

# Rock Hill C&D Landfill

The Rock Hill C&D Landfill is located in Rock Hill , MO., which is part of the St. Louis metropolitan area. It is owned and operated by The Rock Hills Quarry Company. The disposal facility is permitted to accept only construction and demolition materials. The landfill is situated in an old quarry and surrounded by residential neighborhoods. The landfill is operated in a very efficient manner and is certainly one of the cleanest landfills in the state.

The Rock Hill C&D Landfill accepted 315,630 cubic yards (105,210 tons) in 1996, 331,938 cubic yards (110,646) tons in 1997 and 371,547 cubic yards (123,849 tons) in 1998. The landfill operation was observed from Monday February 22nd through Thursday February 25<sup>th</sup>, 1999. The weather was snowy and cold on Tuesday but fair for the remainder of the week. Observation took place from 8 AM till 4 PM on the above dates. During the four-day period 420 trucks, delivering 5,093 cubic yards of waste to the landfill were observed. The Rock Hill C&D Landfill does not have a scale and therefore all waste was estimated in cubic yards. The landfill converts the yardage to tons using a 3:1 (yards to tons) ration when reporting tonnage figures to the Missouri Department of Natural Resources. The same 3:1 ration was used to convert cubic yards to tons in this report.

The landfill staff felt the material received during the observation period was typical of material received year round. All loads could be classified visually without interviewing drivers.

## **The Total Waste Stream - 1,697 tons (5,093 cubic yards)**

The Rock Hill C&D Landfill is not permitted to accept Municipal Solid Waste (MSW), and by choice does not accept industrial waste. The construction, demolition and other waste stream components were delivered to the landfill in dump trucks, roll-off containers, and small pick-ups and trailers.

Total waste received during the observation period was 5,093 cubic yards (1,697 tons). The components of the waste stream were estimated as they were unloaded. These components are listed below.

### **Waste Stream Components**

<b>Construction</b>	<b>Demolition</b>	<b>Other</b>
9.5%	61%	29.5%
482 cubic yards	3110 cubic yards	1501 cubic yards
161 tons	1036 tons	500 tons

## Construction Waste - 161 tons (482 cubic yards)

About 9.5% 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). Masonry was defined as inorganic materials (bricks, concrete, etc.) which was part of a load with other materials that were classified as coming from new construction. Other materials were primarily insulation.

Total construction waste received during the observation period was 482 cubic yards (161 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
51%	24%	4%	0%	4%	12%	5%
245 yds.	115 yds.	20 yds.	0 yds.	18 yds.	58 yds.	26
82 tons	38 tons	7 tons	0 tons	6 tons	19 tons	9 tons

## Demolition Waste - 1,036 tons (3,108 cubic yards)

About 61% 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 and broken up, 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.

The masonry materials were difficult to classify. Several trucks delivered dirt to the landfill during the observation period. Some of that dirt was unloaded away from the landfill face and used as daily cover. This dirt was classified as other waste and is listed in a separate area. Some trucks delivering contained dirt, asphalt, bricks, and rocks within their loads. These loads were dumped near the landfill face and mixed immediately with the other waste. The landfill personnel made the choices on where the dirt was unloaded.

Total demolition waste received during the observation period was 3,110 cubic yards (1036 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
40%	2%	13%	41%	3%	1%	0%
1239 yds.	68 yds.	411 yds.	1273 yds.	91 yds.	22 yds.	6 yds.
413 tons	23 tons	137 tons	424 tons	30 tons	7 tons	2 tons

## Other Waste - 500 tons (1501 cubic yards)

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.). The only materials which fit into this category was the clean dirt that was received and stockpiled for daily cover as explained earlier. The Rock Hill Landfill does not have an internal source for daily cover and therefore relies on clean soil received from contractors for that purpose. No contaminated soil was received.

Total Other waste received during the observation period was 1501 cubic yards (500 tons). The materials within the other waste stream were estimated, as they were unloaded. These estimated materials are listed below.

### The Other Waste Component

Soil used for daily cover  
1501 cubic yards  
500 tons

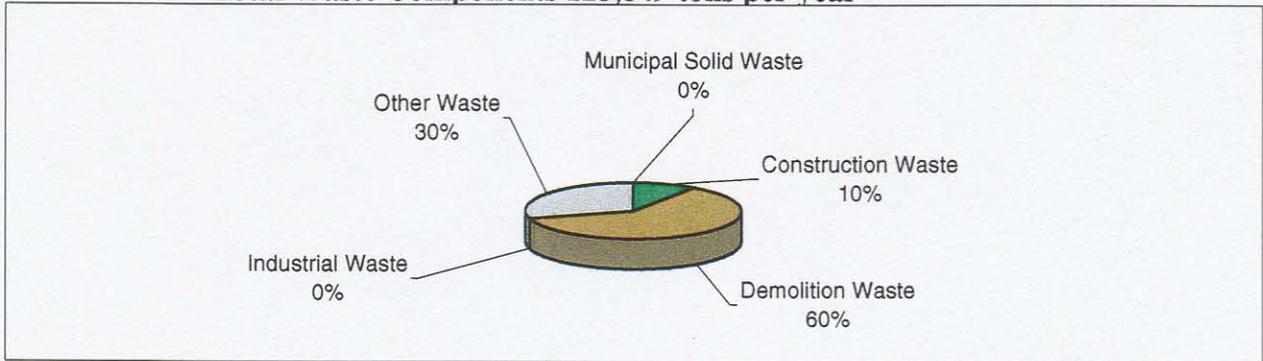
# ROCKHILL LANDFILL

# 123,849 TONS IN 1998

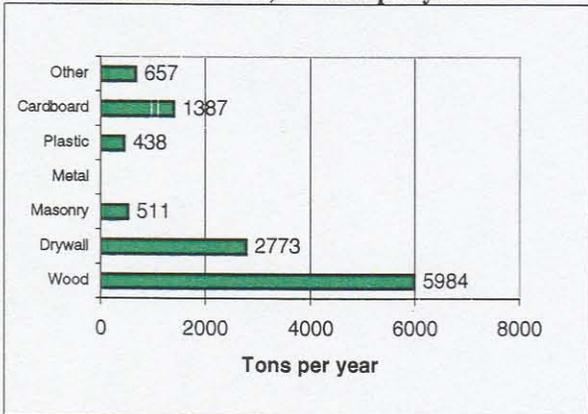
MATERIAL	Tons received during observation period	Percent of each material received	Estimated tonnage received in 1998 based on observation
<b>MSW Component</b>			
Paper	0	0.0%	- Tons
Glass	0	0.0%	- Tons
Metals	0	0.0%	- Tons
Plastics	0	0.0%	- Tons
Organics	0	0.0%	- Tons
Inorganics	0	0.0%	- Tons
<b>TOTAL MSW</b>	<b>0</b>	<b>0.0%</b>	<b>- Tons</b>
<b>Construction Waste</b>			
Wood	82	4.8%	5,984 Tons
Dry Wall	38	2.2%	2,773 Tons
Masonry	7	0.4%	511 Tons
Metal	0	0.0%	- Tons
Plastic	6	0.4%	438 Tons
Cardboard	19	1.1%	1,387 Tons
Other	9	0.5%	657 Tons
<b>TOTAL CONSTRUCTION</b>	<b>161</b>	<b>9.5%</b>	<b>11,750 Tons</b>
<b>Demolition Waste</b>			
Wood	413	24.3%	30,141 Tons
Dry Wall	23	1.4%	1,679 Tons
Roofing	137	8.1%	9,998 Tons
Masonry	424	25.0%	30,944 Tons
Metal	30	1.8%	2,189 Tons
Carpet	7	0.4%	511 Tons
Other	2	0.1%	146 Tons
<b>TOTAL DEMOLITION</b>	<b>1036</b>	<b>61.0%</b>	<b>75,608 Tons</b>
<b>Industrial Waste</b>			
Cardboard	0	0.0%	- Tons
Paper	0	0.0%	- Tons
Food	0	0.0%	- Tons
Metal	0	0.0%	- Tons
Wood	0	0.0%	- Tons
Plastic	0	0.0%	- Tons
Textiles	0	0.0%	- Tons
Rubber	0	0.0%	- Tons
Other	0	0.0%	- Tons
<b>TOTAL INDUSTRIAL</b>	<b>0</b>	<b>0.0%</b>	<b>- Tons</b>
<b>Other Waste</b>			
Bulky Items		0.0%	- Tons
Soil and inert materials	500	29.5%	36,491 Tons
Sludge		0.0%	- Tons
Other		0.0%	- Tons
<b>TOTAL OTHER WASTE</b>	<b>500</b>	<b>29.5%</b>	<b>36,491 Tons</b>
<b>TOTAL WASTE STREAM</b>	<b>1697</b>	<b>100%</b>	<b>123,849 Tons</b>

# The Rockhill C&D Landfill

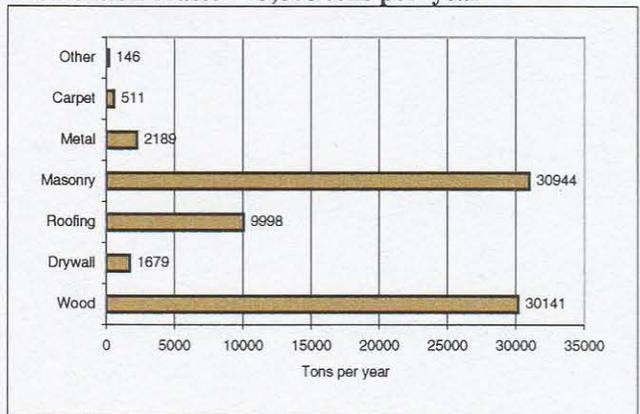
## Total Waste Components 123,849 tons per year



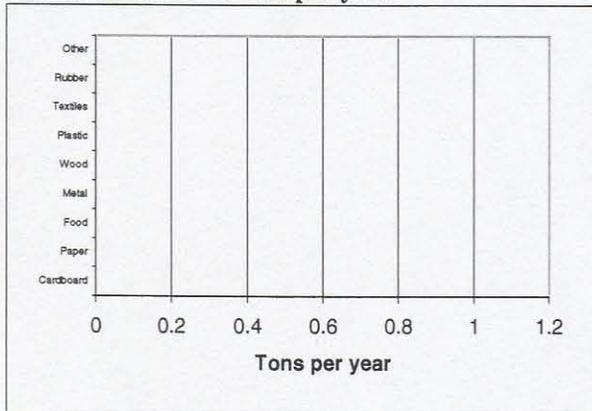
### Construction Waste - 11,750 tons per year



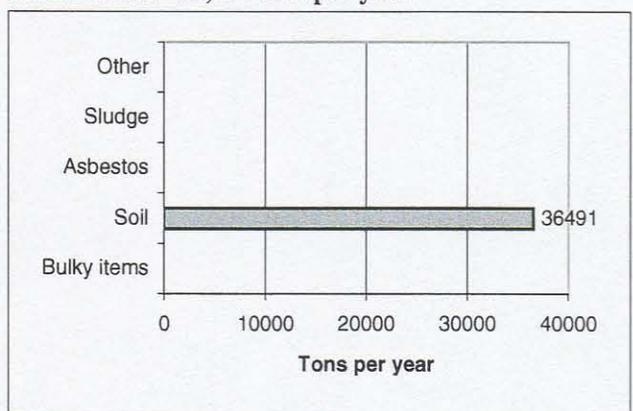
### Demolition Waste - 75,608 tons per year



### Industrial Waste - 0 tons per year



### Other Waste - 36,491 tons per year



## RockHill Waste Components vs Peerless C&D and State C&D Averages

