

The Southeast Sanitary Landfill

The Southeast Sanitary Landfill is located in Kansas City , MO. It is owned and operated by Allied Waste Systems Inc. The disposal facility covers 126 acres and is permitted to accept all municipal solid waste (MSW) and some other wastes such as contaminated soils, asbestos, and wastewater treatment sludge.

The Southeast Landfill accepted 341,328 tons in 1996, 306,569 tons in 1997 and 348,260 tons in 1998. The landfill operation was observed from Monday November 30^h through Thursday December 3rd . The weather was sunny and fair during the entire week. The Southeast Landfill is open 24 hours a day. However the observation took place from 8 AM till 4:30 PM on the above dates. During the observation period, 660 trucks, delivered 4485 tons of waste to the landfill. All loads were observed and recorded. The landfill staff felt the material received during the observation period was typical of material received year round.

Because the traffic was high, each driver was not asked where the load originated.. However, all loads could be classified visually, without any driver data.

The Southeast Landfill accepts waste from mainly from Jackson and Cass counties. The nearest Missouri sanitary landfills are the Courtney Ridge Landfill and the City of Lee's Summit Landfill, both in Jackson County. There are no construction and demolition Landfills on the Missouri side of the State line. However there is a Construction and demolition landfill in Johnson County, Kansas. There were relatively few self-hauls. Most traffic was commercial. The Cass County Transfer Station delivered their waste to the landfill.

The Total Waste Stream - 4,482 tons

The total waste stream was mixed with a plurality being Municipal Solid Waste (MSW). The source of the MSW was primarily residential, institutional, and light commercial waste. The demolition waste was almost three times larger than the construction waste. Much of the area served by the landfill has older housing that tends to push demolition waste streams higher. The amount of industrial waste was about normal but the other waste component (contaminated soil) was surprisingly high.

Total waste received during the observation period was 4485 tons. The components of the waste stream were estimated as they were unloaded. These components are listed below.

Waste Stream Components

MSW	Const.	Demo	Industrial	Other
45%	6%	17%	10%	22%
2019 tons	272 tons	741tons	448 tons	1002 tons

Municipal Solid Waste - 2,019 tons

Municipal Solid Waste (MSW) accounted for about 45% of the total waste stream. MSW materials were not estimated during the observation period because the items are very small and normally contained within plastic bags. However, MSW was sorted and recorded at 19 landfills and transfer stations as part of this study in 1996 and 97. During the 56 sorts 632 samples, weighing an average of 222 pounds each, were examined. Each of these samples were hand sorted into six major categories and 26 sub categories. The sorted materials were recorded by weight and volume. Further details are available in the *Missouri Waste Composition Study: Municipal Solid Waste*.

The total MSW received during the observation period was 2,019 tons. The average percentage of each major material category found in the 1996-97 waste sorts was applied to the tonnage received during the observation period and is displayed below.

Municipal Solid Waste Components

Paper	Glass	Metals	Plastics	Organics	Inorganics
37.3%	5.8%	6.9%	14.4%	30.8%	4.8%
753 tons	117 tons	139 tons	291 tons	622 tons	97 tons

Construction Waste - 272 tons

About 6% of the total waste received was from new construction sources. Construction waste loads were usually transported to the landfill in open top roll-off containers, dump trucks, or open trailers. The construction loads tended to be lighter, less weathered, more homogeneous (all wood, dry wall, etc), and contained more cardboard boxes (usually from fixtures) than the demolition waste loads.

Total construction waste received during the observation period was 272 tons. The materials within the construction waste stream were estimated as they were unloaded. These estimated materials are listed below.

Construction Waste Components

Wood	Dry Wall	Masonry	Metal	Plas.	Cardbrd	Other
48%	15%	23%	4%	3%	5%	1%
130 tons	41 tons	63 tons	12 tons	9 tons	14 tons	4 tons

Demolition Waste – 741 Tons

About 17% of the total waste were from demolition sources. Demolition waste loads were usually transported to the landfill in open top roll-off containers, dump trucks, or open trailers. The wood was more weathered, there was very little if any cardboard, and there was more masonry materials (brick, concrete blocks, rock and dirt) in the demolition waste as compared to the construction waste. At most landfills, roofing shingles were delivered without many other

materials mixed within. However at Southeast most roofing loads were mixed with wood shakes.

Total demolition waste received during the observation period was 741 tons. The materials within the demolition waste stream were estimated as they were unloaded. These estimated materials are listed below.

The Demolition Waste Component

Wood	Dry Wall	Roof	Masonry	Metal	Carpet	Other
34%	7%	25%	27%	2%	2%	1%
254 tons	55 tons	190 tons	204 tons	15 tons	16 tons	11 tons

Industrial Waste - 448 tons

About 10% of the total waste stream was from industrial sources. Industrial waste loads were usually transported to the landfill in open top roll-off containers or compactor units. They were normally homogeneous, containing a single waste products from a manufacturing process. These loads came from a variety of sources.

Total industrial waste received during the observation period was 448 tons. The materials within the industrial waste stream were estimated as they were unloaded. These estimated materials are listed below.

The Industrial Waste Component

Cardbrd	Paper	Food	Metal	Wood	Plas.	Tex.	Rbr.	Other
34%	8%	11%	1%	24%	13%	0%	0%	8%
153 tons	37 tons	50 tons	4 tons	107 tons	59 tons	0 tons	0 tons	38 tons

Other Waste - 1002 tons

Other wastes were defined as waste which did not fit into one of the above categories or was handled differently at the landfill (i.e. soil-like materials used for daily cover, asbestos, etc.). Bulky items include furniture, mattresses, appliances, etc.. Most of the other waste was contaminated soil. The contaminated soil came from two sources. The City of Kansas City Street Department delivered 534 tons of dirt, rock and asphalt. A remediation project in Kansas City brought in 321 tons of contaminated soil. Both the Contaminated soil and the dirt from the street dept. was unloaded next to the landfill face and used for daily cover. About 81 tons of asbestos was received and disposed of properly at the landfill during the observation period.

Total other waste received during the observation period was 1002 tons. The materials within the other waste stream were estimated, as they were unloaded. These estimated materials are listed below.

The Other Waste Component

Bulky	Contaminated Soil	Asbestos
7%	85%	8%
66 tons	855 tons	81 tons

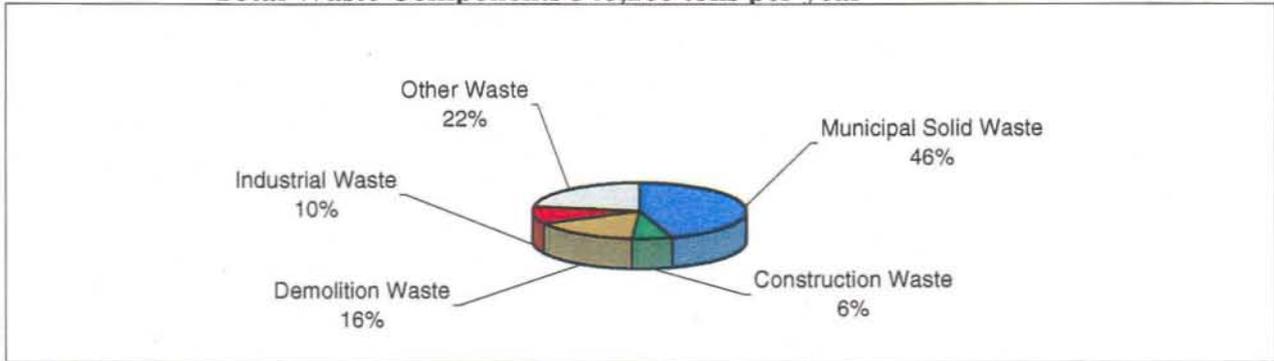
SOUTHEAST (KC) LANDFILL

348,260 TONS IN 1998

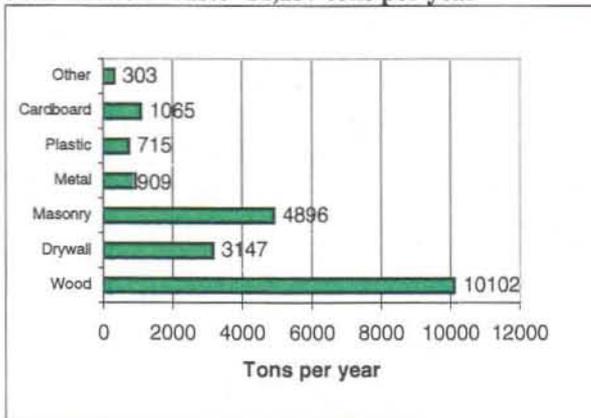
MATERIAL	Tons received during observation period	Percent of each material received	Estimated tonnage received in 1998 based on observation
MSW Component			
Paper	753 Tons	16.8%	58,515 Tons
Glass	117 Tons	2.6%	9,092 Tons
Metals	139 Tons	3.1%	10,802 Tons
Plastics	291 Tons	6.5%	22,613 Tons
Organics	622 Tons	13.9%	48,335 Tons
Inorganics	97 Tons	2.2%	7,538 Tons
TOTAL MSW	2019 Tons	45.1%	156,894 Tons
Construction Waste			
Wood	130 Tons	2.9%	10,102 Tons
Dry Wall	41 Tons	0.9%	3,147 Tons
Masonry	63 Tons	1.4%	4,896 Tons
Metal	12 Tons	0.3%	909 Tons
Plastic	9 Tons	0.2%	715 Tons
Cardboard	14 Tons	0.3%	1,065 Tons
Other	4 Tons	0.1%	303 Tons
TOTAL CONSTRUCTION	272 Tons	6.1%	21,137 Tons
Demolition Waste			
Wood	253 Tons	5.6%	19,660 Tons
Dry Wall	55 Tons	1.2%	4,305 Tons
Roofing	188 Tons	4.2%	14,609 Tons
Masonry	203 Tons	4.5%	15,775 Tons
Metal	15 Tons	0.3%	1,197 Tons
Carpet	16 Tons	0.3%	1,204 Tons
Other	11 Tons	0.2%	824 Tons
TOTAL DEMOLITION	741 Tons	16.5%	57,574 Tons
Industrial Waste			
Cardboard	153 Tons	3.4%	11,889 Tons
Paper	37 Tons	0.8%	2,860 Tons
Food	50 Tons	1.1%	3,862 Tons
Metal	4 Tons	0.1%	295 Tons
Wood	107 Tons	2.4%	8,315 Tons
Plastic	59 Tons	1.3%	4,616 Tons
Textiles	0 Tons	0.0%	- Tons
Rubber	0 Tons	0.0%	- Tons
Other	38 Tons	0.8%	2,937 Tons
TOTAL INDUSTRIAL	448 Tons	10.0%	34,775 Tons
Other Waste			
Bulky Items	66 Tons	1.5%	5,113 Tons
Soil and Inert Materials	855 Tons	19.1%	66,441 Tons
Asbestos	81 Tons	1.8%	6,326 Tons
Other	0 Tons	0.0%	- Tons
TOTAL OTHER WASTE	1002 Tons	22.4%	77,880 Tons
TOTAL WASTE STREAM	4482 Tons	100%	348,260 Tons

Southeast Landfill

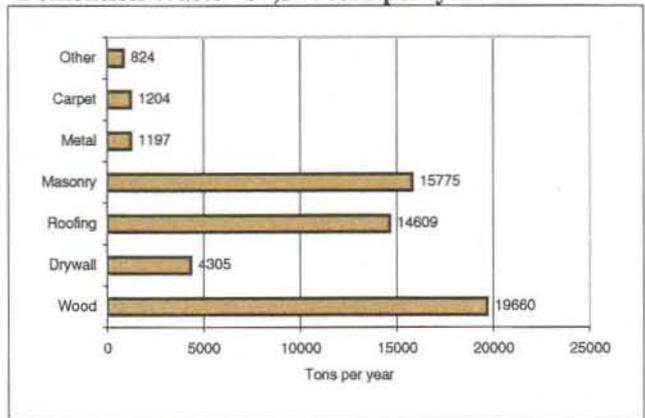
Total Waste Components 348,260 tons per year



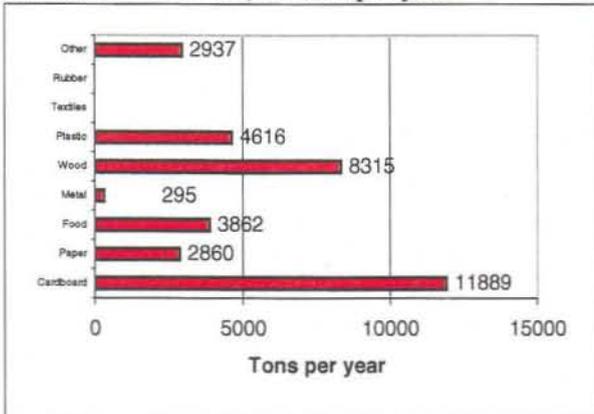
Construction Waste - 21,137 tons per year



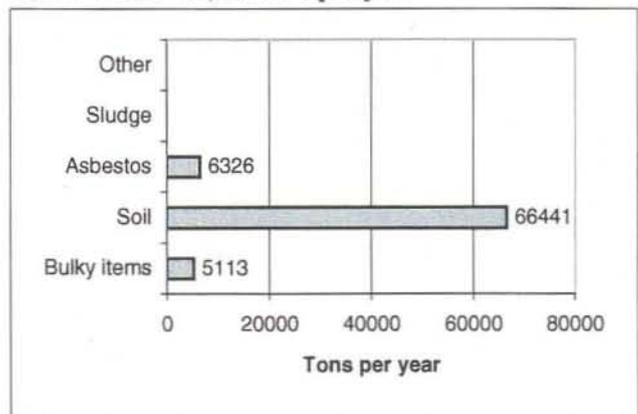
Demolition Waste - 57,574 tons per year



Industrial Waste - 34,775 tons per year



Other Waste - 77,880 tons per year



Southeast Waste Components vs Large Metro and State Averages

