

Oak Ridge Landfill

The Oak Ridge Landfill Inc. is located in West St. Louis County, MO., approximately 25 miles west of St. Louis, MO. It is owned and operated by Superior Waste Services Inc. An upscale residential community now surrounds the landfill, which originally was in a very sparsely populated portion of St. Louis County. The disposal facility is permitted to accept all municipal solid waste (MSW) and some other wastes such as contaminated soils, asbestos, and wastewater treatment sludge.

The Oak Ridge Landfill accepted 179,686 tons in 1996, 193,403 tons in 1997 and 262,365 tons in 1998. The landfill operation was observed from Monday November 16^h through Friday November 20th. The weather was sunny and fair during the entire week. Observation took place from 7 AM till 4:30 PM on the above dates. During the observation period, 720 trucks, delivered 6172 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. This would have been helpful to determine where the load originated and how it should be recorded. Nevertheless, all loads could be classified visually, without any driver data.

The Superior Oak Hill Landfill accepts waste from St. Louis, St. Charles, and Jefferson counties. The nearest Missouri sanitary landfills are the Fred Weber Landfill and the Bridgeton Landfill, both in St. Louis County. The Peerless Construction and Demolition Landfill is within 5 miles. There were very few self-hauls. Most traffic was commercial. The City of St. Peters Transfer Station delivered their waste to the landfill.

The Total Waste Stream - 6152 tons

The total waste stream was predominantly Municipal Solid Waste (MSW). The source of the MSW was primarily residential, institutional, and light commercial waste. The amount of construction and demolition waste was almost identical. This is in contrast with many of the other landfills that receive two to five times more demolition than construction waste. The area around the landfill is growing rapidly and most construction is new rather than renovation or demolition. The industrial component was relatively low due to the lack of industrial activity in the West St. Louis County area. Other waste (contaminated soil) was surprisingly high. Total waste received during the observation period was 6152 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
55%	6%	6%	8%	25%
3381 tons	358 tons	365 tons	515 tons	1533 tons

Municipal Solid Waste – 3381 Tons

Municipal Solid Waste (MSW) accounted for only 25% 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 3381 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%
1,261 tons	196 tons	233 tons	487 tons	1,042 tons	162 tons

Construction Waste - 358 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 368 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
36%	22%	31%	1%	2%	4%	4%
131 tons	80 tons	109 tons	3 tons	9 tons	13 tons	14 tons

Demolition Waste - 365 tons

About 6% of the total waste was from demolition sources. According to drivers, much of the heavier demolition waste such as roofing shingles are taken to the Peerless C&D landfill where the tipping fee is less and the loads are charged by volume instead of weight. 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.

Total demolition waste received during the observation period was 365 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
36%	2%	10%	36%	5%	6%	4%
132 tons	8 tons	38 tons	132 tons	19 tons	23 tons	13 tons

Industrial Waste - 515 tons

About 8% 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. The other material was foundry sand.

Total industrial waste received during the observation period was 515 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
17%	15%	6%	1%	8%	14%	0%	1%	39%
88 tons	75 tons	33 tons	6 tons	41 tons	70 tons	0 tons	4 tons	199 tons

Other Waste - 1533 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 several remediation projects in St. Louis and Washington Counties. Both the Contaminated soil and the foundry sand was unloaded next to the landfill face and used for daily cover. No asbestos was received at the landfill during the observation period.

Total other waste received during the observation period was 571 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
2%	88%
31 tons	1502 tons

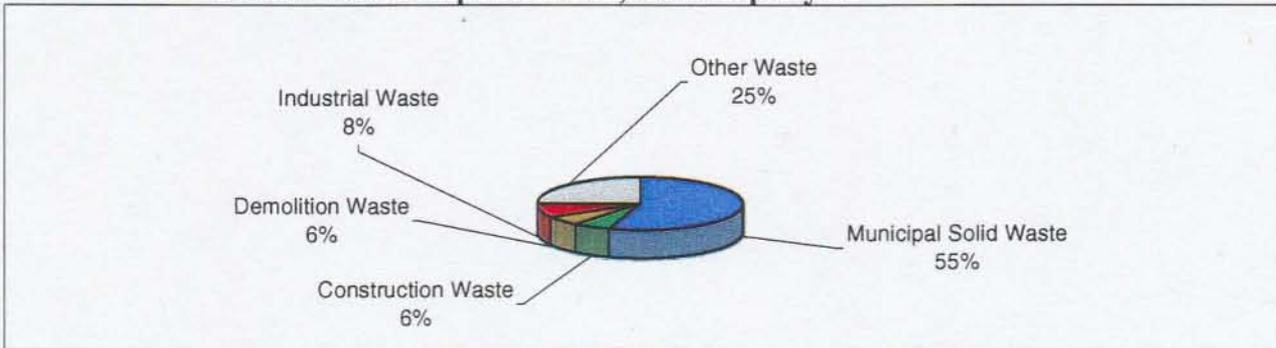
OAK RIDGE LANDFILL

262,365 TONS IN 1998

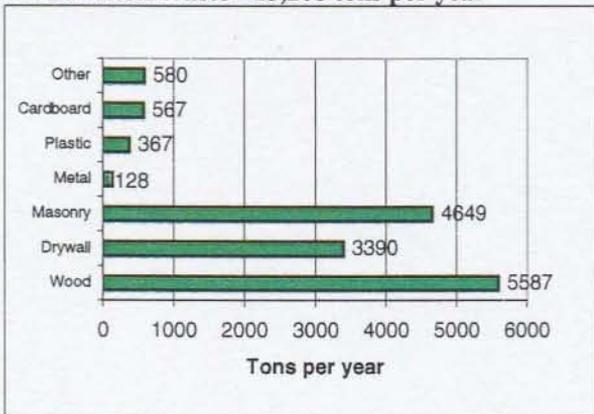
MATERIAL	Tons received during observation period	Percent of each material received	Estimated tonnage received in 1998 based on observation
MSW Component			
Paper	1261 Tons	20.5%	53,778 Tons
Glass	196 Tons	3.2%	8,359 Tons
Metals	233 Tons	3.8%	9,937 Tons
Plastics	487 Tons	7.9%	20,769 Tons
Organics	1042 Tons	16.9%	44,438 Tons
Inorganics	162 Tons	2.6%	6,909 Tons
TOTAL MSW	3381 Tons	55.0%	144,190 Tons
Construction Waste			
Wood	131 Tons	2.1%	5,587 Tons
Dry Wall	80 Tons	1.3%	3,390 Tons
Masonry	109 Tons	1.8%	4,649 Tons
Metal	3 Tons	0.0%	128 Tons
Plastic	9 Tons	0.1%	367 Tons
Cardboard	13 Tons	0.2%	567 Tons
Other	14 Tons	0.2%	580 Tons
TOTAL CONSTRUCTION	358 Tons	5.8%	15,268 Tons
Demolition Waste			
Wood	132 Tons	2.1%	5,629 Tons
Dry Wall	8 Tons	0.1%	337 Tons
Roofing	38 Tons	0.6%	1,608 Tons
Masonry	132 Tons	2.1%	5,629 Tons
Metal	19 Tons	0.3%	798 Tons
Carpet	23 Tons	0.4%	972 Tons
Other	13 Tons	0.2%	571 Tons
TOTAL DEMOLITION	365 Tons	5.9%	15,545 Tons
Industrial Waste			
Cardboard	88 Tons	1.4%	3,761 Tons
Paper	75 Tons	1.2%	3,190 Tons
Food	33 Tons	0.5%	1,395 Tons
Metal	6 Tons	0.1%	247 Tons
Wood	41 Tons	0.7%	1,753 Tons
Plastic	70 Tons	1.1%	2,981 Tons
Textiles	0 Tons	0.0%	- Tons
Rubber	4 Tons	0.1%	158 Tons
Other	199 Tons	3.2%	8,487 Tons
TOTAL INDUSTRIAL	515 Tons	8.4%	21,972 Tons
Other Waste			
Bulky Items	31 Tons	0.5%	1,335 Tons
Soil and Inert Materials	1502 Tons	24.4%	64,056 Tons
Asbestos	0 Tons	0.0%	- Tons
Other	0 Tons	0.0%	- Tons
TOTAL OTHER WASTE	1533 Tons	24.9%	65,391 Tons
TOTAL WASTE STREAM	6152 Tons	100%	262,365 Tons

The Oak Ridge Landfill

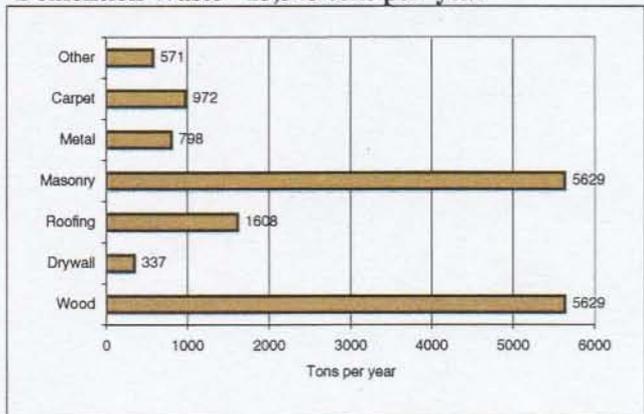
Total Waste Component -262,365 tons per year



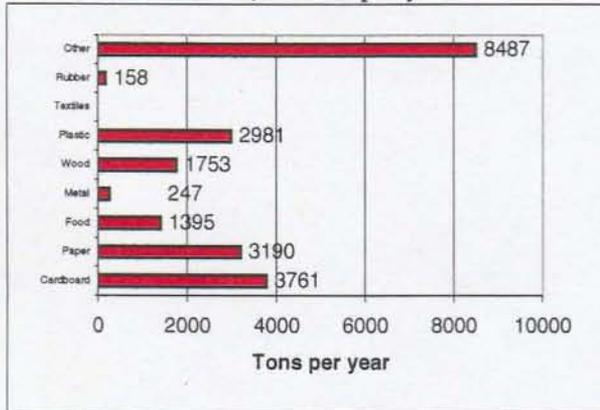
Construction Waste - 15,268 tons per year



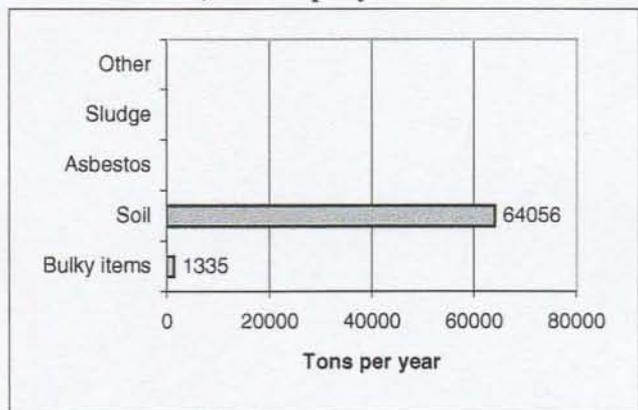
Demolition Waste - 15,545 tons per year



Industrial Waste - 21,972 tons per year



Other Waste - 65,391 tons per year



Oak Ridge Waste Components vs Large Metro and State Averages

