# **General Assembly- Solid Waste Management Districts**

KRS 109.011(10): It is the intent of the General Assembly that waste requiring disposal in municipal solid waste disposal facilities be reduced and that solid waste be managed in an environmentally protective manner

KRS 109.011 Findings and DECLARATION OF PURPOSE

of 109 Board's enabling statue

KRS 109.011(7): That the General Assembly recognizes the generation of solid waste is inevitable, but much of it is unnecessary and should be discouraged. However, where solid waste does exist, it should be considered to the extent possible as a valuable resource, and be made use of wherever and whenever desirable and economically justifiable.

### General Assembly- Solid Waste Management Districts

LMCO Chapter 51 mirrors the language of the statutes and includes the language of KRS 109.120 verbatim.

KRS 109.120 Rules and regulations of the board: "The board may adopt such rules and regulations as are necessary to carry out the purposes for which the waste management district was created and necessary for the adequate management of solid waste in a manner adequate to protect the public health and consistent with such rules and regulations as may be promulgated by the department"

The Waste Management District was created December 11, 1990 by Jefferson Fiscal Court pursuant to KRS 109.41 (13), KRS 109.115 and KRS 67.083(3) and includes in its jurisdiction all territory within the borders of the county.

The District was granted those powers and duties assigned to solid waste management districts under KRS 68.178 and KRS Chapters 109 and 224.

# Louisville/Jefferson County Metro Government Waste Management District

#### The duties of the District are to:

- prepare and submit to the Cabinet, the Louisville/Jefferson County Solid Waste Management Plan;
- · provide a universal collection program; and
- adopt such rules as necessary for the adequate management of solid waste in a manner adequate to protect the public health and consistent with rules and regulations as may be promulgated by the Cabinet.



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# Louisville/Jefferson County Metro Government Waste Management District

## History

1997 Yard Waste Landfill Ban was implemented

Garbage and yard waste separated at the curb

Plastics began to be a problem in early 2000's as many of the reusable containers used for collection of trash before the larger carts slowly went away.

#### Result

Yard waste increasingly became contaminated with plastic

#### **Tipping Point**

2006 The compost from the curbside yard waste became unusable.

Alternative Daily Cover-Covering the waste at the end of the day

Previous attempts to fix the issue failed

### **Curbside Yard Waste Collection Numbers**

24% (80,000) of households in Jefferson County use curbside collection for yard waste

32,000 tons of yard waste was collected.

Much of that yard waste is contaminated with plastic that prevents it from being composted

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# Louisville/Jefferson County Metro Government Waste Management District

## Why is Plastic a Problem?

Plastic Does Not Decompose

**Reduces Quality of Compost** 

No one wants to buy mulch with plastic shreds in it

**Increases Processing Cost** 

If each household set out 15 bags <u>per year</u>, it would generate over 1,200,000 plastic bags (too many to remove manually)



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#### Removing bags while they are collected

- Significantly increases time and cost to complete route
- Increased risk to workers and motorist along roadways
- Plastic bags that are removed have a tendency blow away...creating litter.

#### Removing plastic contamination at compost facility

- · Facilities quickly become overwhelmed
- · Hand removal is inefficient
- · Technology still unable to remove plastic



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#### **Resolution Recommended Best Practices**

Handling yard waste, in order of preference:

- Mulch and/or compost yard clippings to eliminate cost and need for yard waste collection. It's Free!
- Utilize seasonal drop-off centers for yard waste materials. It's Free!
- Place yard waste in reusable containers to reduce the need for continual purchase of single-use bags. Cheapest Method for Curbside Collection!
- · Place yard waste in paper bags designed for yard waste collection.
- Place yard waste in compostable bags that meet ASTM D6400 standards.



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#### Handling Yard Waste At Home

Experts agree mulching is the best way to manage grass and leaf clippings

Lawn Care Companies
Golf Courses
Parks
Do Not Pick Up Grass Or Leaves

Why pay for yard waste collection?

# Michigan State University Turf Grass Sciences

A common misconception is that clippings left on the lawn will promote thatch buildup. This is not true. Clippings do not make significant contributions to thatch and should be returned to the lawn whenever possible.

If clippings are removed, they can be used in compost piles or as mulch. Backyard compost stations are becoming increasingly popular, and grass clippings are a welcome addition.

Mowing tree leaves in the autumn and returning them to the turf system is an outstanding alternative to raking and bagging. MSU studies have evaluated the effects of mowing tree leaves into lawns. In these studies, up to 6 inches of various types of tree leaves were mowed into lawns. No adverse effects were detected on the lawns.

Reports from professional turf managers who have been practicing this technique on golf courses and commercial turf have been positive.

http://www.turf.msu.edu/mowing-lawn-turf

# Louisville/Jefferson County Metro Government Waste Management District

| Cost of Reusable Containers vs. Plastic Bags Over Time |               |         |         |         |         |
|--|---------------|---------|---------|---------|---------|
| Reusable Container                                     | Cost per Use* |         |         |         |         |
| Cost per Unit  | Year 1        | Year 2  | Year 3  | Year 4  | Year 5  |
| \$20.00  | \$0.63        | \$0.31  | \$0.21  | \$0.16  | \$0.13  |
| \$15.00  | \$0.47        | \$0.23  | \$0.16  | \$0.12  | \$0.09  |
| \$10.00  | \$0.31        | \$0.16  | \$0.10  | \$0.08  | \$0.06  |
| Single-use Plastic Bag (Cost per Use)                  | Overall Cost* |         |         |         |         |
| \$0.30   | \$9.60        | \$19.20 | \$28.80 | \$38.40 | \$48.00 |
| \$0.20   | \$6.40        | \$12.80 | \$19.20 | \$25.60 | \$32.00 |

\*Based on 32 uses per year, yellow indicates when the price of using plastic bags exceeds a \$10 reusable container, orange when the price exceeds use of a \$15 reusable container, and red when the price exceeds use of a \$20 container(s).

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# What is an appropriate reusable container for yard waste collection?

<u>Durable grade of galvanized metal</u> <u>or plastic from 20 to 35 gallons</u> capacity.

The container shall be provided with two lifting handles on opposite sides

Containers that are emptied manually <u>shall not exceed 60</u> pounds when filled...

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# Louisville/Jefferson County Metro Government Waste Management District

# **Paper Yard Waste Bags**

Tougher than conventional plastic bags

Stands up so you don't bend over

Easy to fill openings



Yard Waste Container Regulation 51.507R

### **Durability of Paper**

This bag was filled with grass and sticks then soaked with garden hose, left out through four different rain events, and after each rain event it was tossed in the air.

The key is to fold the top to prevent water from pooling inside



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Yard Waste Container Regulation 51.507R

#### Proposed Yard Waste Regulation Outreach Plan

#### **High Level Outline**

This draft is intended to be a guide for the Outreach Campaign. Some items may be changed or adapted as needed.

The goal is to reach all households using plastic bags three times through either public information messaging, mailings, and hand delivered notices during collection.

To assist in the effort the District is in the process of hiring a public education coordinator who will work with various community groups, elected officials, and media outlets.

In addition the District will reach out to other organizations to help promote the regulation.

- Press Release announcing measure has passed
- Multiple message placements in Metro Council News newsletters/emails during the outreach period
- Multiple message placements in Louisvilleky.gov website(s)
- Establishment of a web based communications and education site
- Radio interviews with appropriate personalities and formats
- Mayor's social media and newsletters
- Television interviews with appropriate personalities and formats
- Metro Text Alerts
- Promotional Bag Give-A-Ways with information on regulation
- · Point of Purchase Signage at retailers
- Informational Flyers at Staffed Recycling Centers
- Compost Bin Sale and Education Event (May 31)
- Hand Notices or door hangers for waste haulers to place at homes setting out yard waste in plastic bags during the outreach period. Yard waste will still be collected during that time.
- Notices in billing information for private haulers

#### 109 Board of Directors

Joyce StClair: Chair, At-Large Representative

Darrel Rhodes: Represents Urban Service District Residents

Venu Vanaparthy: Represents A District Residents

Lee Lewis: Represents B District Residents

Vacant: C District

Executive Director: Keith Hackett, Department of Public Works-Solid Waste Management Division

#### The Waste Management District Technical Advisory Committee

Robert Lee: Small Hauler Representative-President/Owner of Eco-Tech Inc. and Clark Floyd Landfill, Chair of the National Waste and Recycling Association)

Bruce Burrow: Large Hauler Representative-Rumpke-long-time member of the committee, held positions in all aspects of solid waste management including landfills and composting.

Bob Schindler: Citizen Representative-Past Director of Public Works-Past Solid Waste Coordinator for Jefferson County-Many years of service in solid waste management)

 $Marie \ Burnett: \ Representative for \ Landfills, currently with \ Waste \ Management of \ Kentucky \ as \ manager of the \ landfill \ operations \ and \ compost facility \ operations$ 

Darrell Shelton: Citizen Representative-long standing member of the committee, currently a teacher for Jefferson County Public Schools

Pat Stallard: Attorney with Stites and Harbison (Environmental Law)

Bruce Blue: Processors of Ferrous/Non Ferrous Metals Representative, CEO/Owner Freedom Metals Inc. for 30 plus years

Mike Keeney: Industry Representative

Greg Zahradnik CFEI: Citizen/Environmental, Current Owner Z Engineering, 20 Years General Electric as Senior Engineer and Management, Adjunct Faculty of Technology and Design Sullivan College, Just Solutions-Board of Directors

Sarah-Lynn-Cunningham: Licensed environmental engineer and certified environmental educator. Currently self-employed and teaching green design at the University of Louisville, 23 years in the public sector, most recently for Louisville and Jefferson County (KY) Metropolitan Sewer District where she was involved in the planning, design, construction and O&M

Tim Darst: Citizen/Environmental Representative, Executive Director of Kentucky Interfaith Power and Light Inc., past Financial Manager

Louisville/Jefferson County Metro Government Waste Management District Established a "Host" agreement with the Outer Loop Landfill to ensure adequate landfill space for our county by preventing unauthorized waste shipments from other states

Established a Universal Collection System of licensed haulers

Operates recycling centers for citizens wanting to recycle

Operates the Household Hazardous Materials Drop off center

Programs and Accomplishments

Conducts special events related to landfill reduction

Partner with the Mayor's Innovation Delivery Team on recycling which has established innovative collection call "Wet/Dry" in the Central Business District

Partner with Brightside to provide litter abatement funding and personnel during community clean up events

# **Funding**

Funding of the District is generated by fees on licensing of waste management facilities with the emphasis on disposal activities.

Therefore the more effective the District programs are in diverting waste from disposal the less income from license fees.