

# Bridgeton Landfill

The Bridgeton Landfill is located in Bridgeton, MO., approximately 20 miles west of St. Louis, MO. It is owned and operated by Allied Waste Industries Inc. The disposal facility covers 52 acres and is permitted to accept all municipal solid waste (MSW) and other wastes such as asbestos, fly ash, contaminated soils and waste water treatment sludge.

The Bridgeton Landfill accepted 797,280 tons in 1996, 912,287 tons in 1997 and 913,621 tons in 1998. The landfill operation was observed from Monday May 17<sup>th</sup> through Friday May 21<sup>st</sup>, 1999. The weather was sunny and fair for the entire observation period. Observation took place from 7 AM till 4:00 PM on the above dates. The Bridgeton Landfill is open 24 hours a day and therefore not all trucks were observed. During the five-day period 1,063 trucks (54% of the total trucks )were observed and recorded. 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 - 9,196 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 local packer trucks and transfer trucks from the City of St. Louis's North Transfer Station. Total waste observed during the period was 9,196 tons. The components of the waste stream were estimated as they were unloaded. These components are listed below.

### Waste Stream Components

<b>MSW</b>	<b>Const.</b>	<b>Demo</b>	<b>Industrial</b>	<b>Other</b>
67%	5%	6%	11%	12%
6137 tons	416 tons	565 tons	1022 tons	1056 tons

## Municipal Solid Waste - 6,137 tons

Municipal Solid Waste (MSW) accounted for 67% 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 was 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 6137 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%
2289 tons	356 tons	423 tons	884 tons	1890 tons	295 tons

### Construction Waste - 416 tons

About 5% of the total waste was received 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 416 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
47%	17%	18%	0%	5%	11%	2%
194 tons	72 tons	76 tons	1 tons	21 tons	45 tons	7 tons

### Demolition Waste - 565 tons

About 6% 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 565 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
34%	12%	9%	32%	4%	7%	2%
189 tons	69 tons	53 tons	179 tons	23 tons	42 tons	10 tons

### Industrial Waste - 1,022 tons

Industrial waste loads were usually transported to the landfill in open top roll-off containers or compactor units. They were normally homogeneous, containing single waste products from a manufacturing process. A large portion of the wood waste was sawdust and wood shavings from a local firm that manufactures commercial fixtures from presswood materials. 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 1,022 tons. The materials within the industrial waste stream were estimated as they were unloaded. These estimated materials are listed below.

### The Industrial Waste Component

Cardboard	Paper	Food	Metal	Wood	Plas.	Tex.	Rbr.	Other
43%	6%	0%	0%	36%	8%	2%	0%	4%
437 tons	66 tons	0 tons	1 ton	365 tons	87 tons	23 tons	2 tons	41 tons

### Other Waste - 1,056 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. The soil was not contaminated and was used for cover. The "Other" category consisted mostly of fly ash.

Total Other waste received during the observation period was 1056 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	Asbestos	Other
6%	8%	70%	10%	5%
62 tons	88 tons	738 tons	109 tons	59 tons

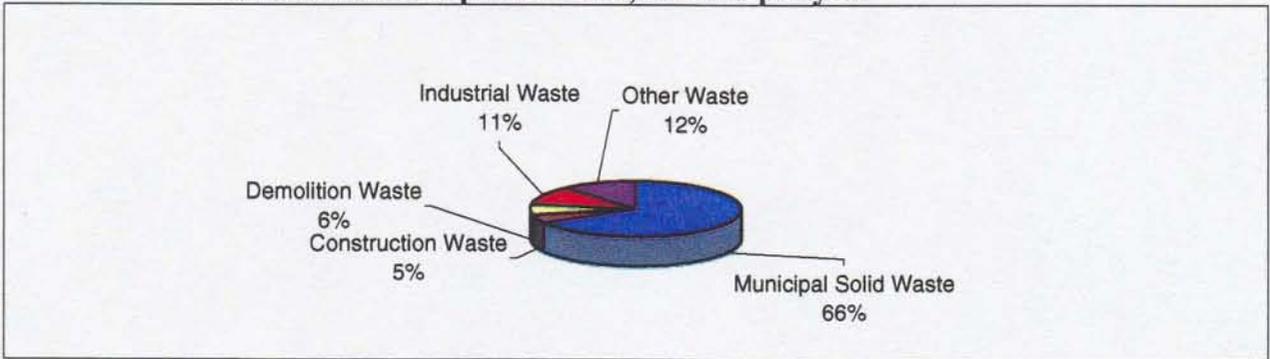
# BRIDGETON LANDFILL

## 913,621 TONS IN 1998

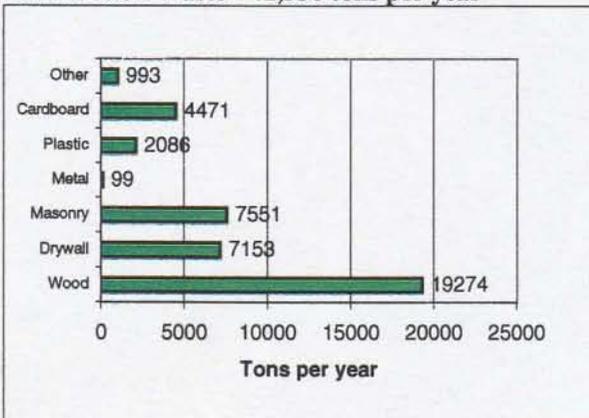
MATERIAL	Tons received during observation period	Percent of each material received	Estimated tonnage received in 1998 based on observation
<b>MSW Component</b>			
Paper	2289 Tons	24.9%	227,412 Tons
Glass	356 Tons	3.9%	35,369 Tons
Metals	423 Tons	4.6%	42,025 Tons
Plastics	884 Tons	9.6%	87,825 Tons
Organics	1890 Tons	20.6%	187,771 Tons
Inorganics	295 Tons	3.2%	29,308 Tons
<b>TOTAL MSW</b>	<b>6137 Tons</b>	<b>66.7%</b>	<b>609,710 Tons</b>
<b>Construction Waste</b>			
Wood	194 Tons	2.1%	19,274 Tons
Dry Wall	72 Tons	0.8%	7,153 Tons
Masonry	76 Tons	0.8%	7,551 Tons
Metal	1 Tons	0.0%	99 Tons
Plastic	21 Tons	0.2%	2,086 Tons
Cardboard	45 Tons	0.5%	4,471 Tons
Other	7 Tons	0.1%	695 Tons
<b>TOTAL CONSTRUCTION</b>	<b>416 Tons</b>	<b>4.5%</b>	<b>41,330 Tons</b>
<b>Demolition Waste</b>			
Wood	189 Tons	2.1%	18,777 Tons
Dry Wall	69 Tons	0.8%	6,855 Tons
Roofing	53 Tons	0.6%	5,266 Tons
Masonry	179 Tons	1.9%	17,784 Tons
Metal	23 Tons	0.3%	2,285 Tons
Carpet	42 Tons	0.5%	4,173 Tons
Other	10 Tons	0.1%	993 Tons
<b>TOTAL DEMOLITION</b>	<b>565 Tons</b>	<b>6.1%</b>	<b>56,133 Tons</b>
<b>Industrial Waste</b>			
Cardboard	437 Tons	4.8%	43,416 Tons
Paper	66 Tons	0.7%	6,557 Tons
Food	0 Tons	0.0%	- Tons
Metal	1 Tons	0.0%	99 Tons
Wood	365 Tons	4.0%	36,263 Tons
Plastic	87 Tons	0.9%	8,643 Tons
Textiles	23 Tons	0.3%	2,285 Tons
Rubber	2 Tons	0.0%	199 Tons
Other	41 Tons	0.4%	4,073 Tons
<b>TOTAL INDUSTRIAL</b>	<b>1022 Tons</b>	<b>11.1%</b>	<b>101,536 Tons</b>
<b>Other Waste</b>			
Bulky Items	62 Tons	0.7%	6,160 Tons
Soil and Inert Materials	738 Tons	8.0%	73,320 Tons
Asbestos	109 Tons	1.2%	10,829 Tons
Other	147 Tons	1.6%	14,604 Tons
<b>TOTAL OTHER WASTE</b>	<b>1056 Tons</b>	<b>11.5%</b>	<b>104,913 Tons</b>
<b>TOTAL WASTE STREAM</b>	<b>9196 Tons</b>	<b>100%</b>	<b>913,621 Tons</b>

# The Bridgeton Landfill

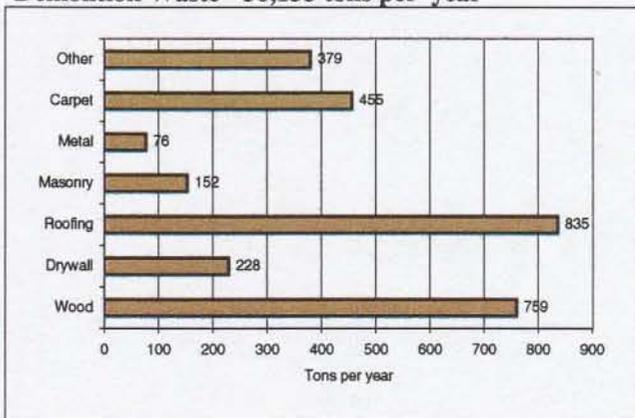
## Total Waste Component - 913,621 tons per year



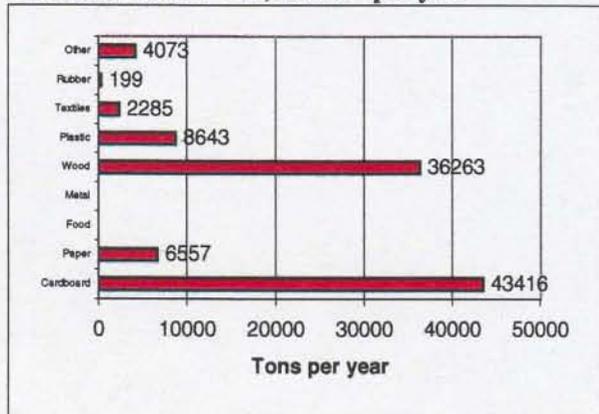
### Construction Waste - 41,330 tons per year



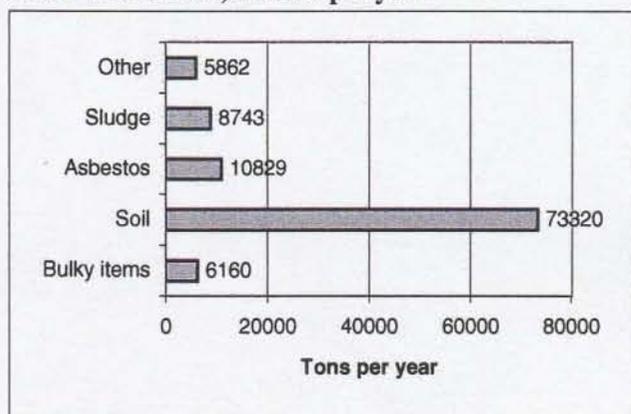
### Demolition Waste - 56,133 tons per year



### Industrial Waste - 101,536 tons per year



### Other Waste - 104,913 tons per year



### Bridgeton Waste Components vs. Large Metro and State Averages

