

**ADDENDUM TO TOPIC PAPER ON WASTE TRANSFER STATIONS**

***WASTE TRANSFER RECYCLING RATES - SITA***

**Introduction**

- 1.1 SITA has provided the West of England Partnership with additional information in relation to the assumption of a 20% recycling rate at Waste Transfer Stations (WTS) in the Joint Waste Core Strategy (JWCS). SITA's full response is included in Annex 1. SITA has confirmed that the three operational sites within the West of England Plan Area act as traditional WTS and recycle 0% of the total waste managed.

Further to this SITA has also provided information for other sites that are not located in the Plan Area, but that are located in urban areas and recycle or process a proportion of waste. Due to commercial confidentiality the sites are not named, but Table 1 of Annex 1 offers an overview of the operations at each site in relation to how much is recycled, recovered and how much is residual waste that is sent for disposal.

**Conclusion**

- 1.2 The average recycling rate at the 4 sites (5 operations) displayed in Table 1 of Annex 1 is 34.6%. Further the information demonstrates that recycling is undertaken at varying degrees dependant upon the operation and equipment on the site. The information supports the 20% recycling assumption at WTS made in the JWCS.

## **Annex 1. SITA's Full Response**

Currently SITA operate 3 transfer station sites within the West of England. These are;

Collett Way, Yate

Carsons Road, Mangotsfield, Bristol

Victoria Road, St Philips, Bristol

Figures for these 3 sites have NOT been included here, because none of these sites are representative of a "normal" waste transfer station for the following reasons;

- Collett Way, Yate; This site is part of the South Glos PFI Contract. This site is purely set up for bulking source segregated municipal waste for onward transfer for disposal (currently to Swindon and Birmingham). There is no recycling within the shed other than the odd bit of wood / metal being hand pulled out of the waste mass.
- Carsons Road, Mangotsfield; This site is part of the South Glos PFI Contract. This site is purely set up for bulking source segregated municipal waste for onward transfer for disposal (currently to Swindon and Birmingham). There is no recycling within the shed other than the odd bit of wood / metal being hand pulled out of the waste mass.
- Victoria Road, St Philips; This site was formerly Hemmings Ltd bulking station, which is a split level shed with the sole purpose of skip wastes being tipped directly into a compactor unit, for onward transfer to landfill. Therefore there is very little recycling at this site and it is therefore not truly representative. This site is due for redevelopment by SITA into a "normal" transfer station that will be able to recycle more materials.

It is SITA's experience that the recycling levels at a waste transfer station will depend on;

- a) The waste types delivered to the site (what market sector is the site intending to support). Skip wastes will differ in their material from source segregated residual C&I wastes collected in Refuse Collection Vehicle (RCV) & Front End Loader vehicles (FEL) with much more wood and inerts / fines within skip wastes, and a lot more organic in the source segregated residual RCV
- b) The site's purpose, how the site is set up; Is the site set up purely to bulk up materials for onward shipment, or is it set up to separate and segregate materials.
- c) The size / throughput of the site. Some sites are size constrained with large throughputs therefore they are purely concentrating on bulking materials for onward shipment with little effort put into recycling / segregating. Large sites with lots of space and relatively low throughputs have the space and time to separate materials and recycle more.

The sites on the attached table are;

Site 1; Small inner-city enclosed waster transfer building. Handling predominantly skip wastes. There is a baler on site but no room for a trommel or any other processing equipment. Site will handle between 10,000-15,000tpa. Table shows materials landfilled are 26%, with inerts wood & plasterboard making up the rest of the waste streams recycled.

Site 2; Urban fringe waste transfer station building. Handling predominantly RCV and FEL delivering C&I wastes and some household wastes. Site will handle around 25,000-30,000tpa. Building is generally confined, no specific processing equipment on

site (no picking belt / baler / trommel). Average of 78% of inputs landfilled. Site is mainly set up for bulking from 4-7tonne payload RCV`s into 22tonne payload bulkers.

Site 3; This is a large site which comprises 2 main facilities, 3a a large waste transfer building, 3b a large clean MRF

Site 3a; Large waste transfer building with capacity to operate around 150,000tpa, but generally only handles around 60,000-70,000tpa. Site is located in an urban setting on a large industrial site surrounded on all sides by housing. Site mainly handles C&I wastes from roro`s RCV`s & FEL`s. Large building but is mainly set up for bulking for onward transportation. Landfill rates average 75% of waste input.

Site 3b; Dedicated clean MRF for processing co-mingled recyclables under a municipal waste contract & also C&I recyclables. Site has picking belts, eddy current separators, band Magnets and balers. Site is fully enclosed and handles around 25,000-30,000tpa. Landfill rate is 3% of waste input with largest output being mixed paper (64%)

Site 4; Urban site, consisting of an open air transfer station located on former rail sidings. Site handles generally 30,000-40,000tpa of waste and deals mainly with skip wastes and roro wastes. Site has some limited processing on site in the form of an (old) trommel. Site recycles significant amounts of inert & wood and only landfills 25% of waste inputs.

Sites 1 & 2 are very representative of the transfer stations located on Albert Road in Bristol, whilst Site 4 is representative of the transfer sites in Avonmouth.

**Table 1. Summary of Information Provided by SITA for the Percentage of Waste Recycled, Recovered and Residual Sent for Disposal at Each Identified Site**

<b>Site 1</b>		
	Monthly	Annual
Total Tonnes Recycled	834.62	2,976.98
Total Recovered	296.20	2,923.16
Total Residual	410.70	2,025.32
Total Tonnes Processed	1,541.52	7,925.46
Percentage Recycled	54%	38%
Percentage Recovered	19%	37%
Percentage Residual	27%	26%
<b>Site 2.</b>		
	Monthly	Annual
Total Tonnes Recycled	271.96	1,489.25
Total Recovered	384.42	2,942.32
Total Residual	1,986.74	16,041.55
Total Tonnes Processed	2,643.12	20,473.12
Percentage Recycled	10%	7%
Percentage Recovered	15%	14%

Percentage Residual	75%	78%
<b>Site 3 a.</b>		
	Monthly	Annual
Total Tonnes Recycled	1,096.06	6,919.78
Total Recovered	971.04	5,228.96
Total Residual	3,581.22	36,013.81
Total Tonnes Processed	5,648.32	48,162.55
Percentage Recycled	19%	14%
Percentage Recovered	17%	11%
Percentage Residual	63%	75%
<b>Site 3b.</b>		
	Monthly	Annual
Total Tonnes Recycled	1,352.22	16,978.69
Total Recovered	242.00	242.00
Total Residual	0.00	477.70
Total Tonnes Processed	1,594.22	17,698.39
Percentage Recycled	85%	96%
Percentage Recovered	15%	1%
Percentage Residual	0%	3%
<b>Site 4.</b>		
	Monthly	Annual
Total Tonnes Recycled	525.94	4,670.14
Total Recovered	2,084.84	14,733.51
Total Residual	801.14	6,516.45
Total Tonnes Processed	3,411.92	25,920.10
Percentage Recycled	15%	18%
Percentage Recovered	61%	57%
Percentage Residual	23%	25%