

FLORIDA ORGANICS RECYCLING PROGRAM UPDATE

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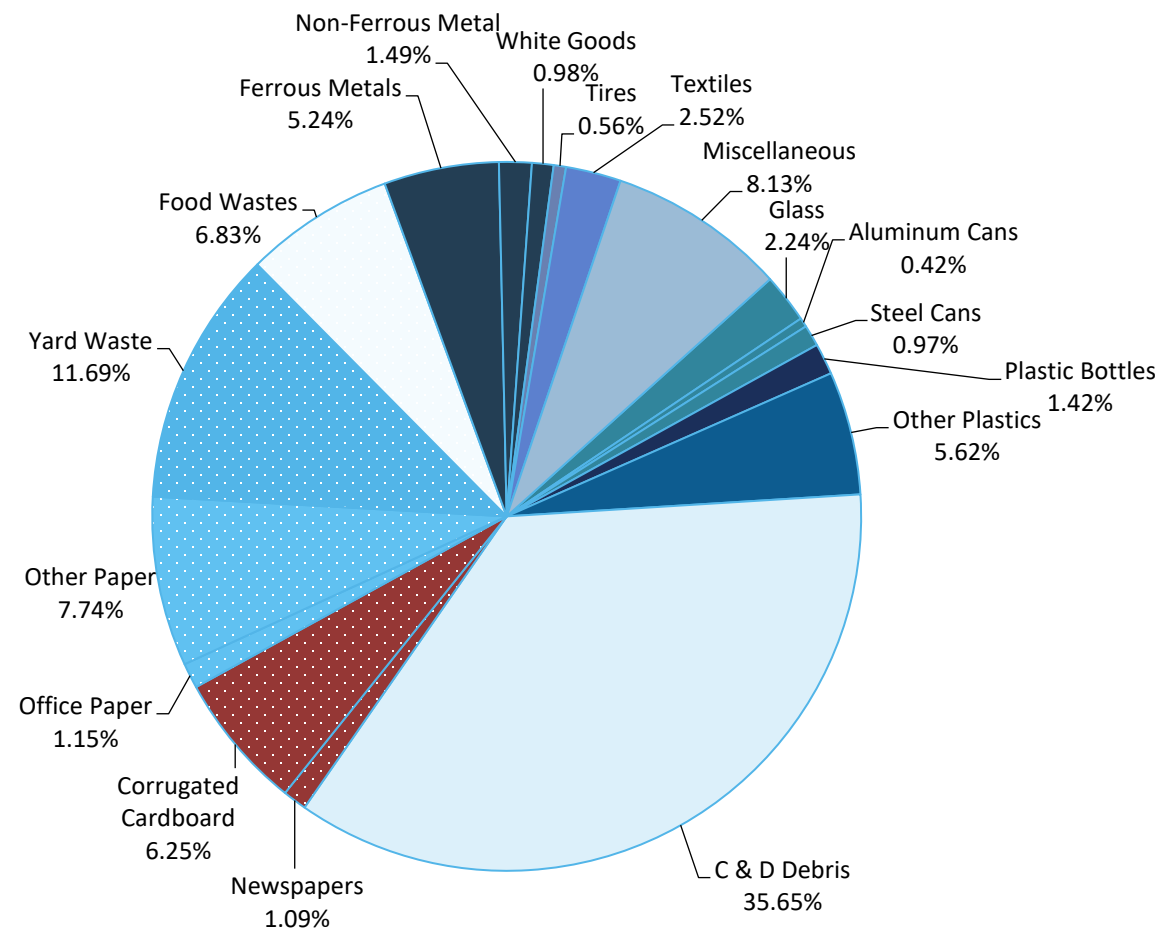
Division of Waste / Waste Reduction
Florida Department of Environmental Protection

Florida Composting Council
2023 Annual Composter Conference
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Current State of Organics in Florida

Florida Municipal Solid Waste Collected (2021)
(49.9 million tons)



Florida Municipal Solid Waste Collected and Recycled (2021) - ORGANICS

ORGANIC MATERIALS	MUNICIPAL SOLID WASTE COLLECTED ¹		MUNICIPAL SOLID WASTE RECYCLED		
	TONS PER YEAR	% OF TOTAL TONS PER YEAR	TOTAL TONS RECYCLED	% OF TOTAL TONS RECYCLED	MATERIAL RECYCLING RATE ² (PERCENT)
Newspapers	544,724	1.1	62,791	0.3	12%
Corrugated Cardboard	3,120,728	6.3	1,273,045	6.2	41%
Office Paper	574,311	1.2	89,795	0.4	16%
Other Paper	3,862,582	7.7	349,899	1.7	9%
Yard Waste	5,831,461	11.7	3,871,871	18.9	66%
Food Wastes	3,408,436	6.8	180,428	0.9	5%
Process Fuel ³	N/A ⁴	N/A	295,945	1.4	100%

¹Municipal solid waste collected is the total recycled, landfilled and combusted.
²Unadjusted traditional recycling rate.
³Process fuel is composed of yard, wood and paper waste used in process boilers.



Current State of Organics in Florida

- The focus of Florida organics recycling has been on the production and use of compost made from solid waste and materials handled in source-separated organic processing facilities (SOPFs). SOPFs include yard trash, manure, animal byproducts and vegetative wastes.
- In 2023, Florida had approximately 300 SOPFs processing over 3 million tons of organics that were diverted for beneficial use. Approximately 20 facilities were registered to process food waste (animal byproducts and vegetative wastes).
- In 2023 there has been an increase in community compost operations processing food waste throughout the state.
- FDEP is in Rulemaking to update Chapter 62-709, F.A.C. – Criteria for Organics Processing and Recycling Facilities for updates.



Florida Composting Facilities

Registered / Permitted

There are over 300 registered/permitted facilities recycling and composting organic in Florida:

Registered Source-Separated Organics Processing Facilities	
• Yard trash mulching/composting	315
• Manure composting/blending	7
• Pre and post-consumer vegetative (food) waste composting	20
• Animal byproducts (meats, eggs & dairy) composting	5
• Sargassum seaweed	1
Permitted Solid Waste Composting Facilities	4
Permitted Biosolids Composting Facilities	15
Permitted Anaerobic Composting Facilities	3



Composting Facilities - Exempt

Composting on the farm

- Applies to normal farming operations
- For use on and off the farm
- [Exemptions - 62-709.305, F.A.C.](#)
- [Agricultural Best Management Practices - Florida Department of Agriculture & Consumer Services \(fdacs.gov\)](#)



Community Composting – 13 known operations

- Applies to sites composting under 100 cubic yards of organic solid waste
- Material generated onsite or offsite
- May include a neighborhood, school or university and other institutions
- [Composting for Community Map – Institute for Local Self-Reliance \(ilsr.org\)](#)

Backyard Composting

- Includes composting of grass clippings, leaves and food waste
- Waste is generated by the homeowner or tenant of a single or multi-residential unit



Organics Processing and Recycling Facilities Registration and Permits

Source-Separated Organics Processing Facility (SOPF) Registration

- Chapter 62-709, F.A.C.
- Chapter 62-701, F.A.C. – general provisions
- Registration required in accordance with Rule 62-709.320, F.A.C.
- Rule 62-709.330, F.A.C. – specific criteria for yard trash
- Rule 62-709.350, F.A.C. – specific criteria for pre and post consumer food waste, animal byproducts and/or manure
- Limited to 1 year – must renew annually



Organics Processing and Recycling Facilities Registration and Permits - Continued

Solid Waste Composting Facility Permit

- Chapter 62-701, F.A.C.
- Chapter 62-709, F.A.C.
- Permit required – 5 years

Solid Waste Organic Recycling Pilot Project Permit

- Chapter 62-709, F.A.C.
- Permit required – 18 months, with option to extend



Organics Processing and Recycling Facilities Registration and Permits - Continued

Biosolids Processing/Composting Facility Permit

- Chapter 62-640, F.A.C.
- Permit required – 5 years
- Biosolids with yard trash only is regulated under Chapter 62-640, F.A.C.
- Biosolids with organics other than yard trash regulated under Chapters 62-640 and 62-709, F.A.C. Solid waste conditions may be added to permit in lieu of a separate SOPF Registration



Organics Processing and Recycling Facilities Registration and Permits - Continued

Air Program Anaerobic Digestion Permit

- Chapter 62-210, F.A.C.
- Required for digestion of organic waste in the production of renewable natural gas (RNG)

Stormwater and Multi-Sector Generic (MSGP) Permits

- Chapters 62-620 and 62-621, F.A.C.
- Each facility is evaluated on a case-by-case basis
- [NPDES Stormwater Program | FDEP](#) and [Stormwater FAQ's](#)



Organics Processing and Recycling Facilities Registration and Permit Forms

Subsection	Form Title
62-709.901(3)	<u>Application for Registration and Annual Report of a Yard Trash Transfer Station or a Solid Waste Organics Recycling Facility</u>
62-709.901(1)	<u>Application for a Permit to Construct/Operate a Solid Waste Management Facility for the Production of Compost</u>
62-709.901(2)	<u>Annual Report for a Solid Waste Management Facility Producing Compost Made from Solid Waste</u>
62-709.901(4)	<u>Application for a Permit to Operate an Organics Recycling Pilot Project</u>
62-640.210(2)(d) and 62-620.910(10)	<u>Wastewater Facility or Activity Permit Application</u>
62-210.900(1), (3) and (4)	<u>Air Permit Application</u>



Organics Processing and Recycling Facilities

General Provisions

General provisions relating to solid waste management in Chapter 62-701, F.A.C., apply to facilities regulated under Chapter 62-709, F.A.C.

- Any facility producing compost made from solid waste must have a current valid permit or registration issued by FDEP, unless exempt
- Notify FDEP 45 days prior to closing a facility and remove all materials within one month
- Compliance with stormwater rules in Chapters 62-302 and 62-330, F.A.C.
- Compliance with any other local, state or federal requirements and regulations
- Facilities composting biosolids with food waste are regulated under Chapter 62-709, F.A.C.
- No product shall be placed in a water body or wetland without a permit, or in a sinkhole or dewatered pit



Source-Separated Organics Processing Facility Registration Criteria

- Annual registration with FDEP on Form 62-709.901(3)
- Registration not required if authorized under a valid solid waste facility permit, e.g., landfill, or another department permit
- Annual registration renewal due by July 1st of each year
- Annual Report submitted with application
 - Site inventory submitted with initial report
 - Inbound & outbound material (cyds or tons) for previous calendar year for renewals
- Monthly records of incoming and outgoing material retained for 3 years
- Temperature records retained for 3 years
- Registration fee of \$35.00 per facility due with renewal application



Source-Separated Organics Processing Facility Registration – Design and Operating Requirements

- **Operational features and equipment to maintain a clean and orderly operation**
- **Site control including an effective barrier to prevent unauthorized entry and dumping**
- **Dust and litter control methods**
- **Fire protection and control provisions**
 - 20 ft perimeter road
 - No compaction
 - <50 ft access by motorized firefighting equipment



Source-Separated Organics Processing Facility Registration – Design and Operating Requirements

- **Vector and odor control**
- **Clean storm water and drainage systems if present**
- **Putrescible waste incorporated into compost pile within 48 hours upon receipt**
- **Containerize and remove any biomedical or hazardous waste**
- **When operations cease, all material removed per Chapter 62-701, F.A.C., requirements**



Food Waste Composting Facilities

Registration – Additional Specific Requirements

- **Material stored more than 500 ft from off-site potable well**
- **Material stored more than 200 ft from any body of water including wetlands**
- **Facility not located within 10,000 ft of any licensed and operating airport runway used by turbine powered aircraft, or within 5,000 ft if used only by piston engine aircraft**
- **Carbon to Nitrogen ratio >20:1**



Source-Separated Organics Processing Facility Registration – Additional Specific Requirements

- **Piles do not exceed 12 ft in height**
- **Materials removed within 18 months**
- **Demonstrate disinfection standard is achieved**
- **Vector attraction reduction controls:**
 - 14 days $\geq 40^{\circ}\text{C}$ and average $\geq 45^{\circ}\text{C}$, or
 - Specific oxygen uptake rate (SOUR) $\leq 1.5 \text{ mg O}_2 / \text{hr/gm TS}$ at a temperature of 20°C



Organics Processing and Recycling Facilities

Testing Parameters

Composite sample every 20,000 tons or every 3 months, whichever comes first.

- **Compost analyzed for:**
 - moisture, reduction in organic matter, organics matter and PH
 - % foreign matter and metals (Cd, Cu, Pb, Ni, and Zn)
- **Compliance with disinfection standards**
- **Compost produced by persons for their own use does not need to be tested**
- **FDEP can change required parameters or frequency**

All sampling & analysis must comply with 62-160, F.A.C., Quality Assurance Rules.



Organics Processing and Recycling Facilities Recording and Reporting

Maintain monthly records for 3 years of:

- Compost analytical results
- Quantity, type & source of waste received
- Quantity & type of waste processed, compost produced, and compost removed

Solid Waste compost facilities must submit an annual report



Disaster Debris Management



A Disaster Debris Management Site (DDMS) is a temporarily authorized solid waste processing facility subject to an Emergency Final Order.

Provide unique management challenges.





Disaster Debris Management

Pre-authorization process

- Annual process
- Request using FDEP Business Portal or through FDEP district/delegated county office

Distribution and number of sites

- 697 sites pre-authorized for 2023
- Sites pre-authorized statewide
- 20 county governments still need pre-authorized sites for 2023





Florida Organics Recycling Center for Excellence (F.O.R.C.E.)

The mission of F.O.R.C.E. is to provide a framework to promote organics recycling and serve as clearinghouse of information in a statewide effort to streamline compost processing, food diversion, research, demonstration, marketing and education information in Florida.



FloridaForce.org



THANK YOU

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