

## Miami-Dade County's Integrated Solid Waste Management System At A Glance





With a strong commitment to the environment and future sustainability, the Miami-Dade County Department of Solid Waste Management (DSWM) provides an integrated solid waste management system that benefits the entire Miami-Dade County community.

The DSWM is the largest government owned and operated waste management system in the southeastern United States, with decades of experience providing efficient and reliable waste services. Our workforce of more than 1,000 employees provides curbside collection of garbage and trash at more than 320,000 service area households, operates 13 Neighborhood Trash and Recycling Centers and administers the contracted collection of household recyclables at the curbs of 350,000 single-family homes in our service area and 12 participating municipalities. Each year, we process approximately 1.5 million tons of garbage and trash through our disposal system which includes 3 regional transfer stations, three landfills and a state-of-the art Resources Recovery waste-to-energy plant.

The illustration on the reverse side provides a visual overview of our solid waste management services and facilities. Each lettered illustration on the reverse is described below.

- A.** In hundreds of neighborhoods throughout the service area, the DSWM provides twice-weekly automated curbside garbage collection service and every-other-week automated recycling collection service. The wheeled and lidded automated collection carts (green for garbage and blue for recycling) are more convenient for our customers, improve neighborhood aesthetics and offer a safer and more efficient method of service delivery for our employees. When residents need to get rid of large household trash and major yard cuttings, they can arrange to use one of their scheduled curbside bulky waste pickups. The Department's Code Enforcement Officers canvass neighborhoods to ensure that residents and business owners comply with waste management rules outlined in Chapter 15 of the County Code.
- B.** For convenience, residents can take trash to one of our 13 Trash and Recycling Centers. These drop-off sites are open daily and accept household trash, yard cuttings, white goods and used auto tires. Select centers also accept motor oil and used computer and electronic equipment for recycling. Trash collected at these centers is moved into our disposal system for final processing. Recyclable items are collected and processed by contracted vendors.
- C.** At our Home Chemical Collection Centers at the NW 58 Street Operations Center and the South Dade Landfill, we offer free and safe disposal for household paints, pesticides, batteries, fluorescent bulbs and the like. Proper disposal of this waste helps protect our fragile South Florida environment.
- D.** At Waste Management's Materials Recovery Facility, hundreds of tons of recyclables are delivered each day by our recycling collection vendors. Here, valuable plastic, steel, glass, paper, and aluminum products are sorted mechanically and manually, baled and readied for shipment to be sold as raw material for new, recycled-content products.
- E.** Garbage from most neighborhoods is delivered to one of three regional transfer stations. These sites contribute to the efficiency of County and municipal waste delivery and reduce truck traffic on roads and travel time for waste haulers. Waste delivered to these sites is transported by 85-cubic yard transfer vehicles to one of our landfills or our Resources Recovery Facility.
- F.** The County's Resources Recovery Facility (our waste-to-energy plant) is the workhorse of the disposal system, processing more than 1.3 million tons of garbage and trash each year. Waste is converted into a fuel used to generate electricity that powers the plant and provides electricity to 50,000 households each year. The plant also produces a bio-mass fuel created from high-grade trash. Some of this material is used on site to create electricity. The remaining bio-mass fuel is sold to cogeneration facilities in Central Florida. What's more, a front-end recovery system in the plant removes valuable ferrous metal for recycling. Annual revenues from the sale of electricity and recyclable materials help to offset the plant's operating costs. Adjacent to the Resources Recovery Facility is an ash monofill (F1) which is used for the disposal of the ash resulting from the waste-to-energy process.
- G.** The South Dade Landfill is used primarily for the disposal of garbage and non-processable waste from the Resources Recovery Facility. The landfill has been designed and constructed using the best-available technology which includes a synthetic liner system, a leachate collection system, a groundwater monitoring and treatment system and a sequencing batch reactor (G1) to treat leachate and wastewater generated on site. Currently, methane gas resulting from the decomposition of waste is extracted and flared. The Department is in the process of constructing a landfill gas-to-energy recovery facility (G2) where methane will be converted into electricity. Some of the gas will be piped to the neighboring Miami-Dade County waste water treatment facility for their gas-to-energy project. A similar landfill gas-to-energy conversion system will be constructed at the County's North Dade Landfill. The South Dade Landfill is also one of several sites in our disposal system that has been converted into a natural habitat and wetland area for native plants and varied wildlife. South Dade's wetlands (G3) are home to dozens of species of plants and wildlife including the American Alligator and the Bald Eagle.
- H.** The DSWM's administrative offices are located on the 5th floor of the Martin Luther King, Jr. Office Building in the heart of Miami-Dade County's Liberty City. This site is home to our leadership team and administrative employees who provide support for our field operations.

#### **Solid Waste Management Mission Statement:**

*To provide our customers with exceptional waste collection, recycling and disposal services that protect, preserve and improve our environment and the quality of life in our community.*