.S.
- White goods
- Whole waste tires
- Liquid waste
- CCA-treated wood

¹⁹ <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-730>

²⁰ <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-212>

²¹ <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-213>

²² <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-296>

²³ http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=0400-0499/0403/0403ContentsIndex.html

3.2.2 Chapter 62-709, F.A.C. Criteria for Organics Processing and Recycling Facilities

Current state regulations divide composting facilities into three categories: exempt (small quantity), registration (yard waste only), and permitted, which are described below:

1. **Exempt** – These facilities are typically either smaller (less than 100 cubic yards), including the beneficial use of yard trash or vegetative waste (that is not expected to pose a significant threat to public health), and on-farm composting or composting material to be exclusively used for farms.
2. **Registered Facility** – These facilities can process yard trash, pre-consumer vegetative waste, manure, or animal byproducts. These facilities have basic design criteria detailed in Chapter 62-709 F.A.C. A registered facility must only comply with the typical Florida stormwater regulations ([Chapter 62-330 FAC](#)).
3. **Permitted Facility** - A permitted facility will typically accept a mix of materials, notably including either wastewater treatment plant biosolids (regulated under [Chapter 62-640 FAC](#)) or post-consumer food waste (regulated under both Chapter 62-709 and [Chapter 62-701 FAC](#)). These facilities have more strict design parameters and require contact water to be treated as leachate.

Any composting facilities receiving solid waste such as food waste that are not exempt from permitting are regulated under Chapter 62-709, which defines the permits required and the criteria necessary for design and operation of these facilities, the testing and reporting, the classification of composted material and the criteria for the end-use of compost (if applicable to the technology). The permit application must meet the requirements specified in Chapter 62-701.320, F.A.C., except that Form 62-709.901(1) is used, Application for a Permit to Construct/Operate a Solid Waste Management Facility for the Production of Compost.

This regulation should be considered when implementing a food waste processing facility as it limits the end-use of composted material based on the components of the waste stream utilized to generate the compostable material, for example pre-consumer versus post-consumer, and the heavy metals content. If the goal is to maximize the beneficial end-use of the composted material, then proper source separation and collection to prevent contamination will be critically important. Table 1 provides a summary of the compostable material type, description, and end-use criteria.

Table 1. Compostable Material Classification, Description, and End-Use Criteria from FAC 62-709 Criteria for Organics Processing and Recycling Facilities

Compost Classification ¹	Description ¹	End-Use Criteria ²
Type Y	Compost made only from yard trash, which is mature or semi-mature, and is fine, medium or coarse. For such compost, a foreign matter content of less than 2% and a metal concentration equivalent to code 13 is assumed.	Unrestricted distribution.
Type YM	Compost made from only vegetative waste, animal byproducts or manure, with or without yard trash, which is mature or semi-mature and is fine, medium or coarse. For such compost, a foreign matter content of less than 2% and a metal concentration equivalent to code 13 is assumed.	Unrestricted distribution.
Type A	Compost made from solid waste, other than only yard trash, vegetative waste, animal byproducts or manure, which is mature and is fine. The foreign matter content shall be less than or equal to 2%, and the metal concentration shall fall under code 13. Further, it shall contain no foreign matter, such as glass or metal shards, of a size and shape that can cause injury.	Unrestricted distribution.
Type B	Compost made from solid waste, other than only yard trash, vegetative waste, animal byproducts or manure, which is mature or semi-mature and is fine or medium. The foreign matter content shall be less than or equal to 4%, and the metal concentration shall fall under codes 13 or 24. Further, it shall contain no foreign matter, such as glass or metal shards, of a size and shape that can cause injury.	Compost classified as Types B shall be restricted to use by commercial, agricultural, institutional or governmental operations. If contact with the general public is likely (public park) Type B may be used in these locations.

Compost Classification ¹	Description ¹	End-Use Criteria ²
Type C	Compost made from solid waste, other than only yard trash, vegetative waste, animal byproducts or manure, which is mature or semi-mature and is fine, medium or coarse. The foreign matter content shall be less than or equal to 10%, and the metal concentration shall fall under codes 13, 24 or 35.	Compost classified as Type C shall be restricted to use by commercial, agricultural, institutional or governmental operations. However, it cannot be used if contact with the general public is likely (public park).
Type D	Compost made from solid waste, or from only yard trash, vegetative waste, animal byproducts or manure, which is fresh and is fine, medium or coarse. It shall have a foreign matter content of less than or equal to 10%, and the metal concentration shall fall under codes 13, 24 or 35. Foreign matter content and metal concentration is assumed for fresh compost made from only yard trash, vegetative waste, animal byproducts or manure.	Compost classified as Type D shall only be used at landfills or land reclamation projects. However, such use shall not be allowed if contact with the general public is likely.
Type E	Compost made from solid waste, other than only yard trash, vegetative waste, animal byproducts or manure, which has a metal concentration that falls under code 46.	Type E must be disposed of pursuant to Chapter 62-701, F.A.C., unless demonstrated that use of this material will not endanger the public or the environment.

Notes:

- 1 62-709.550 Classification of Compost (2).
- 2 62-709.600 Criteria for the Use of Compost.
- 3 Code 1 Heavy Metal Concentrations: Cadmium ≤ 15, Copper ≤ 450, Lead ≤ 500, Nickel ≤ 50, Zinc ≤ 900
- 4 Code 2 Heavy Metal Concentrations: Cadmium 15 ≤ 30, Copper 450 ≤ 900, Lead 500 ≤ 1,000, Nickel 50 ≤ 100, Zinc 900 ≤ 1,800
- 5 Code 3 Heavy Metal Concentrations: Cadmium 30 – 100, Copper 900 – 3,000, Lead 1,000 – 1,500, Nickel 100 – 500, Zinc 1,800 – 10,000
- 6 Code 4 Heavy Metal Concentrations: Cadmium ≥ 100, Copper ≥ 3,000, Lead ≥ 1,500, Nickel ≥ 500, Zinc ≥ 10,000

As food waste is regulated as solid waste, collectors and processing facilities that exceed exemption criteria or otherwise meet the requirements of Chapter 62-709 must be permitted by the FDEP under solid waste rules.

It should be noted that the FDEP is considering options to revise Chapter 62-709, which was first enacted in 2010 and has not been revised. Some of the key provisions being considered include revising definitions, design criteria for Permitted Facilities, storage, best management practices, compost quality, amongst other provisions.

3.2.3 Chapter 62-730, F.A.C. Hazardous Waste

Chapter 62-730, F.A.C. includes certain portions of the federal regulations (Title 40 CFR) related to hazardous waste adopted by reference by the State of Florida. The State hazardous waste rules establish standards for generators and transporters of hazardous waste as well as standards for owners and operators of hazardous waste treatment, storage, and disposal facilities.

Hazardous waste generators are classified into the following categories based on the quantity of hazardous waste generated per month:

1. Very Small Quantity Generators (VSQGs): Generate less than 220 pounds of hazardous waste per month and less than 2.2 pounds or more of acute hazardous waste per month.
2. Small Quantity Generators (SQGs): Generate 220 to 2,200 pounds of hazardous waste per month.
3. Large Quantity Generators (LQGs): Generate 2,200 pounds or more of hazardous waste per month or 2.2 pounds or more of acute hazardous waste per month.

The requirements and procedures for the construction, operation, modification, and closure of hazardous waste facilities are specified in Chapter 62-730, F.A.C. Operation permits are typically issued for a duration of five (5) years, and the term of a post-closure permit and a corrective action permit is generally 10 years.

3.2.3.1 Lithium-ion Batteries

As mentioned in Section 2.1.1.1.1, management of spent lithium-ion batteries has become a significant concern. Per the EPA, most lithium-ion batteries on the market are likely to meet the definition of hazardous waste under RCRA. Florida Statutes (Chapter 403.7192, F.S.²⁴) requires that a unit management system be implemented by manufacturers and marketers of rechargeable batteries and rechargeable battery-powered products sold in Florida. A unit management system refers to a collection and management program for discarded batteries in accordance with Section 403.7192. Rechargeable batteries including lithium-ion batteries need to be recycled or transported to a permitted disposal facility. In Florida, such batteries can be sent to a permitted Household Hazardous Waste facility.

Lithium batteries must also conform to applicable Hazardous Materials Regulations (HMR) requirement referenced in 49 CFR Parts 171-180 as lithium batteries that are transported for

²⁴ [Florida Statute 403.7192](#)

recycling, are regulated as a hazardous material by the Department of Transportation (DOT)²⁵. If the lithium batteries get damaged or the terminal ends touch, it could lead to a fire and therefore, FDEP recommends placing a non-conductive tape over the terminals. FDEP website also provides information regarding battery safety, recycling and disposal, which is mentioned under “Take Charge Florida” campaign²⁶.

3.2.4 Chapter 62-212, F.A.C., Stationary Sources – Preconstruction Review

The federal Clean Air Act Amendments (CAAA) require the EPA to set National Ambient Air Quality Standards (NAAQS) for common pollutants emitted from numerous and diverse sources considered harmful to public health and the environment. There are currently NAAQS designated for six pollutants: sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), lead (Pb), ozone (O₃), and particulate matter (PM₁₀ and PM_{2.5}). The CAAA also established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, young children, and the elderly. Secondary standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation, and buildings. Florida has incorporated the NAAQS by reference into the state's air quality regulations. The EPA tracks compliance with the NAAQS for each criteria pollutant by designating each area of the country as either “attainment” if the area meets the NAAQS or “nonattainment” if the area does not meet the NAAQS. A separate determination of attainment status is made for each criteria pollutant. Broward County is currently classified as an attainment area for all criteria pollutants.

Construction of new major sources (i.e., landfills, WTE facilities, etc.) and major modifications to existing major sources are subject to New Source Review (NSR) permitting requirements. NSR refers to the preconstruction review process that applies to new and modified major sources for the purpose of protecting air quality through a permitting framework that supports compliance with the NAAQS. NSR includes two permitting programs: Prevention of Significant Deterioration (PSD) permitting and Nonattainment NSR (NNSR) permitting. Under NSR, a new major source or a major modification proposed in Broward County would be subject to PSD permitting requirements in recognition that PSD review applies to new major sources in NAAQS attainment areas.

PSD permitting provides for carefully managed economic growth in a manner consistent with preserving clean air resources. The primary objectives of the PSD permitting program are to protect public health and welfare and to limit degradation of air quality in surrounding areas and within designated areas of special recreational, scenic, or historic value. The PSD permitting regulation requires that analyses be completed to address air pollution control technology requirements and to demonstrate that proposed projects will not adversely impact air quality.

In Florida, the permitting authority for issuance of air construction permits is the FDEP. Construction permits for projects subject to PSD permitting requirements are processed by FDEP's Division of Air Resource Management (DARM) office in Tallahassee. The PSD permitting regulation provides for public participation and input from the EPA and designated Federal Land Manager (FLM) for Class I areas and sensitive Class II areas in the vicinity of the project site. Input from these entities is given special consideration and concerns are typically required to be addressed by an applicant during the

²⁵ 49 CFR Chapter I Subchapter C, Parts 171-180. <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-C>

²⁶ <https://floridadep.gov/waste/waste-reduction/content/take-charge-florida>

permit review process. As the permitting authority, FDEP makes the final decision on whether to issue or deny issuance of an air construction permit.

3.2.5 Chapter 62-213, F.A.C., Operation Permits for Major Sources of Air Pollution

In Florida, major sources of air pollutant emissions are subject to Title V operating permit program requirements under Chapter 62-213, F.A.C. Title V air operation permits specify applicable air quality requirements for affected sources including emission limitations, monitoring, testing, recordkeeping, and reporting obligations. Each Title V source in Florida is required to pay an annual emissions fee. Title V operation permits are effective for 5 years, and applications for permit renewal must be submitted to FDEP no later than 225 days before the permit expiration date. New facilities subject to the Title V permitting program must file operation permit applications with FDEP at least 90 days before the facility's air construction permit expires, but no later than 180 days after operations commencement. Prior to final permit issuance, the Title V permitting process requires a public notice period and review by EPA.

3.2.6 Chapter 62-296, F.A.C., Stationary Sources – Emission Standards

Standards for mercury emissions applicable to waste-to-energy facilities in Florida are specified in Section 296.416 of this chapter. These standards apply to waste-to-energy facilities with charging rates of 40 tons per day or more.

3.2.7 Florida Electrical Power Plant Siting Act

The intent of the Power Plant Siting Act (PPSA) is to establish a procedure for the selection and utilization of sites for electrical generating facilities, such as a waste-to-energy facility, while ensuring through reasonable methods that such facilities will pose minimal adverse impact to human health and the environment. PPSA is a centralized process for licensing large power plants in the State of Florida. The PPSA Certification is typically issued by the Siting Board and it addresses permitting, land use and zoning. PPSA Certification generally replaces local and state permits but does not include licenses required by the federal government.

PPSA is applicable to all steam or solar electrical generating facilities that generate over 75 megawatts of electricity. Statutory laws pertaining to Florida Electrical Power Plant Siting Act are specified in Sections 403.501-403.518, FS²⁷. The procedures for reviewing and processing the electrical power plant applications are outlined in Sections 403.501 through 403.518, F.S., and Chapter 62-17, Parts I and II, F.A.C. The application process for a new facility including an application guide is provided on the FDEP website.

3.2.8 Chapter 403.706, F.S. Local Government Solid Waste Responsibilities

The State of Florida prescribes that *“The governing body of a county has the responsibility and power to provide for the operation of solid waste disposal facilities to meet the needs of all*

²⁷ [403.501-518](#)

incorporated and unincorporated areas of the county.” The Florida Statutes do not specify how this responsibility is achieved. The State of Florida also delegates the power and authority to adopt ordinances governing the disposal of solid waste generated outside of the county at the county’s solid waste disposal facility. Other key elements of this legislation²⁸ include that a county and/or municipality:

- Implement a recyclable materials recycling program to achieve a 75% recycling rate by December 31, 2020.
- Implement a program for recycling construction and demolition debris.
- Require the provision of adequate space and adequate receptacles for recycling at multifamily residential or commercial properties.
- Consider plans for composting or mulching organic materials that would otherwise be disposed of in a landfill. The composting or mulching plans are encouraged to address partnership with the private sector.
- Ensure, to the maximum extent possible, that municipalities within its boundaries participate in the preparation and implementation of recycling and solid waste management programs through interlocal agreements pursuant to s. [163.01](#) or other means provided by law.

3.2.9 Zero Waste Legislation

Legislation and programs addressing Zero Waste goals are typically pursued at a local level (county, city, or municipality), with many states such as California mandating diversion requirements at a state level but leaving much of the action towards those goals to local regulators. Examples of types of legislation or programs used to advance Zero Waste initiatives include but are not limited to:

- **Material Bans** – One more public-facing type of legislation is material bans. Typical items targeted by material bans include single-use plastics, plastic straws, polystyrene foam, and plastic bags. Bans such as these typically do not reduce waste-to-landfill by a substantial tonnage but are none-the-less impactful in reducing non-recyclable or non-compostable material from the waste stream. Florida state law currently prohibits local municipalities from banning plastic bags, but in time that law may be changed.
- **Diversion or Zero Waste Mandates** – State or local governments can set diversion or zero-waste mandates that require diversion at a set goal. This is most easily applied to lower tier government bodies that the higher-level governmental entity has jurisdiction over, such as a state mandate applied to counties, or a local government mandate applied to local governmental buildings. Those lower tier government bodies can then be held accountable for reaching the proposed goal(s) and can justify spending on studies, programs for residents and businesses, and facilities to reach those goal(s).

²⁸ http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0400-0499/0403/Sections/0403.706.html

- Extended Producer Responsibility (EPR) – EPR policies put the financial responsibility for a product’s end-of-life on the producers of the product, rather than directly to ratepayers or taxpayers. EPR policies can be difficult to pass due to the complexities of designing the regulations and setting the rates on materials, as well as pushback from manufacturers. However, these policies can have a substantial impact by incentivizing manufacturers to minimize waste or design for recycling, as well as incentivize the recycling of waste materials by product users. An extremely successful example of EPR is deposit return schemes for beverage containers, which allow for a higher return rate for plastic bottles and aluminum cans than other recyclable materials.
- Public-Private Partnerships (PPP) – PPPs can be an impactful way to develop the infrastructure necessary to improve diversion, such as development of more up-to-date MRFs, anaerobic digestors, WTE facilities, transfer stations, or other facilities. Even if a mandate increases the diversion at the point of generation, the materials diverted will still need to have a facility where it will be processed and a market for the sale of the product.
- Contractor Performance Incentives – Contracts with operators can be designed so that financial incentives exist for better performance. For example, a high diverter, San Jose’s contracts with waste haulers allow for tiered higher rates to be paid to the hauler by the local government for higher diversion rates, as well as incentives to minimize contamination as higher contamination requires the hauler to pay a higher rate to the recycling or organics processor. Another example of a performance incentive is payment-sharing for recyclables or compostable products sent to market, where operators are paid a portion of the sale value of the materials to incentivize higher quality and quantity of outputs.
- Pay-as-You-Throw (PAYT) – PAYT is a type of incentive structure that encourages waste generators such as residents or businesses to limit the amount of waste that they set out. PAYT programs often either charge households by the size of bin that is used, or by the sale of certified bags for pickup.
- Product Certification – A concept being explored by some municipalities is adhering to a certification standard for products created by recycling or organics processors. For example, PAS 100 is a standard used the UK for compost. Another example is standards for biogas to be used as Renewable Natural Gas (RNG) in pipelines. These types of standards allow purchasers of these products produced from waste to know the quality of material that they are purchasing, thus encouraging a market for those products.
- Government Purchasing Programs – Local governments can enact policies and legislation related to procurement practices to assist in the development of secondary markets for certain recycled materials. Such policies may include requirements for minimum recycled content in new products, sourcing local mulch and compost from recycled yard waste and recovered clean wood, and others. If executed properly, these programs can effectively create the demand for recycled material and overcome one of the most difficult challenges to recycling.

3.2.10 Recycling Legislation

The State of Florida recycling goal is 75%. Per Florida Statute 403.706²⁹, all Florida counties must provide the opportunity for their residents to recycle. As mentioned in Section 403.706(2)(a), F.S., Florida counties and municipalities are encouraged to form cooperative arrangements for implementing recycling programs. Recyclable materials per FDEP's comprehensive recycling program as noted in Section 403.7032, F.S. include, but are not limited to, metals, paper, glass, plastic, textile, rubber materials, and mulch. Also, per Section 403.706, F.S., each county is required to implement a construction and demolition debris recycling program.

FDEP has established a Recycling Recognition Program to promote recycling and encourage private and public institutions, organizations, schools and businesses to increase recycling in order to reach the State's recycling goal by 2020. In order to receive recognition after 2020, a recycling rate of at least 75% is required. Per Chapter 403, F.S., solid waste that is used for the production of renewable energy counts toward the State's long-term recycling goal³⁰ and the Florida Renewable Energy Policy³¹ as described in Section 366.92, F.S. promotes the development of renewable energy in the State of Florida. In accordance with these Florida Statutes, renewable energy credits for solid waste processed at any waste-to-energy facility or resource recovery facility within Broward County can be included as recycled materials under the Recycling Recognition Program. Also, renewable energy recycling credit for solid waste that is disposed in a landfill, which has a landfill gas collection system with beneficial use of the collected landfill gas, can be included as materials recycled. According to FDEP 2023 recycling credits data, Broward County ranked 18th among Florida counties, achieving a traditional recycling rate of 30% and an overall recycling rate of 39%.

Effective 2010, the Recycling Business Assistance Center (RBAC) was created by the FDEP with the intent that this center would assist in the development and expansion of markets for recyclable materials to achieve the 75% recycling goal. The main objectives of RBAC are:

1. Provide guidance to increase recycling markets
2. Create connections between industry and government professionals
3. Increase awareness of RBAC's services

²⁹ http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0400-0499/0403/Sections/0403.706.html

³⁰ Section 403.706(4)(a), F.S., states: "In order to promote the production of renewable energy from solid waste, each megawatt-hour produced by a renewable energy facility using solid waste as a fuel shall count as 1 ton of recycled material and shall be applied toward meeting the recycling goals set forth in this section. If a county creating renewable energy from solid waste implements and maintains a program to recycle at least 50 percent of municipal solid waste by a means other than creating renewable energy, that county shall count 1.25 tons of recycled material for each megawatt-hour produced. If waste originates from a county other than the county in which the renewable energy facility resides, the originating county shall receive such recycling credit."

Section 403.706(4)(b), F.S.: "A county may receive credit for one-half of the recycling goal set forth in subsection (2) from the use of yard trash, or other clean wood waste or paper waste, in innovative programs including, but not limited to, programs that produce alternative clean-burning fuels such as ethanol or that provide for the conversion of yard trash or other clean wood waste or paper waste to clean-burning fuel for the production of energy for use at facilities other than a waste-to-energy facility as defined in s. 403.7061."

³¹ Florida Renewable Energy Policy Section 366.92(1), F.S.: "It is the intent of the Legislature to promote the development of renewable energy; protect the economic viability of Florida's existing renewable energy facilities; diversify the types of fuel used to generate electricity in Florida; lessen Florida's dependence on natural gas and fuel oil for the production of electricity; minimize the volatility of fuel costs; encourage investment within the state; improve environmental conditions; and, at the same time, minimize the costs of power supply to electric utilities and their customers." ([Chapter 366 Section 92 - 2024 Florida Statutes - The Florida Senate \(flisenate.gov\)](http://www.flisenate.gov/Chapter-366-Section-92-2024-Florida-Statutes-The-Florida-Senate))
<https://floridadep.gov/waste/waste-reduction/content/florida-recycling-statutes-and-rules>

It should be also noted that solid waste and recycling related bills are routinely introduced for consideration by the Florida Legislature, but are not adopted. The most notable example from 2023 is HB 455/SB 36: Comprehensive Waste Reduction and Recycling Plan, which would require the FDEP to develop a comprehensive waste reduction and recycling plan for the state by July 2025 that includes recycling goals based on sustainable materials management and waste diversion; a 30-year plan to implement strategies relating to recycling education and outreach; provide local government recycling assistance; and recycling include materials market development. Other bills with pre-emption initiatives are discussed in Section 3.2.10.1 below.

3.2.10.1 State of Florida Pre-Emptions

The State of Florida, through Chapter 403, Section 708, F.S., pre-empts local government from regulating the packaging of products manufactured or sold in the state by regulation or ordinance adopted after March 1, 1974. This has been legally defended to include single-use plastic containers and bags.

As noted in Section 3.2.10, solid waste and recycling related bills are routinely introduced for consideration by the Florida Legislature, but are not adopted. A notable example is SB 498, Preemption of Recyclable and Polystyrene Materials that would have removed the pre-emption of local laws regarding the regulation of auxiliary containers, wrappings, or disposable plastic bags. Another is SB 698: Regulation of Single-Use Plastic Products, which would have authorized coastal communities to establish pilot programs to regulate single-use plastic products.

There are other pre-emption initiatives that failed that could have adversely impacted the Authority. One example is HB 975/SB 798, Solid Waste Management, which would have prohibited counties and municipalities from “unreasonably restraining” private entities from providing solid waste management services within the local government’s jurisdiction and would have also sunsetted all active commercial solid waste franchise agreements at the conclusion of their current contract and prohibited exclusive renewals. Another is SB 1126, Regulation of Auxiliary Containers, that would have expressly preempted local governments from regulating certain single-use bags, cups, bottles, or other packaging.

However, while Chapter 403, Section 708 pre-empts local governments from regulating the packaging of products manufactured or sold in the state, it does not appear to prevent local governments from banning the disposal of materials. Such bans can improve the recycling rates for materials such as single-use plastics and other specifically targeted materials, but must be properly planned and implemented with sufficient collection, processing, and secondary market infrastructure to manage the potential volume of materials in the waste stream.

3.2.11 Organic Waste Legislation

The US Composting Council reported that as of 2023, 21 states had landfill bans in place for yard waste, many dating back to the 1990s. The five states with the largest number of yard waste composting facilities (Ohio, Wisconsin, Florida, New Hampshire and South Dakota) also have yard waste landfill disposal bans. Regarding food waste, as of 2024 five states (California, Connecticut, Massachusetts, Rhode Island and Vermont) have established food waste disposal bans, and predictably, those states have the majority of commercial-scale (greater than 2,000 tons per year) organic waste processing facilities. Four other states have enacted organics diversion requirements.

Many cities (i.e., Phoenix, Arizona; Austin, Texas; and others) have also adopted regulations regarding the management of food/organic wastes within their jurisdictions.

California's Senate Bill 1383 (SB 1383) is the most significant state-level organic waste legislation adopted to date in the United States, mandating residences and businesses to sort and separately collect food scraps, food-soiled paper and yard debris from trash and recycling and subscribe to an organic waste collection service. The law also requires that all jurisdictions (cities, counties, and special districts that provide solid waste collection services) provide food/organic waste collections services to all residents and businesses and recycle the collected organic waste by January 1, 2022. As a result, SB 1383 has greatly accelerated the growth of organic waste programs, in California, with 465 of 616, or 75% of jurisdictions having organic waste, including food waste, collection programs in place (Calrecycle.ca.gov).

In the State of Florida, food waste is regulated as solid waste. The State of Florida continues to manage food waste from the viewpoint of protecting public health and safety by minimizing disease vectors and regulates food waste, with some exceptions, as solid waste that must be managed in a permitted solid waste facility. Consequently, there has been no significant development of municipal-scale food waste diversion programs to date in Florida.

Mandatory food waste diversion or processing could be enacted by the State of Florida or by a local government, via statute, local ordinance, or special act, by banning food waste disposal via landfill and/or WTE or requiring source separation and processing for commercial and/or residential properties. The State of Florida has not enacted a landfill and/or WTE disposal ban for food waste or mandatory source separation. However, local governments in several communities within Florida, other states and municipalities across the U.S. have implemented such ordinances. For example, in June 2023, the City of Gainesville, Florida (Ordinance 200381) enacted mandatory food waste source separation and composting for commercial businesses that generate one cubic yard of food waste or more per week and is currently in the process of enacting mandatory source separation, curbside collection and composting of organic food waste for residents.

3.3 LOCAL REGULATIONS

The SCS Team conducted a review of local legislation applicable to Broward County and its municipalities for regulating and managing municipal solid waste and recycling programs. Local ordinances, rules and regulation data are discussed below.

3.3.1 Municipal Solid Waste Ordinances, Resolutions and Rules

3.3.1.1 Chapter 27, Article VI – Solid Waste

Rules for regulation and management of solid waste activities and facilities within the geographic boundaries of Broward County is specified in Chapter 27, Article VI of Broward County Code of Ordinances (Code), with the intent of protecting the County's natural resources and the health, safety and wellbeing of its residents. As noted in Chapter 27, Article VI, Section 27-211 of the Code³², the Resilient Environment Department ("RED") is responsible for enforcing the provisions of Article VI, Solid Waste. General prohibitions regarding storage, processing, and disposal of solid waste are

³² https://library.municode.com/fl/broward_county/codes/code_of_ordinances?nodeld=PTIICOOR_CH27POCO_ARTVISOWA

provided in Chapter 27, Article VI, Section 27-215 of the Code. Recycling and recovery of resources with potential further use, that would otherwise end up in the disposal stream, are encouraged.

Prior to construction, operation and/or modification of any solid waste management facility, a solid waste management license must be obtained per Chapter 27, Article VI, Section 27-216 of the Code, which is authorized by RED. Activities or facilities that are exempted from the licensing requirement as stated in Section 27-216(a)(2), are:

“(2) Unless otherwise prohibited by the Code, the following activities or facilities are exempted from the licensing requirement provided that no nuisance or any condition is created that adversely affects the environment or public health and provided that the activity or facility does not violate any provisions of the Code, or federal, state, or local government regulations:

- a) *Backyard composting;*
- b) *The on-site storage, processing, disposal, and open burning of solid waste from normal, on-site farming activities;*
- c) *The storage of solid waste in containers on property which is owned, rented or leased by the persons who generated the stored waste from their own on-site activities;*
- d) *Facilities authorized by a site certification issued under Chapter 403, pt. II, F.S. (§ 403.501, F.S. et seq.), Electrical Power Plant Siting;*
- e) *The on-site temporary storage of construction and demolition debris, provided that the debris is generated from on-site activities.”*

Section 27-216 also specifies the license requirements and standards for solid waste management activities such as borrow pit reclamation utilizing clean debris as fill material, landfills (Class I, Class II & Class III), material recovery area or transfer station, compost area, waste tire processing or waste tire collection area, and construction and demolition debris disposal area. The owner or operator of licensed solid waste management facilities must submit to RED applicable compliance, testing and monitoring reports to ensure compliance. In addition, records, reports, analytical results as required by the Code need to be maintained onsite and made available to RED for review upon request.

3.3.1.2 Chapter 14 – Garbage and Trash

The purpose of Broward County Code of Ordinance, Chapter 14³³ is to regulate the disposal of processible waste in an environmentally safe, efficient, and feasible way in order to conserve Broward County’s limited landfill space. Landfilling of any processible waste in excess of 1,000 tons per day is prohibited per Section 14-2 as long as there is capacity available to accept and dispose such waste at any operating resource recovery/WTE facilities in Broward County.

The County’s Mandatory Residential Recycling Ordinance is set forth in Sections 14-71 through 14-75 of the Code and is applicable only within the unincorporated areas of Broward County. Per the Broward County Recycling Program, recyclable materials including newspaper, glass, plastic, aluminum cans and steel are required to be source separated and collected by a hauler. Haulers are

³³ https://library.municode.com/fl/broward_county/codes/code_of_ordinances?nodeld=PTIICOOR_CH14GATR

required to submit monthly reports to Broward County Waste and recycling Services specifying the tonnages and number of units served.

3.3.2 Broward County Recycling Programs

Various municipalities in the U.S. as well as in the State of Florida have enacted mandatory recycling ordinances, resolutions and rules. Table 2 below provides a summary of recycling programs for each of the 28 participating municipalities within Broward County.

Table 2. Recycling Programs in Broward County

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Coconut Creek ^{34 35 36 37}	Y (Collection & Drop off)	Y (Collection & Drop off)	Y (Collection & Drop off)	Y	Y	N	N
Cooper City ^{38 39 40}	Y (Collection)	Y (Collection)	Y (Open Market)	Y	N	N	Y (Mandatory for Residents)

³⁴ Coconut Creek, FL Code of Ordinances, Article III Sec. 12-61. " All commercial properties that engage in recycling recovered materials in the city shall register yearly with the city on a form provided by the city by October 1, of each year, and pay a yearly registration fee of one hundred dollars (\$100.00) for each service location in the city".

https://library.municode.com/fl/coconut_creek/codes/code_of_ordinances?nodeId=PTIIICOR_CH12GARE_ARTIIIIREWA_S12-61ALCORE.

³⁵ Republic Services of Florida Solid Waste Agreement pg. 16 7.3.2 and pg. 19 7.7.3 states residential single and multi-family recycling collection. "The Contractor shall collect all of the Source Separated Recyclable Material that each Residential Curbside Customer Sets Out in Recycling Carts ""The Contractor shall provide Recycling Carts or Mechanical Containers for the Collection of the Customer's Source Separated Recyclable Materials"

³⁶ Coconut Creek City Website states drop-off recycling: Drop-off recycling [Recycling Drop-Off Center Leaderboard | Public Works \(coconutcreek.net\)](https://www.coconutcreek.net/public-works/recycling-drop-off-center-leaderboard)

³⁷ Tamarac City Website "The City of Tamarac, in participation with the cities of Coconut Creek, Coral Springs, Fort Lauderdale, Lauderdale-by-the-Sea, Lauderdale Lakes, and Pompano Beach, provides a series of drop-off events for household hazardous waste (HHW) and old electronics (E-Waste)".[Hazardous Waste | Tamarac, FL - Official Website](https://www.tamaracfl.gov/hazardous-waste)

³⁸ Cooper City, FL Code of Ordinance, Article I Sec 14-3 "All owners and occupants of residential and multi-family units in the City shall participate in the City's residential and multi-family units recycling program, by participating in the placement and segregation of recyclable materials for collection, "https://library.municode.com/fl/cooper_city/codes/code_of_ordinances?nodeId=CH14RESEGO_ARTIRE_S14-3MAPA

³⁹ Coastal Waste & Recycling Agreement pg. 51 Sec 5.1.2." Commercial recycling services will be open market and will not be part of this exclusive agreement"

⁴⁰ Wheelabrator Solid Waste Agreement pg. A-2 states that the agreement includes the recycling of household electronic such as computers televisions, printers, DVD players, copiers and cell phones.

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Coral Springs ^{37 41 42 43 44}	Y (Collection & Drop off)	Y (Collection & Drop off)	Y (Collection & Drop off)	Y	Y	Y	N
Dania Beach ^{45 46}	Y (Collection)	Y (Collection)	N	Y	Y	N	N
Davie ^{42 47}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	Y

⁴¹ Coral Springs, FL Code of Ordinances, Article I Sec. 8-3. "Every property owner, tenant, resident, firm or corporation shall use the services of contractor for the collection of recyclable materials upon the approval, the resolution, of the recycling program by the city, and it shall be the responsibility of the owner to pay for such service. Such compulsory service shall include a minimum of one (1) pickup per week. It is not the intent of this section to prohibit any nonprofit organization from soliciting recyclable materials for the purpose of resource recovery and recycling" https://library.municode.com/fl/coral_springs/codes/code_of_ordinances?nodeId=PTIICO_CH8PRMA_ARTIGACORESE_S8-3COGASE

⁴² Coastal Waste and Recycling of Florida, Inc. Solid Waste Agreement Sec 7.13 "The Contractor shall provide Supplemental Collection Service for Commercial Customers, subject to the requirements herein. Specifically, the Contractor shall provide Collection Service for Bulky Waste, Yard Waste, and Source Separated Recyclable Materials when such service is requested by a Commercial Customer."

⁴³ "The City of Coral Springs offers curbside and drop-off recycling and waste disposal services. The Recycle Right Coral Springs program aims to manage and conserve resources sustainably through proper recycling, safe hazardous waste disposal, and waste reduction." <https://www.coral springs.gov/Government/Departments/Public-Works/Garbage-Recycling/Recycling#:~:text=The%20City%20of%20Coral%20Springs%20offers%20curbside%20and%20drop-off%20recycling>

⁴⁴ The City of Coral of Springs offers free drop-off food waste disposal services for residents. <https://www.coral springs.gov/Government/Departments/Public-Works/Garbage-Recycling/Composting>

⁴⁵ Dania Beach, FL Code of Ordinances, Article IV Sec. 13-69. "Recyclables. For each residential unit(s) and multi residential family building(s) containing no more than four (4) units, the city shall provide once a week pickup of recyclables, which shall be placed in recycling bins provided by the city. The pickup of recyclables shall be on one of the days that solid waste is picked up and the residents or occupants shall not co-mingle solid waste with recyclables."

⁴⁶ One of the Cities that have Participation Agreements with Broward County for the disposal of household hazardous waste and electronic. <https://www.broward.org/WasteAndRecycling/Recycling/Pages/ElectronicsRecycling.aspx>

⁴⁷ Davie Beach, FL Code of Ordinances, Article V Sec. 9-77. "it shall be required by residential, commercial, industrial, office and all other waste producers of the town, as designated by resolution, to separate the recyclable materials from waste and place materials in the appropriate recycling container on a date as designated." https://library.municode.com/fl/davie/codes/code_of_ordinances?nodeId=PTIICOOR_CH9GARE_ARTVCOREWA_S9-77RECO

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Deerfield Beach ^{48 4950}	Y (Drop off)	Y (Drop off)	Y (Drop off)	N	N	Y	Y
Fort Lauderdale ^{37 51 52}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	N
Hillsboro Beach ⁵³	Y (Collection)	Y (Collection)	No Information Available	Y (Drop off)	No Information Available	No Information Available	N

⁴⁸ Deerfield Beach, FL Code of Ordinances, Article III Sec 106, 107, 108. "Residents' responsibilities. It is the responsibility of all residents to separate recyclable materials from all residential solid waste. All recyclables as identified herein shall be placed at the curbside along with solid materials on the resident's designated collection days in bins or other solid containers provided by the city." *Multi-family residential communities' responsibilities.* It is the responsibility of all multi-family communities' residents to separate recyclable materials from all residential solid waste. It shall be required that all multi-family residential communities' management offices to provide recycling services for all residents. Recyclables for collection shall be placed at the designated recycling collection location in carts or other solid containers provided by the city." Commercial operations accounts' responsibilities. It is the responsibility of all commercial establishments to separate recyclable materials from all solid waste materials. Recyclables for collection shall be placed at the designated recycling collection location in carts or other solid containers provided by the city." https://library.municode.com/fl/deerfield_beach/codes/code_of_ordinances?nodeId=PTIICOOR_CH58SOWA_ARTIIIREWA_S58-106SIMICUREREREWA

⁴⁹ "The City Commission voted to suspend the City's curbside recycling collection programs starting July 1, 2020. The suspension is currently in place. Although curbside recycling has been suspended, you can bring your clean and uncontaminated recyclables to the City's Recycling Drop-Off Center. <https://deerfield-beach.com/1723/Recycling#:~:text=The%20City%20of%20Deerfield%20Beach%20Recycling%20Drop-Off%20Center%20makes%20it>.

⁵⁰ The City of Deerfield Beach offers drop-off food waste disposal services for residents (for composting). <https://www.deerfield-beach.com/235/Drop-Off-Center>

⁵¹ Fort Lauderdale, FL Code of Ordinances, Article I Sec 24-8, 24-26." The owner of each multifamily residence shall implement a recycling program and encourage the participation of each living unit in such multifamily residence." "Residential Recyclables shall be collected roadside once weekly or as scheduled by the city." https://library.municode.com/fl/fort_lauderdale/codes/code_of_ordinances?nodeId=COOR_CH24SOWA_ARTIIMUCODISE_DIV1GE_S24-26FRPRGE

⁵² City of Fort Lauderdale Website "Commercial recycling is voluntary in Fort Lauderdale, meaning that at this time there is no ordinance in place requiring businesses to contract with a recycling hauler." <https://gyr.fortlauderdale.gov/greener-government/recycling-waste-reduction/recycling-in-fort-lauderdale/commercial-recycling#:~:text=Reducing%20waste%20by%20recycling%20is%20a%20great%20way%20to%20improve>

⁵³ Town of Hillsboro Beach Website. Recycling is collected one time weekly and electronic recycling can be dropped off. <https://www.townofhillsborobeach.com/295/RecyclingSolid-Waste-Information#:~:text=Recycle%20Electronics.%20Household%20Hazardous%20Waste.%201210%20Hillsboro%20Mile%201%20Hillsboro>

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Hollywood ^{46 54}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	Y
Lauderdale Lakes ^{37 55 56}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	N
Lauderdale-by-the-Sea ^{33 57}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	N
Lauderhill ^{462 58}	Y (Collection)	Y (Collection)	N	Y	Y	N	Y (Residents Only)

⁵⁴ City of Hollywood, FL Code of Ordinances, Article V Sec 50.04. "Single-family, duplex and triplex owners, renters, and occupants of these units, the city shall provide a curbside recycling bin for the purpose of recycling. "All new and existing multi-family unit owners, landlords, agents, and associations shall be responsible for implementing an on-site recycling program which must be source separated for each of their multi-family units no later than October 1, 2015, unless otherwise noted and excepted." "All new and existing commercial establishments shall implement an on-site recycling program which must be source separated no later than October 1, 2015, unless otherwise noted and excepted. However, commercial establishments that are on minimal waste service of one or fewer waste pickups per month, are exempt from providing an on-site recycling program." https://codelibrary.amlegal.com/codes/hollywood/latest/hollywood_fl/0-0-0-37297

⁵⁵ Lauderdale Lakes, FL Code of Ordinances, Article II Sec 16. "Single Family: Collection shall be made from all single-family homes ("Units") located in the City. Contractor shall collect properly set-out program recyclables acceptable at the designated Broward County MRF pursuant to the Agreement for Materials Recycling Facility between Broward County and Waste Management Inc. of Florida applicable to cities that are members of the Interlocal Agreement." "Multi-Family: Collection shall also include multi-family residences for such program recyclables set forth above." https://library.municode.com/fl/lauderdale_lakes/codes/code_of_ordinances?nodeId=APXAFR_ARTIISOWACOFR_DIV4WAMAINFL_S16REPRSCSE

⁵⁶ City of Lauderdale Lakes Website. "The City of Lauderdale Lakes provides garbage, bulk waste and recycling services to the residential and commercial residents of the City through an exclusive franchise agreement with Waste Management." <https://www.lauderdalelakes.org/156/Garbage-and-Bulk-Waste-Collection#:~:text=The%20City%20of%20Lauderdale%20Lakes%20provides%20garbage,%20bulk%20waste%20and>

⁵⁷ Solid Waste Agreement Waste PRO Pg.17 Sec 3.4. "The CONTRACTOR shall offer recycling services to all Commercial Recycling Collection Service Units; the fees for those services shall be agreed upon by the Commercial Recycling Collection Service Unit and the CONTRACTOR". "The CONTRACTOR shall provide Recycling Services to all Residential Service Units."

⁵⁸ Lauderhill, FL Code of Ordinances, Article II Sec 10-20. "The recyclable waste services for single family and multifamily as set forth in this section shall not be optional, but shall be required of all residents to the extent as set forth herein" https://library.municode.com/fl/lauderdale_lakes/codes/code_of_ordinances?nodeId=CH10GATRUNUNCOABREPR_ARTIIREWA_S10-20REPR

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Lazy Lake ^{462 59}	Y (Collection)	Y (Collection)	No Information Available	Y	Y	N	N
Lighthouse Point ^{462 60 61}	Y (Collection)	Y (Collection)	Y (Open Market)	Y	Y	N	Y (Mandatory for Residents)
Margate ^{462 62}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	Y (Mandatory)

⁵⁹ Solid Waste Agreement with Coastal Waste & Recycling of Florida states residential recycling curbside pickup.

⁶⁰ Lighthouse Point, FL Code of Ordinances, Div 1 Sec 74-38. "All persons living in residential living units located on properties zoned RS-3, RS-5, RD-10, RM-16 and RM-25 shall participate in and pay for the costs of participating in the curbside recyclable materials and collection and recovery services in the city, the costs thereof as established by agreement between the city and a duly authorized recycling collection contractor." https://library.municode.com/fl/lighthouse_point/codes/code_of_ordinances?nodeld=PTIICICO_CH74SOWA_ARTIICODI_DIV1GE_S74-38REPR

⁶¹ Municipal solid waste (MSW) and recyclable materials collection services agreement between the City of Lighthouse Point and Waste Management Inc. of Florida. Pg 2. "Collection services shall include but may not be limited to automated collection of residential garbage carts, automated collection of residential recycling carts, multi-family garbage and recycling services, commercial garbage services, bulk trash and white goods collection, and Permanent Rolloff services. " "Commercial recycling services and temporary rolloff services will be open market and will not be part of this exclusive agreement"

⁶² Margate, FL Code of Ordinances, Chap 19 sec 19-10, 19-11. "All single-family dwelling units shall receive collection service from the city's contractor for source separated recyclable materials once per week on one (1) of the scheduled garbage collection days." All multifamily communities shall receive collection service from the city's contractor for source separated recyclable materials at least once per week." "Every owner or tenant of a commercial establishment shall use the services of the contractor, and it shall be the responsibility of the owner to pay for such services." https://library.municode.com/fl/margate/codes/code_of_ordinances?nodeld=PTIICORR_CH19SOWARECOPRDI_S19-10COSOSEREMA

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Miramar ⁶³ ⁶⁴	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	Y
North Lauderdale ⁴⁶ ⁶⁵	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	Y (Residents Only)
Oakland Park ⁴⁶² ⁶⁶ ⁶⁷	Y (Collection)	Y (Collection)	Y	Y	Y	N	N

⁶³ Miramar, FL Code of Ordinances, Article IV, Sec 19-76, 18-77 and 18-78. “Recyclable Materials shall be segregated from other waste and placed in Recycling. Bins and Roll Carts and shall be placed at curbside or in designated areas on collection days as scheduled by the city or as agreed upon with the Franchise Hauler.” “Recyclables for Commercial Establishments or Multi-Family Residential Establishments (not using wheeled carts) shall be placed in a city approved container and stored in an enclosure or other acceptable location as approved for by the City.” https://library.municode.com/fl/miramar/codes/code_of_ordinances?nodeId=SPAADRE_CH18SOWA_ARTIVREPR_S18-77RECO SIMIREUNMUMIUNUSREBICA

⁶⁴ Drop-off at Waste Pro Operating Facility - Accepts household chemicals and electronic waste from Miramar residents on the first Saturday of each month at no cost. <https://www.miramarfl.gov/419/Recycling-in-Miramar#!rc-cpage=73409>

⁶⁵ North Lauderdale, FL Code of Ordinances, Article I, Sec 54-14, 54-20. Newspaper, Clear glass and aluminum cans shall be segregated from all other solid waste material by all single-family homeowners and Multi family homeowners. “All businesses performing solid waste collection, disposal, and recycling services within the city shall pay the following franchise fee to the city for the privilege of conducting and operating solid waste collection, disposal, and recycling services.”

https://library.municode.com/fl/north_lauderdale/codes/code_of_ordinances?nodeId=PTIICOOR_CH54SOWA_ARTIINGE_S54-14REPR

⁶⁶ Oakland Park Website. “Household waste is collected twice a week, yard waste is collected once a week, and recycling is collected once a week.” <https://oaklandfl.gov/637/Solid-Waste-and-Recycling#:~:text=The%20Town%20contracts%20with%20Waste%20Management%20for%20solid%20waste%20collection>

⁶⁷ Oakland Park, FL, Code of Ordinance Article II sec 42-23. “The town shall charge the owner or occupant of a dwelling or commercial establishment the amounts as set by resolution of the town commission for solid waste collection/recycling service”. https://library.municode.com/fl/oakland/codes/code_of_ordinances?nodeId=PTIICOOR_CH42HESA_ARTIIGATRWE_S42-23SECHLE

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Parkland ^{462 68}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	Y (Mandatory for Commercial)
Pembroke Park ^{462 69}	Y (Collection)	Y (Collection)	Y	Y	Y	N	Y (Residents Only)
Plantation ^{70 71 72 73}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	N (Encouraged)

⁶⁸ Parkland, FL Code of Ordinance Article II sec 35 and Article III Sec 7-51. "Each owner, occupier, caretaker or tenant of a residential dwelling unit in the City of Parkland shall separate all designated recyclable materials from other refuse in accordance with the provisions of this section irrespective of whether or not said dwelling unit receives paid solid waste services." "multifamily customers using a separate recycling dumpster, corrugated cardboard shall be segregated from all other solid waste material and must be flattened and placed into a recycling dumpster." "Mandatory commercial recycling - It is determined by the city that it is appropriate to require that commercial establishments separate commercial material"

⁶⁹ Pembroke Park, FL Code of Ordinance Article VI sec 11-97. "All newspaper, aluminum and bi-metal beverage cans and glass food and beverage containers shall be segregated from all other solid waste material by residential refuse customers. Aluminum and bi-metal beverage cans and glass food and beverage containers shall be placed in household recycling containers provided by the Town and placed out for collection for pickup by the garbage and trash collector, or other designated collector of the Town." "Article VIII. - Provision of commercial source separated recovered materials recycling services". https://library.municode.com/fl/pembroke_park/codes/code_of_ordinances?nodeId=PTIICOOR_CH11GARE_ARTVIRE_S11-97PRMACO

⁷⁰ Plantation, FL Code of Ordinance Article I sec 11-97. "All Persons owning real property within Plantation shall have the responsibility to ensure the proper handling, collection, transportation, and disposal of all Solid Waste; Recovered Materials, Recyclable Materials, and Exempt Material that is generated, deposited, or located upon their property." https://library.municode.com/fl/pembroke_park/codes/code_of_ordinances?nodeId=PTIICOOR_CH11GARE_ARTVIRE

⁷¹ Plantation City Website. "While recycling in the City of Plantation is not mandatory, the City strongly encourages residents to recycle any and all recyclable materials." <https://www.plantation.org/government/departments/public-works/recycling-guidelines>

⁷² Waste Management Franchise Agreement pg. 31 - Sec 5.11. The contractor may offer and make available its recovered materials collection service to all commercial customers"

⁷³ Drop-off services provided for HHW and electronics. <https://www.plantation.org/government/departments/public-works/hazardous-electronic-medical-waste>

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Sea Ranch Lakes ⁴⁶	Y (Collection)	Y (Collection)	No Information Available	Y	Y	N	No Information Available
Southwest Ranches ^{74 75}	Y (Collection)	Y (Collection)	No Information Available	Y	Y	N	Y (Residents Only)
Sunrise ^{76 77 78}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	N

⁷⁴ Southwest ranches, Fl, Code of Ordinance Article II sec 16-25, 16-26. “All unincorporated residential unit owners/Multifamily, lessees, and occupants shall be responsible for recycling the designated recyclable materials, by placing them in the recycling containers and placing them at the curb on designated recycling pickup days, as set forth in this article.” https://library.municode.com/fl/southwest_ranches/codes/code_of_ordinances?nodeId=PTIICOOR_CH16SOWA_ARTIICODI_S16-25RERE

⁷⁵ South Ranch Website. “HOUSEHOLD HAZARDOUS WASTE (HHW) & ELECTRONICS RECYCLING Household Hazardous Waste (HHW) includes paint, batteries, tires and similar materials. Electronic Materials include computers, computer monitors, televisions, printers, scanners, and similar devices. Neither HHW nor Electronic Materials are collected as solid waste, recycling, or bulk trash.” https://www.southwestranches.org/wp-content/uploads/2024/01/SWR_English-online_2024.pdf

⁷⁶ Sunrise Fl, Code of Ordinance Article II sec 12-12, 12-15. “Source separated recyclable materials shall be set out in a collection container. Source separated recyclable materials may be placed in the same collection container with solid waste.” If a commercial customer receives collection service from the contractor or any other person for the collection of source separated recyclable materials or recovered materials, the customer must place those materials in a separate cart or container (i.e., not the cart or container used for garbage and rubbish)”. https://library.municode.com/fl/sunrise/codes/code_of_ordinances?nodeId=PTIICOSUA.GECO_CH12SOWA_S12-15PRCOCU

⁷⁷ Sunrise City Website. Electronic recycling. [https://www.sunrisefl.gov/departments-services/sanitation/recycling#:~:text=Sunrise%20Recycling%20Drop-Off%20Facility:%20Single%20Stream%20\(all%20in%20one\)%20Recycling](https://www.sunrisefl.gov/departments-services/sanitation/recycling#:~:text=Sunrise%20Recycling%20Drop-Off%20Facility:%20Single%20Stream%20(all%20in%20one)%20Recycling).

⁷⁸ Drop-off services provided for HHW and electronics. The City of Sunrise and the City of Plantation have partnered to provide residents with opportunities to safely dispose of household hazardous waste (HHW) and electronics. Drop-off events are held on Saturdays throughout the year, and are open exclusively to residents of Sunrise and Plantation free of charge and with proof of residency. <https://www.sunrisefl.gov/departments-services/sanitation/household-hazardous-waste>

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Tamarac ^{79 80}	Y (Collection)	Y (Collection)	Y (Open Market?)	Y	Y	N	Y
West Park ^{462 81}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	No Information Available
Weston ^{462 82}	Y (Collection)	Y (Collection)	Y (Collection)	Y	Y	N	N (Encouraged)

⁷⁹ Tamarac, Fl, Code of Ordinance Article II sec 19-25,19-30. "Penalties for the failure to comply with the recycling program after receipt of the notice to comply as provided in this Section, or for the unauthorized collection of recycling materials shall be a fine of not less than one hundred dollars (\$100.00) nor more than five hundred dollars (\$500.00), or imprisonment for a term not exceeding ninety (90) days or by both such fine and imprisonment. Each day shall constitute a separate offense." "Every owner, tenant, or resident of a residential service unit, including, but not limited to, single-family residences, duplexes, triplexes, and townhouse dwelling units, and multi-family service units shall use the services of the city's franchise solid waste and recovered materials hauler, and it shall be the responsibility of the owner to pay for such services. Such compulsory service shall include a minimum of two (2) pickups per week." "Every owner or tenant of a Commercial Service Unit shall use the services of the city's franchise solid waste hauler, and it shall be the responsibility of the owner to pay for such services. Such compulsory service shall include a minimum of two (2) pickups per week if waste includes solid waste as defined herein."

⁸⁰ The City of Tamarac, in participation with the cities of Coconut Creek, Coral Springs, Fort Lauderdale, Lauderdale-by-the-Sea, Lauderdale Lakes, and Pompano Beach, provides a series of drop-off events for household hazardous waste (HHW) and old electronics (E-Waste). Residents of Tamarac may dispose of HHW and E-Waste at drop-off events in each participating City. This program provides Tamarac residents with a responsible way to recycle or dispose of household hazardous waste (HHW) and old electronics (E-Waste).
<https://www.tamarac.org/429/Hazardous-Waste>

⁸¹ Waste PRO Solid Waste Agreement Sec 3.3 pg. 129 states residential Recycling Services and Pg 87 sec 3.3.7 states commercial recycling.

⁸² Weston, Fl Code of Ordinance. 1.10.03 Recycling Program pg. 2 states single family, multifamily and commercial recycling. Code states that Multifamily and Commercial customers shall be responsible for implementing On-site Recycling.

Municipalities	Residential Recycling Program	Multifamily Recycling	Commercial Recycling	Electronics Recycling	HHW Recycling	Green (Yard & Food) Waste Program	Mandatory Recycling (Y/N)
Wilton Manors ⁸³ ⁸⁴	Y (Collection & Drop off)	Y (Curbside & Drop off)	Y (Curbside & Drop off)	Y	Y	N	Y (Residents Only)

⁸³ Wilton Manors FL, Code of Ordinance Article II sec 16-21,16-22,16-23. "Mandatory recycling shall be required for all single-family and multifamily units and shall include the recovery of program recyclable materials using approved containers provided by the City." "Commercial recycling service for non-residential accounts may contract directly for collection services with a certified recovered materials dealer licensed by the City. Non-residential commercial accounts may elect to use recycling services provided by the City." "The City may provide a community recycling drop-off center which shall be available to residential and commercial accounts."

https://library.municode.com/fl/wilton_manors/codes/code_of_ordinances?nodeId=PTIICOOR_CH16SOWA_ARTIISOWASE_S16-22CORECO

⁸⁴ The City has contracted with Coastal Waste & Recycling for a special Door Step collection of household hazardous waste. <https://www.wiltonmanors.gov/185/Hazardous-Waste-Disposal>.

3.3.3 Broward County Comprehensive Plan – Solid Waste Element

The main intent of the Solid Waste Element of Broward County Comprehensive Plan⁸⁵ is to provide a cost-effective and equitable solid waste disposal system emphasizing waste minimization and resource recovery while meeting all federal, state, and local environmental quality standards. The Solid Waste Element also addresses solid waste facilities and services correlated to future land use projections. The Solid Waste Element service area includes all of Broward County, i.e., 31 municipalities as well as unincorporated areas.

As stated in Section 6.1, Broward County is required to develop and implement a waste minimization strategy that includes source reduction, reuse, recycling, and recovery. Solid Waste Element Policy 6.1.1 has set a target of 5% reduction in MSW generation rate per capita to achieve a level of 1.80 tons per year by 2030. Per Solid Waste Element Policy 6.1.2, Broward County along with its municipalities are encouraged to promote and implement programs to achieve the state's 75% recycling goal (including net waste combusted) by 2030. In addition, Policy 6.1.3 encourages resource recovery and operation of resource recovery/WTE facilities.

Some of the key programs associated with the Resource Recovery System mentioned in the Solid Waste Element Support Document dated 2010 included Resource Recovery System Operations, Materials Recovery Facility, Ash Monofill, BIC Landfill, Household Hazardous Waste Program, Electronics Recycling Program, and Resource Recovery System Public Education. Also, the 2010 Solid Waste Element Support Document identified recycling and source reduction programs in Broward County such as waste prevention program, residential recycling, government recycling, commercial recycling, electronics recycling, household hazardous waste, paint recycling program, recycled glass beach nourishment project, mulching and composting, and outreach programs.

The Solid Waste Element document of the Broward County Comprehensive Plan was last updated more than a decade ago. However, revisions to the Solid Waste Element document are currently on hold and therefore, the previous version is still in use. Once updated, the Solid Waste Element document will need to be reviewed again to identify any changes from the previous version and potential impacts to solid waste processing, recycling and waste reduction programs that are currently in place.

3.3.4 Recycling Incentive Programs

Typically, incentive programs are operated and managed by a third party for a monthly fee per household paid by the municipality. The third party is responsible for marketing to residents and obtaining rewards/coupons from local businesses as rewards for customers based on their participation in recycling. If a resident is interested in joining the program, they typically sign up online.

Broward County has introduced recycling incentive programs that offer rewards or discounts to participating residents and businesses to encourage recycling. Waste Pro Rewards is one of the main recycling incentive programs currently operating within Broward County.

The State of Florida has also established a Recycling Loan Program that provides access to capital for the purchase of equipment and machinery to expand recycling capacity in Florida. Specifically, the program offers long-term fixed-rate loans at interest rates up to 2% below prime with a maximum

⁸⁵ <https://www.broward.org/BrowardNext/Documents/CompPlanDocs/Solid-Waste-Element.pdf>

loan amount of \$200,000. The program is limited to for-profit small businesses that are either legally licensed and operating in Florida, creditworthy start-up companies or out-of-state firms considering expansions into Florida. Eligible recycling companies must have a net worth less than \$6 million and have less than 100 employees.

In addition, the FDEP established a Green Lodging Program in 2004 that designates and recognizes lodging facilities that make a commitment to conserve and protect Florida's natural resources, based on areas of sustainable operations, including waste reduction, reuse, and recycling.

3.3.5 Pay As You Throw Program

Pay As You Throw (PAYT) programs provide an incentive to reduce waste disposal and increase recycling by charging residents based on the quantity (typically volume) of waste set out for collection. The only PAYT program within Broward County is in Plantation, which has one of the longest-running PAYT programs in the United States. The program uses three types of bags, a standard size bag, a kitchen size bag, and a recycling bag, each at a different cost. The City of Plantation has implemented the use of carts for multifamily and select communities.

The structure of PAYT programs can vary. The bag system used in Plantation can pose issues with recycling as bagged materials impact material recovery facility (MRF) operations. Other programs offer varying sizes of roll carts and/or stickers at varying rates. The City of Plantation reported that Plantation has one of the lowest recycling contamination rates in the County.

While PAYT programs have not caught on extensively in Florida, numerous sources report the effectiveness of these programs in increasing recycling, organics collection and source reduction, with a commensurate decrease in waste generation. Reported increases in recycling typically range from 30-90 percent and decreases in waste generation typically range from 25-50 percent.⁸⁶

3.3.6 Broward County Solid Waste Disposal and Recyclable Materials Processing Authority

Historical Governance: In 1987, Broward County entered into an Interlocal Agreement (ILA) with 26 of 31 municipal cities within the County, which created a dependent Solid Waste Disposal District (Former District). The Former District allowed the County to guarantee waste quantities in order to obtain tax exempt financing, Industrial Development Revenue Bonds, for the construction of solid waste disposal facilities, including Wheelabrator North and South Broward, which created the Resource Recovery System (System) that provided a regional approach to managing the waste stream generated within Broward County.

In accordance with the ILA, the Former District was governed by the Board of County Commissioners with non-binding administrative council from the Resource Recovery Board (Board) for coordinating the transport and disposal of solid waste generated by ILA Cities and unincorporated Broward County. The five cities that did not execute the ILA (non-ILA Cities) were each responsible for the disposal and administration of their own solid waste. The ILA expired in 2013, leaving all parties individually responsible to administer contracts for the disposal of their solid waste streams, or enter into a new agreement under new conditions.

⁸⁶ Sources include: <http://wastezero.com/success-stories/>; <http://www.p2pays.org/payt/main/casestudies.htm>; <https://archive.epa.gov/wastes/conserve/tools/payt/web/html/success.html>

Interlocal Agreement Executed in 2023: In May 2023, Broward County entered into a new ILA with 28 of 31 municipal cities within the County, which created an independent legal entity, the “Solid Waste Disposal and Recyclable Materials Processing Authority of Broward County, Florida” (Authority). The purpose of the Authority is to “develop and implement a long-term, environmentally sustainable, transparent, innovative, and economically efficient plan and approach to disposal, reduction, recycling, and reuse of waste generated in Broward County.”

As stated in Article 1 of the new ILA, the Authority’s goals are as follows:

- “encourage recycling, reduction, and reuse, in order to divert Authority Solid Waste (defined as garbage, rubbish, trash, refuse, or other discarded material resulting from the operation of residential, commercial, governmental, or institutional establishments in Broward County that would normally be collected, processed, and disposed of through a public or private solid waste management service) from landfills, seeking to ultimately reach zero waste,
- support regional solutions with other counties with priority being given to the needs and goals of the Parties,
- conduct comprehensive public education campaigns, and
- engage in and/or support research and development into disposal, reduction, recycling, reuse, and utilization of the latest technology to create a sustainable and resilient Authority Solid Waste disposal and Recyclable Materials (those materials that are capable of being recycled and that would otherwise be processed or disposed as Authority Solid Waste) processing system.”

The general powers of the Authority pursuant to the new ILA include establishment of rates, fees and other charges; Recyclable Materials and Recovered Materials facilities, processing, and programs; collection and transportation services; Authority Solid Waste disposal; issuance of bonds, commitment of System Waste⁸⁷ ; and regulatory flow control.

3.3.7 Zoning Considerations

Development of a solid waste management facility must adhere to local zoning and land use requirements. Setbacks and limitations of use for landfills and other solid waste disposal facilities are specified in Broward County Zoning Code⁸⁸ (Section 39-368(i)), which are as follows:

- 1) “Landfills or other solid waste facilities, except trash transfer stations, shall require a minimum plot size of twenty (20) acres.
- 2) The maximum plot coverage of all main and accessory buildings shall be ten percent (10%) of the net area.

⁸⁷ Defined as “Authority Solid Waste, Recovered Materials, and Recyclable Materials, collectively, generated in any of the Parties’ jurisdictions and/or from outside of Broward County and identified as acceptable waste to be accepted by the Authority in the Master Plan. This term does not include Hazardous Materials or any waste deemed unacceptable in the Master Plan.”

⁸⁸ Chapter 39-Zoning. https://library.municode.com/fl/broward_county/codes/code_of_ordinances?nodeId=PTIICOOR_CH39ZO

- 3) *No disposal area within the plot shall be within two hundred (200) feet of any plot line.*
- 4) *No part of any resource recovery facility shall be within five hundred (500) feet of any plot line.*
- 5) *The maximum height of any landfill area shall be one hundred twenty-five (125) feet above the established grade.*
- 6) *Plots used for landfills or other solid waste facilities, except trash transfer stations, shall not be located within one thousand (1,000) feet of any residentially-zoned district except agricultural districts.”*

In addition, Section 39-368(k) of Broward County Zoning Code states that the minimum plot size for Trash Transfer Stations is 10 acres and such facilities must be located 500 feet or more from residentially zoned districts.

In the A-6 Agricultural-Disposal District (Sections 39-457 through 39-464), solid waste disposal facilities such as sanitary landfill, incinerators, or resource recovery facilities are permitted, and the height of any buildings or structures in this zoning district, with the exception of landfill, must not exceed 200 feet. The maximum height of a landfill is 125 feet above the adjacent ground level. The minimum plot size for disposal of refuse (including garbage and animal waste) and resource recovery facilities is 20 acres, and setbacks from plot lines are 100 feet and 500 feet, respectively.

Broward County Zoning Ordinance, Section 39-464 states the following: *“Any plot utilized for a dump, sanitary landfill, incinerator, or resource recovery facility shall be used, operated, and maintained in accordance with the following regulations:*

- (1) An attendant shall be kept on duty during hours the disposal area is open to control deposit of refuse.*
- (2) The disposal area shall be enclosed sufficiently by a fence with gate or by other means so as to limit use to authorized periods, and for proper purposes.*
- (3) No burning of refuse shall be permitted within 10,560 feet of any residentially zoned property in the incorporated or unincorporated territory of Broward County, except by combustion in a completely enclosed incinerator or resource recovery facility of adequate design and operation to prevent emission of fly ash and dense smoke. There shall be no burning of refuse between the hours of 7:00 p.m. and 7:00 a.m.*
- (4) No refuse to be deposited within any required yard.*
- (5) Refuse is to be compacted daily and topped by a soil cover daily.*
- (6) Maximum height of a landfill shall not exceed one hundred twenty-five (125) feet above adjacent ground level.”*

Setbacks for recycling facilities in industrial zoned districts are noted in Section 39-313. Recycling facilities must be located a minimum of 500 feet from residentially zoned districts and a minimum of 200 feet from business zoned districts.

Broward County Land Use Plan⁸⁹ of the Broward County Comprehensive Plan allows municipalities to rearrange land uses to address municipal-level land use planning issues without the need for County Commission approval.

Depending on specific facility type(s) and proposed location(s), appropriate zoning requirements and setbacks will need to be determined for any planned future facilities.

4.0 ECONOMIC AND REGULATORY FLOW CONTROL REVIEW

This section discusses flow control as a means of solid waste management and provides a comparison of regulatory flow control versus economic flow control.

4.1 SOLID WASTE FLOW CONTROL

Flow control is the ability to direct the ultimate disposition of solid waste generated within the boundaries of a governmental entity to a specific facility for processing, recovery, transfer, energy production or disposal. Flow control is a mechanism used by local governments to generate revenue to support the development and operation of waste management facilities, particularly those requiring large capital investments (e.g., landfills, materials recovery facilities, transfer stations, waste to-energy facilities). There are two types of flow control: economic and regulatory. Economic flow control uses financial mechanisms to encourage solid waste to be delivered to a designated facility for processing, treatment, or disposal while regulatory flow control uses legal provisions (i.e., contracts) to require solid waste to be delivered to a designated facility for processing, treatment, or disposal.

Flow control assists governmental entities with generating and guaranteeing revenue for their solid waste management system. Directing the flow of waste to Broward County solid waste facilities is a key component to implementing a regionalized solid waste system, as it will be required in order to obtain financing, such as revenue bonds, needed to implement future solid waste disposal facilities. Additionally, enacting solid waste flow control in Broward County will create a dedicated revenue stream, through user and/or tipping fees, needed to repay the debt incurred to finance the implementation of the regional solid waste system as well as pay for operating and maintenance costs. System wide flow control could be implemented in Broward County through regulatory/contractual, or economic mechanisms.

4.1.1 Flow Control Background

In 1992, Congress directed the United States Environmental Protection Agency to submit a report to Congress on flow control as a means of municipal solid waste management to protect human health and the environment; and develop State and local waste management capacity and achieve local goals for source reduction, reuse, and recycling. Flow control mechanisms have been debated and have faced legal scrutiny within the waste management industry and environmental groups.

4.1.2 Federal Consideration - Regulatory Flow Control

Regulatory flow control uses the regulatory abilities of a governmental entity to dictate the flow of waste. In the past, regulatory solid waste flow control was implemented through general law or

⁸⁹ [BrowardNEXT - Broward County Land Use Plan](https://www.broward.org/PlanningCouncil/Documents/LandUsePlan/BrowardNext%20Broward%20County%20Land%20Use%20Plan.pdf)
<https://www.broward.org/PlanningCouncil/Documents/LandUsePlan/BrowardNext%20Broward%20County%20Land%20Use%20Plan.pdf>

special act as part of the charter establishing the creation of the governmental entity controlling the disposition of the waste.

During the 1990's, several court decisions ruled against the use of flow controls and most notably, in May 1994, the United States Supreme Court in *C & A Carbone, Inc. vs. Town of Clarkstown* 511 U.S. 383 (1994) (Carbone) decided that the use of flow control can discriminate against interstate commerce and, therefore, can violate the commerce clause of the United States Constitution. Specifically, the United States Supreme Court found the town law discriminated against interstate commerce by favoring a single local waste processor and depriving competitors, including out-of-state firms, of access to a local market. Following the Carbone ruling, some local governments were able to achieve similar results by relying on competitive and negotiated contracts with haulers, franchising systems, and competitive pricing. The courts found these alternative approaches non-discriminatory and upheld them if local benefits from facility designation outweighed effects on interstate commerce. Interstate commerce is less likely to be an issue given the distance it takes to leave the state from Broward County.

More recently, in 2007, in *United Haulers Association v. Oneida-Herkimer Solid Waste Management Authority*, 550 U.S. 330 (2007) (United Haulers) the United States Supreme Court revisited the flow control issue, this time in a context where, unlike the Clarkstown transfer station, the designated facilities were publicly owned. In this case the court ruled that County ordinances requiring haulers to deliver locally generated waste to publicly owned waste facilities did not discriminate against interstate commerce. The majority opinion found that the ordinances merely enabled the counties to pursue traditional policy power functions and that the underlying policy choice (i.e., public sector waste handling) should be free from court interference. Analyzing the ordinances under the burdens-versus-benefits test, the United States Supreme Court found that the public benefits of flow control outweighed whatever burden on commerce might exist. However, since this ruling, there have been other federal court challenges resulting in injunctions prohibiting governmental entities from enforcing their flow control ordinances due to issues other than violation of the interstate commerce clause. Therefore, relying on local ordinance driven regulatory flow control may result in legal challenges and increased risk related to dependent financing.

4.1.3 State Considerations – Regulatory Flow Control

The State of Florida enacted Florida Statute (F.S.) 403 Environmental Control Part IV Resource Recovery and Management to plan for and regulate all aspects of solid waste with the goal of protecting public safety, health, welfare; and enhancing the environment for the people of this state; and recover resources which have the potential for further usefulness. F.S. 403.713(2) states that *“Any local government which undertakes resource recovery from solid waste pursuant to general law or special act may institute a flow control ordinance for the purpose of ensuring that the resource recovery facility receives an adequate quantity of solid waste from solid waste generated within its jurisdiction.”* The statute further defines resource recovery as *“the process of recovering materials or energy from solid waste.”*

The existing WTE facility, Broward County South Resource Recovery Facility meets the definition of a resource recovery facility described in F.S. 403.713(2). Additionally, considering the broader definition of resource recovery described in F.S. 403.703(32), the proposed Material Recovery Facility (MRF), Mixed Waste Processing (MWP) Facility and Bulky Waste (BW)/Yard Trash (YT) Facilities that recover materials from solid waste and would be utilized to meet the short, mid, and long-term disposal needs for Broward County. In addition, certain types of organics processing facilities may also meet the definition of resource recovery described in F.S. 403.703(32) if they

generate electricity, such as through use of an anaerobic digestion process, or recover material such as to produce a soil amendment. Therefore, specifying flow control to Broward County South and other solid waste facilities (MRF, MWP, etc.), within the governmental entity charter may allow for regulatory ordinance-driven flow control of solid waste to these facilities. However, careful consideration must be made in developing the flow control ordinance within the charter to limit legal risk associated with interstate commerce issues.

4.1.4 Applicability to the Solid Waste Authority of Broward County

§ 403.706 (1), F.S. (2013) states in part that “*The governing body of a county has the responsibility and power to provide for the operation of solid waste disposal facilities to meet the needs of all incorporated and unincorporated areas of the county.*” Florida Statutes does not prescribe how this responsibility is achieved.

The Solid Waste Authority of Broward County was established via an Interlocal Agreement (ILA) on May 23, 2023 with the purpose to “*develop and implement a long-term, environmentally sustainable, transparent, innovative, and economically efficient plan and approach to disposal, recycling, and reuse of waste generated in Broward County.*” The County entered into a new ILA in 2023 with 28 of 31 municipal cities within Broward County, which created an independent legal entity, the “Solid Waste Disposal and Recyclable Materials Processing Authority of Broward County, Florida” (Authority).

The general powers of the Authority pursuant to the new ILA include establishment of rates, fees and other charges; Recyclable Materials and Recovered Materials facilities, processing, and programs; collection and transportation services; Authority Solid Waste disposal; issuance of bonds, commitment of System Waste; and regulatory flow control.

The current ILA requires all participating municipalities to comply with the requirements of ordinances noted in Sections 11.2, Regulatory Flow Control (Flow Control Ordinance) and 11.4, System Waste Reporting Ordinance. As noted in Section 11.2, Regulatory Flow Control, each participating municipality is required to enact a Flow Control Ordinance pursuant to Section 403.713, FS and direct all System Waste generated within its geographic boundary to be delivered to the System, except for waste that is designated to be transported outside the state.

System Waste Reporting Ordinance requires all participating municipalities to obtain and maintain monthly reports from each hauler, which includes the quantity of System Waste collected (for each category) and receiving facility details.

While the Solid Waste Authority of Broward County has the power and duty to establish, operate, and maintain the infrastructure and facilities overseen, owned, operated, acquired, or contracted for by the Solid Waste Authority of Broward County, each party to the ILA retains ultimate responsibility within its jurisdiction for supervising waste and recycling as provided by applicable law.

4.2 REGULATORY AND ECONOMIC FLOW CONTROL

Regulatory (contractual) and economic flow control mechanisms could be implemented to direct solid waste to the system facilities and the potential impacts of implementation of flow control are discussed below.

4.2.1 Regulatory or Contractual Flow Control

Regulatory or contractual flow control can be achieved through the development of interlocal agreements between Cities and the new solid waste governance system. As mentioned in Section 4.1.4 above, Broward County has incorporated a flow control ordinance in the new ILA that was executed in May 2023. The 28 municipalities in Broward County that have entered into an ILA have a commitment to deliver all System Waste to facilities within the System² thereby guaranteeing minimum capacity requirements. In addition, the new ILA specifies that each hauler provide a detailed monthly report to their contracting municipality including details of waste tonnage collected for each category of System Waste, and where such waste was transported to and the facility delivered to. This enables the Authority to track all waste generated within its System, provides better identification of haulers suspected of any non-compliance and enhanced control over private facilities within the County. On the other hand, increased reporting requirements may be cost prohibitive and possibly drive smaller companies out of the market place that could potentially violate parts of F.S. 403.70605 Solid Waste Collection Service in Competition with Private Companies.

4.2.2 Economic Flow Control

Economic flow control could be achieved by providing solid waste processing and disposal services at the lowest total cost, creating an economic incentive to direct solid waste to the System facilities. To attain the lowest total cost, fees could be subsidized through an annual assessment or non-ad valorem property tax to residents within the participating Cities; or alternative sources of funding, such as charging user-based waste generation fees or instituting environmental investment charges for haulers and/or generators bypassing system facilities or through implementing a combination of these funding sources. This enables solid waste flows to the System facilities guaranteeing minimum capacity requirements. However, care must be taken as to not violate any parts of F.S. 403.70605 Solid Waste Collection Service in Competition with Private Companies to reduce legal risks.

4.3 COMPARISON OF REGULATORY AND ECONOMIC FLOW CONTROL AND BROWARD COUNTY CONSIDERATIONS

Since the Solid Waste Authority of Broward County does not currently own any solid waste facilities, regulatory flow control may not be feasible at present. However, as mentioned before, the 28 municipalities in Broward County that have entered into an ILA have a commitment to deliver all System Waste to facilities within the System. This delivery commitment is an effective contractual flow control mechanism that will be very beneficial in the future if and when the Solid Waste Authority of Broward County starts developing its own solid waste facilities, as the Authority will be able to direct the waste tonnage to specific facilities as needed to support facility operations.

Through the Regional Solid Waste and Recycling Master Plan, the SCS Team will present detailed recommendations concerning operations and facilities (including facility type, size, placement, etc.) needed to create a regional solid waste and recycling system for solid waste generated within Broward County. Currently, the County owns the following solid waste management assets:

- Southwest Regional Landfill
- South Resource Recovery Plant/Ash Monofill (land only)
- Alpha 250 North/South
- North/Central/South Trash Transfer Stations

Given the need to effectively manage the solid waste generated in the County, these facilities are not expected to meet the solid waste and recycling needs of the County over the planning horizon. While it is not yet known whether the Authority will seek to procure any new solid waste and recycling management services or facilities and/or utilize private solid waste and recycling management infrastructure, flow control limitations must be considered, especially where financing will be dependent on a secure revenue stream. The relative impacts of implementing economic or regulatory flow control are presented below in Table 3.

Table 3. Relative Risks of Economic and Regulatory Flow Control

Attribute	Economic Flow Control	Regulatory Flow Control
Financing	High	Low
Construction	High	Low
Operation	Medium	Low
Residential Customers	High	Low
Commercial Customers	High	Medium

The relatively higher risk associated with economic flow control in Broward County is primarily associated with the limited municipal recycling processing and disposal capacity. Accordingly, to effectively implement economic flow control, the facilities would need to set rates at or below market rates to attract solid waste and recyclable materials. Alternatively, by implementing regulatory flow control, the Solid Waste Authority of Broward County could specify the recycling and disposal facilities in the collection agreements, thus assuring a relatively predictable revenue stream. Having both contractual requirements and an ordinance may help protect against unforeseen circumstances in maintaining flow control.

To assure the financial strength necessary to develop its own infrastructure, and in consideration of the ease of implementation, the use of regulatory flow control is recommended. The Solid Waste Authority of Broward County could also employ a hybrid system that uses both financial and contractual mechanisms to cause solid waste and recyclable materials generated by residential and commercial generators to be transported to designated facilities. This is the approach used by the Solid Waste Authority of Palm Beach County where residential and governmental properties are assessed for 100% of their disposal fees, and in order for the solid waste collection companies to receive credits they must bring the waste to a Solid Waste Authority of Palm Beach County designated facility. Through the use of both financial and contractual mechanisms along with an assessment program, the only portion of the waste stream that is potentially at risk is the commercial waste in the municipalities. To minimize the risk associated with commercial waste, the Solid Waste Authority of Palm Beach County adjusts the commercial assessment to decrease or increase the tipping fee as local markets dictate.

5.0 OVERVIEW OF EFFECTIVELY SITING NEW FACILITIES TO MEET FUTURE PROCESSING AND DISPOSAL NEEDS

Once the need for a solid waste facility and its processing or disposal capacity to meet future demand is defined, the next step in its development is the selection of an appropriate site within the service area. The siting of new solid waste facilities is a challenging process that considers many possible community, political, logistical, regulatory, and financial constraints based on the size and type of facility. The siting criteria includes eight general categories, as follows:

- **Location** – Site location within the County relative to waste sources, proximity to residential zoning, and expected effects on the existing solid waste system operations.
- **Utilities** – Availability of potable water, sanitary sewer, natural gas and electric utilities, and any stormwater and groundwater considerations at the site.
- **Soils** – Identification of soil types at the site and potential effects on site development.
- **Environment** – Consideration of a range of environmental factors, including floodplains, wetlands, threatened and endangered species, and permitting issues.
- **Transportation** – Proximity to major roads, available road access to the site and improvements needed, if any.
- **Community** – Estimate of public response to potential construction of the facility at the site considering proximity to residential zoning, nuisance concerns, environmentally sensitive areas, environmental justice concerns, and others.
- **Cost** – Estimate cost of developing the facility at the site, including factors such as floodplain, wetlands, and wildlife mitigation, removal of unsuitable soils, importing and placing fill to elevate structures to meet resiliency requirements, utility extensions and modifications, etc.
- **Schedule** – Estimate of time needed to the start of commercial operations, considering the site development factors listed above and time needed for County procurement, permitting, potential legal actions, material fabrication and delivery, construction, etc.