

Sonoma County's Central Disposal Site – A Model of Integrated Waste Management

Winner of National Recycling Coalition's 2004 Outstanding Government Program Award

The Central Disposal Site's **Management by Design** is an innovative approach by the County to increase recycling and waste diversion through a convenient site layout and economic incentives. Components include:

- Quick and easy design for “self-haul” users to conveniently discard items for reuse and recycling before disposal.
- Economic incentives that make it more expensive to landfill waste than to recycle.
- Landfill bans for yard debris, wood waste, scrap metal, and cardboard to support existing recycling programs.

History –

- 1972 – Central Disposal Site opened with a landfill and drop-off recycling.
- 1984 – Reuse Center begins accepting items.
- 1993 – 3 megawatt (MW) landfill gas power plant, yard debris composting and wood waste processing begin operations.
- 1996 – Power plant expanded to 6 MW.
- 2002 – Operational improvements open -- reuse center, a larger recycling “Z” wall, and a tipping building with recycling by County staff.
- 2004 – Power plant production expanded to 7.5 MW.
- 2005 – HHW facility open in January.
- 2005 – Suspended landfilling and began 100% outhaul of solid waste in October.

Central Disposal Site – Closed October 1, 2005

Total site area:	398.5 acres
Permitted capacity:	32.65 million cubic yards
Original Central Landfill (130 acres)	25.65 million cubic yards
East Canyon Expansion (42 acres)	7.00 million cubic yards
Waste in place:	32.65 million cubic yards

Landfill Gas Collection System –

Started collection with 25 wells and flare:	1987
Collection wells:	130
Collection pipe:	4 miles

Central Landfill Gas to Electricity Power Plant –

Ten engine-generator sets (Caterpillar 3516 spark ignited engines) producing 7.5 MW
6 MW sold to Sonoma County Water Agency through PWRPA, 1.5 MW sold to 3 Phases Energy LLC, electricity also used for on-site operations

Leachate Management –

Storage on-site: 4.2 million gallons in 2 double-lined ponds
Disposal: Pipeline to Laguna Wastewater Treatment Plant constructed 2005, operation to begin May 2006

Summary of Waste Diversion at the Central Disposal Site-

2004 diversion: 106,000 tons
Programs include: reuse, recycling, wood waste processing, yard debris composting, tipping
building floor sorting, appliance & tire recycling

Compost and Wood Chipping Operations –

Started 1993; contract with Sonoma Compost Company
Area of facility: 23 +/- acres on landfill footprint
Permitted compost capacity: 480 tons per day
Average compost processing: 230 tons per day
Average wood waste chipping: 40 tons per day

Recycle/Reuse Facility –

Started in 1984; contract with joint venture of West Coast Metals/Garbage Reincarnation
Reuse Center: 30 tons per month
Recycle Bins: 85 tons per month of cardboard, paper, metals, glass, aluminum
Oil Recycling: 6,100 gallons per year

Scrap Metal Recycling/Baler – 4,000 tons per year

Household Hazardous Waste Facility – Opened in January 2005

Economics –

Annual Division Operations Budget (FY 06/07):	\$45.3 million
Current tipping fee:	\$83.00/ton
includes SCWMA (JPA) surcharge:	\$4.50/ton
Reuse Center and Recycling Bins	No Charge
Wood waste, clean loads	\$26.60/ton
Yard debris, clean loads	\$33.10/ton
Freon appliances	\$20 each
Non-freon appliances, lawnmowers	\$10 each
Electronics with video displays (TVs, monitors, laptops)	No charge
Small electronics, less than 25 pounds.	
Up to 15 items per load (Printers, answering machines, digital cameras, CD & DVD players, radios, stereos, etc.)	No charge
Large electronics, 25 pounds or more.	
Up to 2 items per load. (Copiers, printers)	\$20 each
Mattresses	\$20 each
Tires	\$5.00 to \$150.00 depending on the size