# Lesson 5: Sources and Types of Organic Materials

## **Learning Objectives:**

- Know the types and sources of organics materials that can be handled at registration facilities
- Understand the typical physical, chemical, and biological characteristics of these materials



# "Feedstocks" Are Organic Materials

- Feedstocks are the primary materials being composted at a site
- Types of feedstocks for registration facilities are:
  - Yard Trimmings (YT)
  - Food Waste (FW)
  - Vegetative Waste (VW) & Animal By-products (AB)
  - Manures (M)



## **Yard Trimmings**

#### Generator Sources:

- Households
- Landscapers & arborists
- Storm debris
- Land clearing debris companies

### Types:

- Grass clippings
- Leaves
- Brush & Wood







# **Yard Trimmings**

(continued)

### **Key Characteristics:**

Source	C:N Ratio %N	Moisture Content	Potential Contaminants
Grass Clippings	12-19:1 2% - 4%	High	Plastic bags Chemicals
Leaves	50-60:1 <1.0%	Low - Moderate	Plastic bags
Brush & Wood	500-700:1 0.1%	Low	Plastic bags Metals



## Types of Food Waste

#### Types:

- Vegetative Waste (VW):
  - Fruits, vegetables, grains, breads, etc.
- Animal By-products (AB):
  - Meat, fat, dairy, eggs, etc.
- Pre-consumer Vegetative Waste:
  - Vegetative waste that has not come in contact with the end user, such as, grocery stores, packing and canning operations, out-of-date items, and restaurant prep







## Sources of Food Waste

#### Sources:

- Grocery stores

   (excluding AB from butcher shops)
- Restaurants
- Institutional kitchens
- Food processors &
   manufacturers
   (excluding animal by-products
   from manufacturing or packaging
   plants, abattoirs, and butcher
   shops)







## **Food Waste**

(continued)

### Key Characteristics:

Source	C:N Ratio %N	Moisture Content	Potential Contaminants
Pre-consumer Vegetative Waste	10 - 30:1 2% - 5%	High	Plastics Non-degradable packaging
Post-consumer Vegetative Waste	10 - 30:1 2% - 5%	High	Plastics Service ware Pathogens
Animal By- products	5 - 10:1 5% - 10%	High	Plastics Non-degradable packaging Pathogens



## Manure

#### Sources

- Farms & feedlots
- Horse stables
- Zoos

## Types

- Cow
- Horse
- Poultry
- Other







## Manure

(continued)

## Key Characteristics:

Source	C:N Ratio %N	Moisture Content	Potential Contaminants
Cow	20:1 2%	High	Pathogens
Horse	25 – 30:1 2%	Moderate	Pathogens
Poultry	5 – 15:1 8%	Low - Moderate	Pathogens

