



# Fairfax County Solid Waste Management Program

Promoting Clean Communities and Environmental Stewardship

Department of Public Works and Environmental Services  
*Working for You!*



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# What is Solid Waste?

## Defined by USEPA

- Household Trash
- Recyclables
- Yard Waste
- Brush
- Commercial Trash
- Industrial Waste
- Construction Debris
- Hazardous Waste



# Regulatory Structure for the Management of Solid Waste

## Resource Conservation and Recovery Act of 1976 (RCRA)

## Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)

- **9VAC-20-81**- Virginia Administrative Code regulates the siting and operation of landfills and a variety of other solid waste management facilities including composting facilities.
- **9VAC-20-130-30** - Virginia Administrative Code states that jurisdictions must develop comprehensive and integrated solid waste management plans that consider and address the Commonwealth's solid waste management hierarchy which prefers recycling to disposal.
- **Code of VA, 10.1-1411(D)(1)** - Jurisdictions that meet certain seasonally-averaged population statistics must recycle at least 25% of all solid waste generated within their borders.
- **Code of VA, 10.1-1411(E)** - Jurisdictions with more than 100,000 residents must prepare a recycling report annually which quantifies the entire amount of recycling conducted in the county.
- **40 CFR Part 98.3** – USEPA regulations requiring GHG reporting
- **40 CFR 63-1940** – USEPA regulations for NESHAPs compliance

Permits for I-66	Permits for I-95
PBR 555	SWP 103
VAR1074	VAR1076
SWP 387	

# Responsibilities

- The I-66 Transfer Station
- The Energy/Resource Recovery Facility
- Residential Disposal and Recycling Centers
- One active and two closed landfills
- Landfill Gas-to-Energy Program
- Groundwater Monitoring System
- Household Hazardous Waste including electronics recycling
- Yard waste mulching
- Permitting for collection service providers
- Invoicing and collections for approximately 4,000 system users
- Environmental Compliance activities

# Responsibilities

- The collection of all solid waste and recyclables in Fairfax County for 44,000 households and for county agencies
- Seasonal collection of leaves for approximately 23,000 customers in established Sanitary Districts
- The countywide recycling program
- Eight Community Recycling Drop-off Centers
- Community cleanup programs
- Creation/decreation of Sanitary Districts
- Enforcement of the county's solid waste ordinance, Chapter 109.1
- Outreach and educational efforts



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I-66

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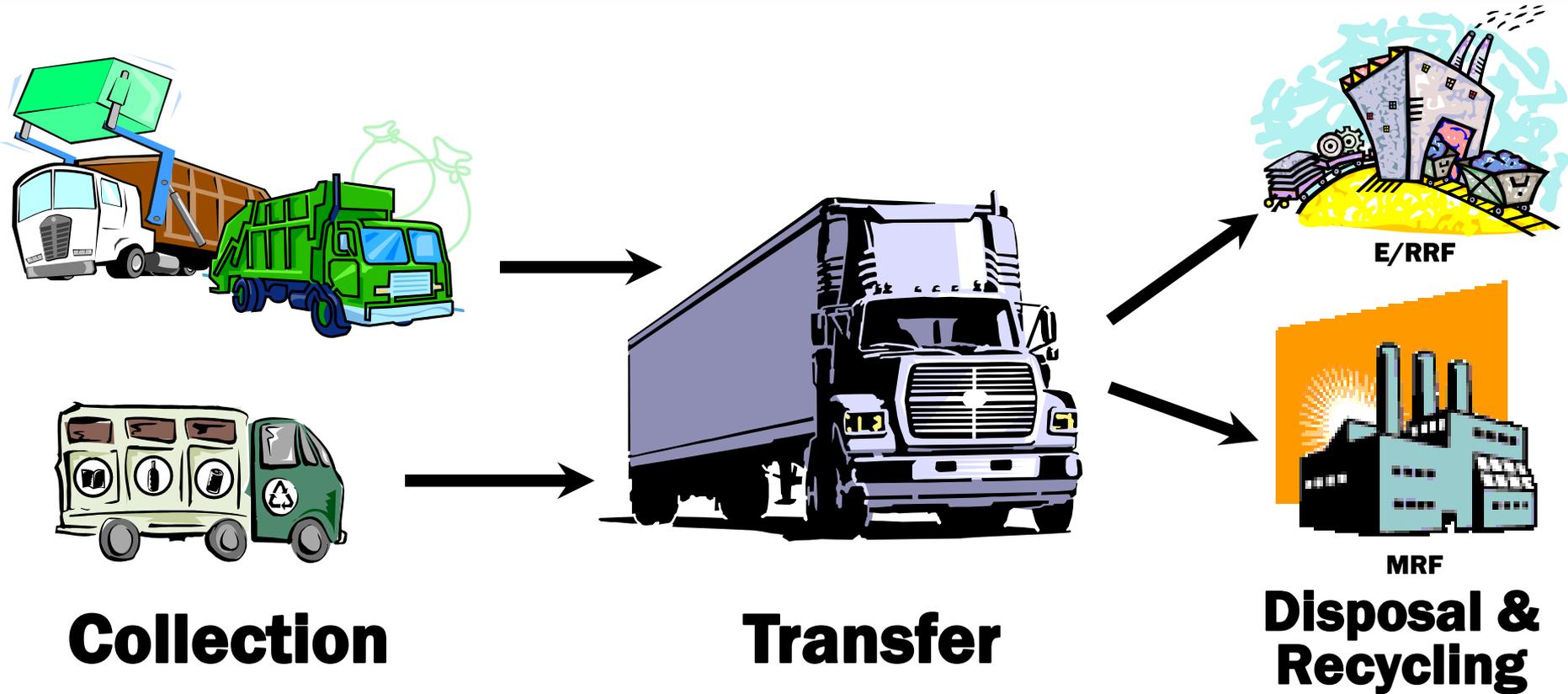
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# Integrated Solid Waste Management System



**Fairfax County uses an Integrated Solid Waste Management System to Manage about 1 Million Tons of Solid Waste Each Year**

# Trash & Recyclables Collection



- Approximately 25 solid waste collection service providers are licensed to operate in Fairfax County
- Residents in Sanitary Districts receive service from the county for a fee
- Weekly collection service is required for refuse and recyclables

# Where Does My Trash Go?

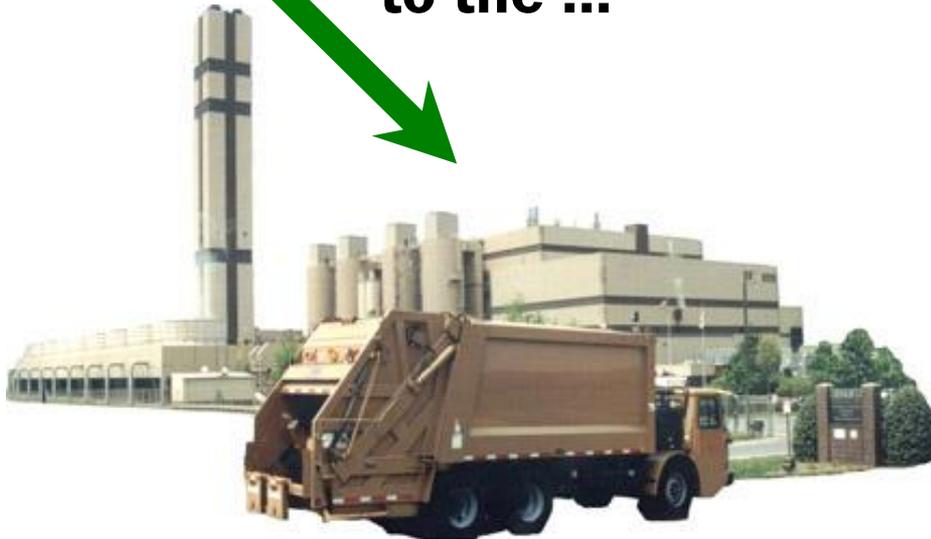
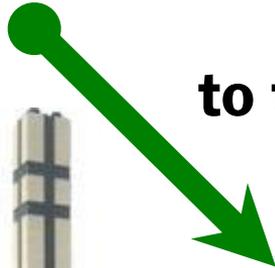
**Depending on where you live, your trash will either go...**

**or to the ...**



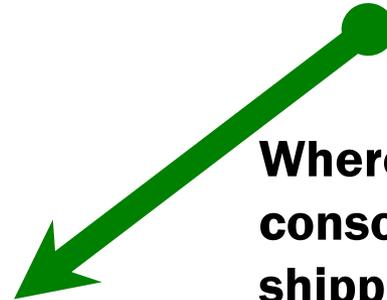
**I-66 Transfer Station**

**to the ...**



**I-95 Energy/Resource Recovery Facility**

**Where trash is consolidated and shipped to the...**



# I-66 Transfer Station Complex

- MSW Transfer Station
- Residential Disposal and Recycling Center
- Scrap Metal Recycling
- Yard Waste Recycling & Mulch Distribution
- Household Hazardous Waste
- Electronics Recycling
- Car Battery, Motor & Cooking Oil, Antifreeze, & Latex Paint Recycling



# I-95 Landfill Complex



- Energy/Resource Recovery Facility
- Residents Disposal and Recycling Center
- Tire Grinding
- Ash Landfill
- Yard Waste Recycling & Mulch Distribution
- Household Hazardous Waste
- Electronics Recycling
- Car Battery, Motor & Cooking Oil, Antifreeze, & Latex Paint Recycling

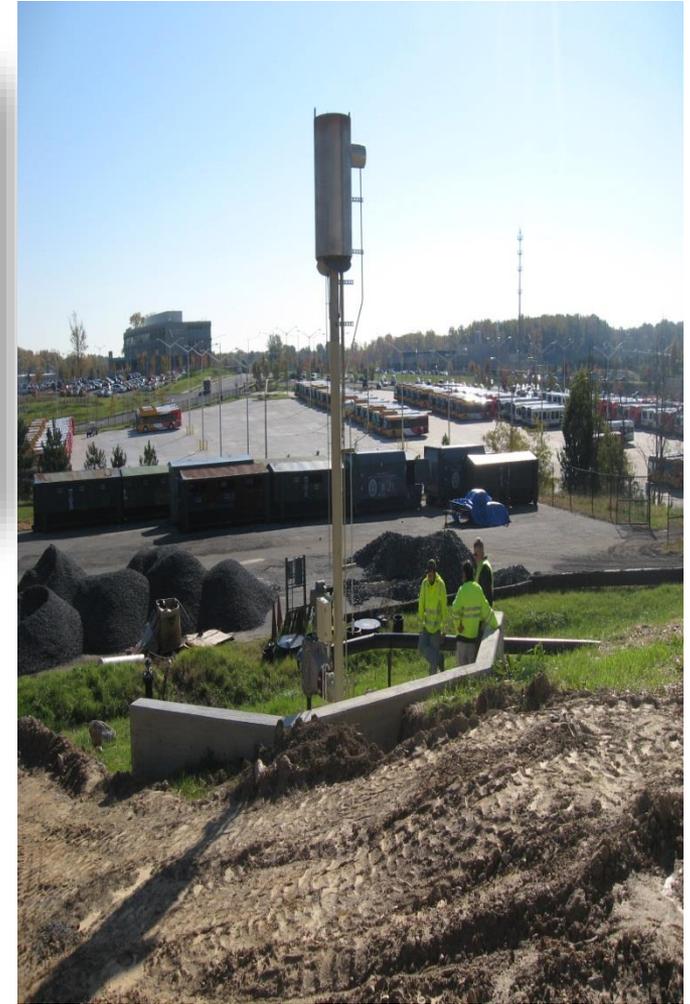
# I-95 Energy/Resource Recovery Facility



## **Fairfax County trash is combusted at temperatures exceeding 1800° F**

- Steam generated from combustion runs turbines that produce 80 MW of electricity sold to Dominion Virginia
- Enough electricity is generated to power 75,000 homes
- Metals are recovered from the ash for recycling
- Remaining ash (10% of original trash volume) is landfilled on site

# Landfill Gas



- Methane extraction system wells are used to collect landfill gas at the closed landfills. The gas is vacuumed from the wells where it is then conditioned to remove moisture and particulates.
- This processed gas is used to:
  - heat workspaces
  - Pre-heat biosolids incinerator at Noman Cole WWTP (I-95)
  - Heat WMATA bus garage (I-66)

# Recycling Requirements

- Residential Properties (Single-Family Homes & Townhouses)
  - Mixed Paper and Cardboard
  - Plastic Bottles/Jugs
  - Container Glass
  - Metal Food Containers
  - Yard Waste (Grass, leaves, brush)
- Multi-Family Residential Properties (Apartments and Condos)
  - Mixed Paper and Cardboard
  - Plastic Bottles/Jugs
  - Container Glass
  - Metal Food Containers
  - Yard Waste (Grass, leaves, brush)
- Non-Residential Properties (Businesses, Schools, & Institutions)
  - Mixed Paper and Cardboard
  - Commercial establishments producing large amounts of other recyclable materials may be required to recycle additional materials

# Where Does My Recycling Go?



**Where they are:**



**Sorted**



**Processed**



**Sold for reuse**

**Recyclables are transported to privately-owned and -operated Material Recovery Facilities**