

Lamar Landfill

The Lamar Landfill is located in Barton County, MO., approximately 5 miles north of Lamar, MO. It is owned and operated by Browning Ferris Industries Inc. 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 Lamar Landfill accepted 165,010 tons in 1996, 181,147 tons in 1997 and 168,591 tons in 1998. The landfill operation was observed from Monday October 19^h through Friday October 23rd. The weather was sunny and fair the entire week.. Observation took place from 7 AM till 4:30 PM on the above dates. During the observation period, 197 trucks, delivered 2,769 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.

Each driver was asked where the load originated. This was done to determine in what classification (MSW, construction, demolition, industrial, or Other) the load should be recorded. However, most loads could be classified visually, without any driver data.

The Lamar Landfill accepts waste from a six county area. The nearest Missouri landfills are located in Springfield and Clinton. Two transfer stations shipped waste to the Lamar Landfill. These were the BFI Transfer Station in Springfield, and the Stockton Transfer Station. These sources accounted for 67% (1862 tons) of the total waste received during the observation period. There were some construction, demolition, and industrial materials observed and recorded in these transfer loads but the overwhelming majority of the transfer station waste was MSW.

The Total Waste Stream - 2,766 tons

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 transfer trailers and local packer trucks. Total waste received during the observation period was 2,769 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
77%	1%	7%	8%	8%
2125 tons	19 tons	187 tons	227 tons	211 tons

Municipal Solid Waste - 2,122 tons

Municipal Solid Waste (MSW) accounted for 77% 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, three MSW sorts were conducted at the Lamar landfill in 1996. During the three waste sorts 38 samples, weighing an average of 212 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 2125 tons. The percentage of each major material category found in the 1996 sort was applied to the tonnage received during the observation period and is displayed below.

Municipal Solid Waste Components

Paper	Glass	Metals	Plastics	Organics	Inorganics
35.1%	4.9%	7.1%	15.5%	33%	4.3%
746 tons	104 tons	151 tons	329 tons	701 tons	91 tons

Construction Waste - 19 tons

Only about 1% 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 area served by the landfill is not a fast growing area and open burning is permitted in most municipalities and all counties. Both of these factors may have contributed to the low amount of construction waste. 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 19 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
51%	4%	0%	2%	0%	9%	26%
10 tons	1 tons	0 tons	2 tons	0 tons	2 tons	5 tons

Demolition Waste - 187 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. Over half (54%) of the of the demolition waste was roofing shingles. 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 187 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
25%	2%	54%	3%	4%	6%	6%
46 tons	4 tons	101 tons	5 tons	7 tons	11 tons	11 tons

Industrial Waste - 413 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. These loads came from a variety of sources. Sludge and foundry sand constituted the largest waste. During the observation period the Lamar Landfill received 178 tons of foundry sand. This sand was not hazardous and was normally dumped to the side and spread over the normal waste as time permitted. Approximately 8 tons of a black carbon char was received and was handled similar to the foundry sand. Aluminum sludge (65 tons) was transported from the BFI Transfer Station in Springfield and mixed with the MSW. The remaining industrial waste was from smaller generators.

Total industrial waste received during the observation period was 413 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.	Sludge
15%	2%	0%	4%	5%	5%	5%	2%	61%
62 tons	10 tons	0 tons	18 tons	20 tons	19 tons	22 tons	9 tons	253 tons

Other Waste - 26 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.. About 12 tons of asbestos was received and disposed of properly during the observation period.

Total Other waste received during the observation period was 26 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	Asbestos
54%	46%
14 tons	12 tons

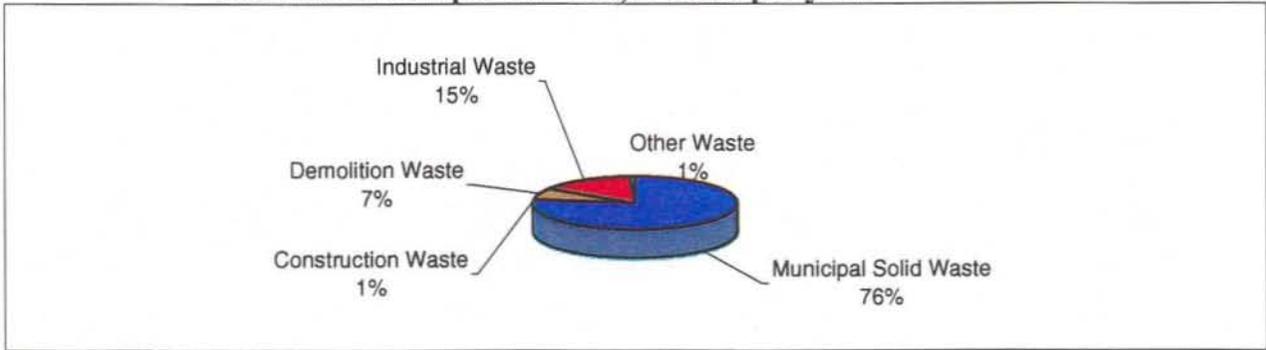
LAMAR LANDFILL

168,591 TONS IN 1998

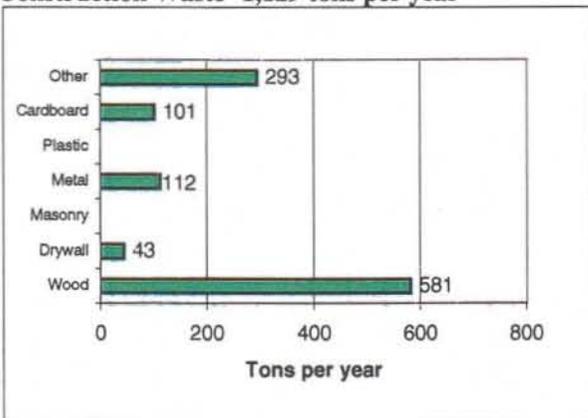
MATERIAL	Tons received during observation period	Percent of each material received	Estimated tonnage received in 1998 based on observation
MSW Component			
Paper	746 Tons	27.0%	45,467 Tons
Glass	104 Tons	3.8%	6,339 Tons
Metals	151 Tons	5.5%	9,203 Tons
Plastics	329 Tons	11.9%	20,052 Tons
Organics	701 Tons	25.3%	42,725 Tons
Inorganics	91 Tons	3.3%	5,565 Tons
TOTAL MSW	2122 Tons	76.7%	129,351 Tons
Construction Waste			
Wood	10 Tons	0.3%	581 Tons
Dry Wall	1 Tons	0.0%	43 Tons
Masonry	0 Tons	0.0%	- Tons
Metal	2 Tons	0.1%	112 Tons
Plastic	0 Tons	0.0%	- Tons
Cardboard	2 Tons	0.1%	101 Tons
Other	5 Tons	0.2%	293 Tons
TOTAL CONSTRUCTION	19 Tons	0.7%	1,129 Tons
Demolition Waste			
Wood	46 Tons	1.7%	2,798 Tons
Dry Wall	4 Tons	0.1%	222 Tons
Roofing	101 Tons	3.7%	6,156 Tons
Masonry	5 Tons	0.2%	282 Tons
Metal	7 Tons	0.2%	410 Tons
Carpet	15 Tons	0.5%	890 Tons
Other	11 Tons	0.4%	646 Tons
TOTAL DEMOLITION	187 Tons	6.8%	11,403 Tons
Industrial Waste			
Cardboard	62 Tons	2.3%	3,797 Tons
Paper	10 Tons	0.4%	616 Tons
Food	0 Tons	0.0%	- Tons
Metal	18 Tons	0.6%	1,085 Tons
Wood	20 Tons	0.7%	1,207 Tons
Plastic	19 Tons	0.7%	1,128 Tons
Textiles	22 Tons	0.8%	1,359 Tons
Rubber	9 Tons	0.3%	524 Tons
Other	253 Tons	9.2%	15,432 Tons
TOTAL INDUSTRIAL	413 Tons	14.9%	25,147 Tons
Other Waste			
Bulky Items	14 Tons	0.5%	823 Tons
Soil and Inert Materials	0 Tons	0.0%	- Tons
Asbestos	12 Tons	0.4%	737 Tons
Other	0 Tons	0.0%	- Tons
TOTAL OTHER WASTE	26 Tons	0.9%	1,560 Tons
TOTAL WASTE STREAM	2766 Tons	100%	168,591 Tons

The Lamar Landfill

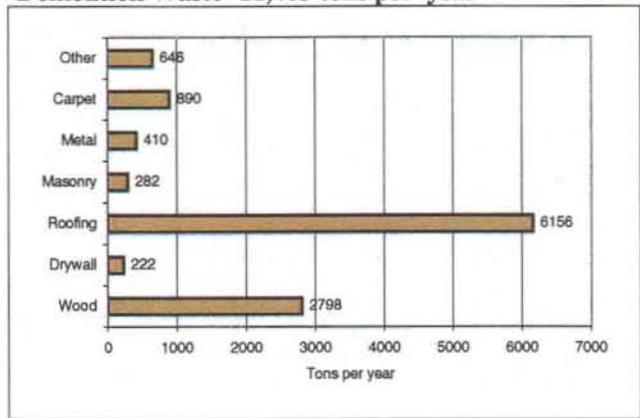
Total Waste Component - 168,591 tons per year



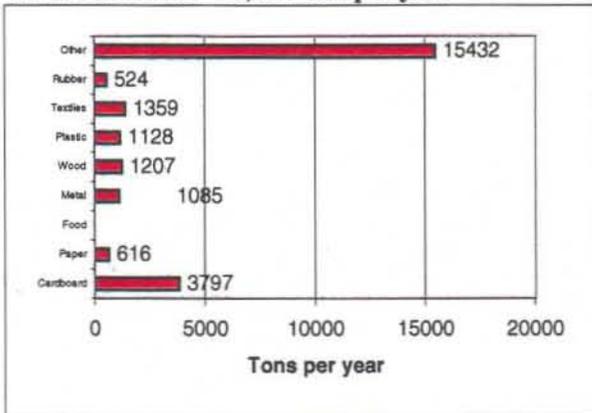
Construction Waste - 1,129 tons per year



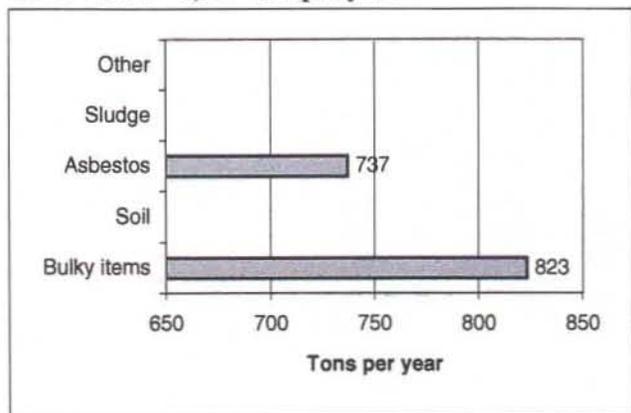
Demolition Waste - 11,403 tons per year



Industrial Waste - 25,147 tons per year



Other Waste - 1,560 tons per year



Lamar Waste Components vs Rural and State Averages

