

Courtney Ridge Landfill

The Courtney Ridge Landfill is located in Sugar Creek, MO., approximately 20 miles northwest of Kansas City, MO. It is owned and operated by Waste Management Inc. The disposal facility covers 134 acres and is permitted to accept all municipal solid waste (MSW) and some Other wastes such as asbestos, contaminated soils and waste water treatment sludge.

The Courtney Ridge Landfill accepted 59,332 tons in 1996, 315,951 tons in 1997 and 418,625 tons in 1998. The landfill operation was observed from Monday February 8th through Friday February 12th, 1999. The weather was fair for the first three days but rained and turned cold on Thursday and Friday. Observation took place from 7 AM till 5:00 PM on the above dates. The Courtney Ridge Landfill is open 24 hours a day and therefore not all trucks were observed. During the five-day period 733 trucks, delivered 4,350 tons of waste to the landfill were observed. The landfill staff felt the material received during the observation period was typical of material received year round.

Due to the heavy traffic and small dumping area drivers were not asked where the loads originated. However, all loads could be classified visually, without any driver data.

The Total Waste Stream - 4,350

The total waste stream was predominately Municipal Solid Waste (MSW). The source of the MSW portion is primarily residential, institutional, and light commercial waste. The MSW was delivered to the landfill in local packer trucks.

Total waste received during the observation period was 4,350 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
59%	5%	7%	20%	9%
2571 tons	209 tons	304 tons	870 tons	397 tons

Municipal Solid Waste - 2571 tons

Municipal Solid Waste (MSW) accounted for 59% 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 2571 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%
959 tons	149 tons	177 tons	370 tons	792 tons	123 tons

Construction Waste - 209 tons

About 5% of the total waste received was from new construction sources. Construction waste loads were transported to the landfill in open top roll-off containers, dump trucks, or open trailers. The construction loads tended to be lighter, less weathered, and more homogeneous (all wood and dry wall).

Total construction waste received during the observation period was 209 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.	Cardboard	Other
52%	21%	6%	2%	8%	10%	0%
108 tons	44 tons	14 tons	4 tons	17 tons	22 tons	0 tons

Demolition Waste - 304 tons

About 7% of the total waste was from demolition sources. Demolition waste loads were usually transported to the landfill in open top roll-off containers, dump trucks, or open trailers. Roofing waste was typically delivered to the landfill by independent contractors and was not mixed with other materials. The remaining demolition loads contained more mixed materials. 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 304 tons. The materials within the demolition waste stream were estimated as they were unloaded. These estimated materials are listed on the next page.

The Demolition Waste Component

Wood	Dry Wall	Roof	Masonry	Metal	Carpet	Other
35%	9%	23%	8%	9%	8%	8%
106 tons	28 tons	70 tons	26 tons	27 tons	24 tons	24 tons

Industrial Waste -870 tons

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. There were two main industrial generators. The materials in the "other" category listed below were primarily a sludge product from a manufacturer.

Total industrial waste received during the observation period was 870 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
22%	8%	34%	0%	22%	5%	0%	0%	9%
189 tons	71 tons	300 tons	2 tons	192 tons	41 tons	0 tons	0 tons	75 tons

Other Waste - 397 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 these bulky items were received in open top roll-off containers.

Total Other waste received during the observation period was 397 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 Items	Sewage Sludge	Soil	Ash
35%	37%	23%	4%
139 tons	148 tons	93 tons	17 tons

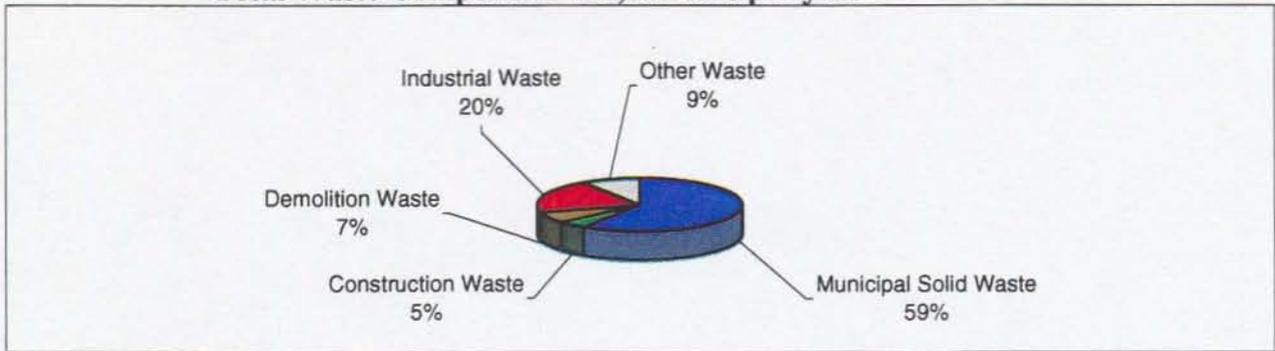
COURTNEY RIDGE LANDFILL

418,625 TONS IN 1998

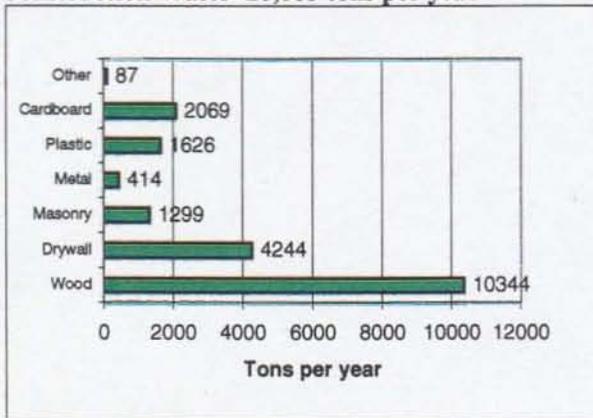
MATERIAL	Tons received during observation period	Percent of each material received	Estimated tonnage received in 1998 based on observation
MSW Component			
Paper	939 Tons	21.6%	90,357 Tons
Glass	149 Tons	3.4%	14,338 Tons
Metals	177 Tons	4.1%	17,032 Tons
Plastics	370 Tons	8.5%	35,604 Tons
Organics	792 Tons	18.2%	76,212 Tons
Inorganics	123 Tons	2.8%	11,836 Tons
TOTAL MSW	2571 Tons	59.1%	247,399 Tons
Construction Waste			
Wood	108 Tons	2.5%	10,344 Tons
Dry Wall	44 Tons	1.0%	4,244 Tons
Masonry	14 Tons	0.3%	1,299 Tons
Metal	4 Tons	0.1%	414 Tons
Plastic	17 Tons	0.4%	1,626 Tons
Cardboard	22 Tons	0.5%	2,069 Tons
Other	1 Tons	0.0%	87 Tons
TOTAL CONSTRUCTION	209 Tons	4.8%	20,083 Tons
Demolition Waste			
Wood	106 Tons	2.4%	10,162 Tons
Dry Wall	28 Tons	0.6%	2,665 Tons
Roofing	70 Tons	1.6%	6,697 Tons
Masonry	26 Tons	0.6%	2,483 Tons
Metal	27 Tons	0.6%	2,589 Tons
Carpet	24 Tons	0.5%	2,281 Tons
Other	24 Tons	0.6%	2,329 Tons
TOTAL DEMOLITION	304 Tons	7.0%	29,205 Tons
Industrial Waste			
Cardboard	189 Tons	4.3%	18,139 Tons
Paper	71 Tons	1.6%	6,813 Tons
Food	300 Tons	6.9%	28,849 Tons
Metal	2 Tons	0.0%	173 Tons
Wood	193 Tons	4.4%	18,533 Tons
Plastic	41 Tons	0.9%	3,955 Tons
Textiles	0 Tons	0.0%	
Rubber	0 Tons	0.0%	
Other	76 Tons	1.7%	7,284 Tons
TOTAL INDUSTRIAL	870 Tons	20.0%	83,746 Tons
Other Waste			
Bulky Items	139 Tons	3.2%	13,347 Tons
Soil and Inert Materials	93 Tons	2.1%	8,939 Tons
Sludge	148 Tons	3.4%	14,251 Tons
Other	17 Tons	0.4%	1,655 Tons
TOTAL OTHER WASTE	397 Tons	9.1%	38,192 Tons
TOTAL WASTE STREAM	4350 Tons	100%	418,625 Tons

The Courtney Ridge Landfill

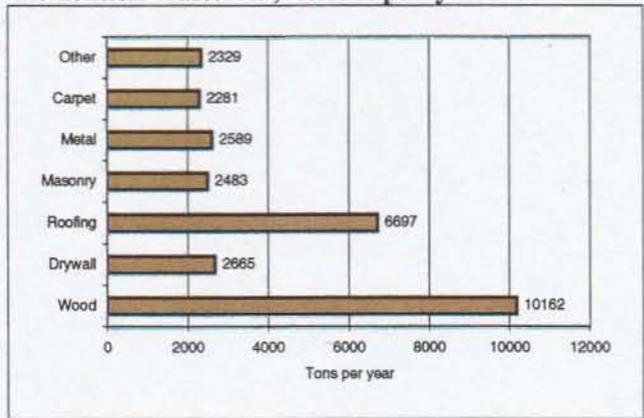
Total Waste Component -418,625 tons per year



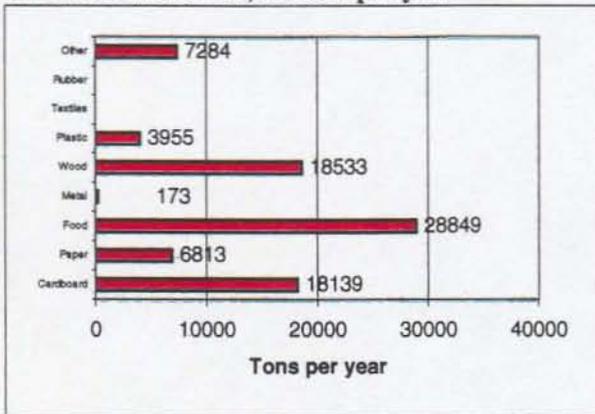
Construction Waste -20,083 tons per year



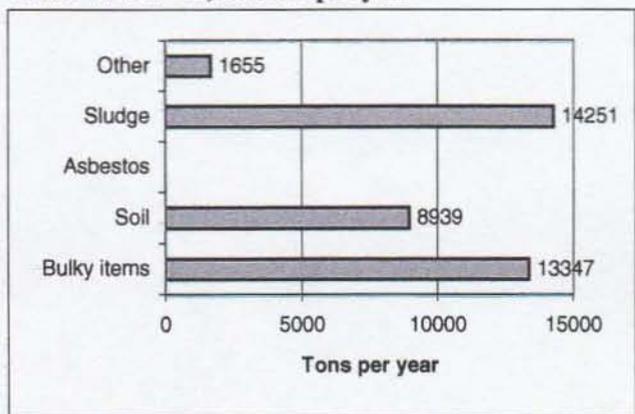
Demolition Waste - 29,205 tons per year



Industrial Waste - 83,746 tons per year



Other Waste - 38,192 tons per year



Courtney Ridge Waste Components vs Large Metro and State Averages

