

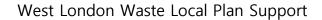
West London Waste Plan

Assessment of Existing Capacity & Apportionment

Report for Final Issue

Version 1.0

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1 Introduction

A key element of demonstrating general conformity with the London Plan is for the West London Waste Plan (WLWP) to make provision for sufficient waste management capacity to meet net self sufficiency targets set in Policy 5.17. This is based on forecasts of MSW and C&I arisings for each Borough provided in the London Plan. The MSW/C&I waste apportionment values for each Borough have been summed together to provide a single value for all the WLWP partner Boroughs in Table 1 below.

Table 1: WLWP Capacity Apportionment (000s tpa)

Year	2011	2016	2021	2026	2031
ktpa	1,399	1,595	1,798	2,019	2,250

Paragraph 5.75 of the London Plan defines the types of waste management capacity that may be counted towards meeting the apportionment as follows:

"The Mayor wants to make the most of London's waste to harness its energy and employment benefits. For the purposes of meeting self-sufficiency, in addition to prevention, reduction and re-use, waste is deemed to be managed in London if:

- it is used in London for energy recovery (e.g. through anaerobic digestion, pyrolysis/gasification or through existing incinerators)
- it is compost or recyclate sorted or bulked in London material recycling facilities for reprocessing either in London or elsewhere
- it is a 'biomass fuel' as defined in the Renewable Obligation Order."

The relationship between the forecasts of C&I and MSW waste arisings and the capacity apportionment is illustrated in Figure 1.



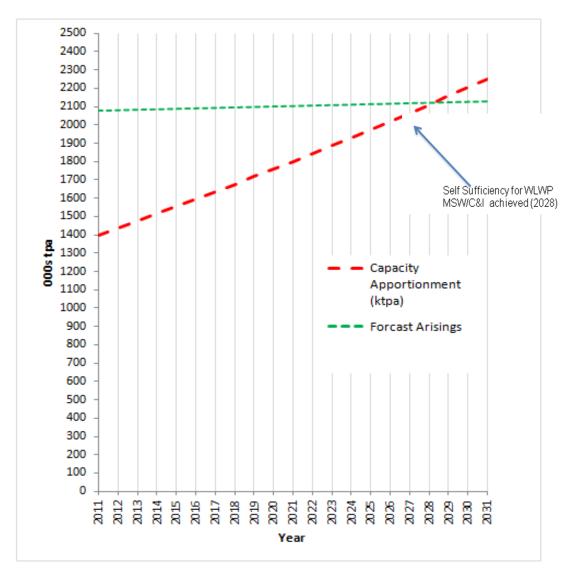


Figure 1: London Plan MSW/C&I Forecasts & Capacity Apportionment



2 Methodology

The following methodology was employed to identify the contribution that existing waste management sites may make to meeting the apportionment targets. The methodology is summarised in the flowchart included in Figure 1.

Stage 1: Preliminaries

Step 1: Generating a Reference Baseline value for existing capacity

Total inputs to WLWP area sites excluding landfill total = 2.1 million tonnes (source: WDI 2011). As the apportionment concerns MSW and C&I waste streams, CDEW tonnage is excluded (Chapter 17 waste as CDEW¹) = 1.3 million tonnes².

This provides a reference baseline value for the capacity of all non-landfill sites within the Plan Area available to meet the MSW and C&I apportionment.

Step 2: % CDEW accepted as a screening factor to site by site capacity assessment

Before undertaking a site by site capacity assessment it is necessary to screen out those sites dedicated to the acceptance of CDEW as this does not count towards the apportionment. Although in reality some C&I waste may be managed at such sites it was considered prudent to exclude all capacity at these sites.

The % input classified under Chapter 17 waste (CDEW) was ascertained by taking a site by site breakdown of inputs. Where the input exceeded a threshold of 85% CDEW, the site was screened out from further consideration.

17 sites exceeded the 85% threshold and so were screened out (in fact all of the sites classified at least 97% of waste received was classed under Chapter 17) (See Table A1.1 in Appendix 1 for the site ranking by CDEW %). It should be noted however that reliance

¹ 'Chapter 17' is a waste classification code used within the WDI to categorise waste from construction and demolition. 0.93 million tonnes of waste classed as CDEW was managed through permitted sites in 2011.

² This compares with a value of 1.16 million in the WDI 2010.



on the waste classification assumes accurate record keeping by operators whereas, in order to simplify data recording, operators³ may record all inputs under a single code regardless of its type. This is particularly the case for mixed skip waste from different sources including businesses and households that may often be classed under Chapter 17.

This step left <u>41 operational permitted sites</u> for further investigation. These sites are recorded as having received 1.3 million tonnes of waste in 2011.

Step 3: Data Cleansing

Detailed checks of the EA WDI dataset were undertaken as a number of sites were identified as having ceased to operate in the dataset compiled during the previous capacity assessment exercise. Therefore direct inquiry was made of each Borough about the status of each site identified with particular focus on those identified as not operational. During the course of this exercise it was established that a number of sites had duplicate entries indicating a number of permits applying to the same sites. This was taken to be an anomoly in the WDI data and therefore one of these entries was excluded from further consideration.

Stage 2: Establishing Maximum Site Capacity

Step 4: Site by Site Assessment

A sequential approach was adopted to establish what the maximum design capacity of the remaining sites might be, as follows:

 Direct inquiry of the Borough planning authorities provided a profile of planning consents for a number of the sites under review. A number of these consents indicated that the consented uses were subject to capacity limitations imposed by conditions such as input limit or vehicle movements. These limits were transposed into a spreadsheet against each site to which they relate.

³ A survey of these operators may establish if or what proportion of inputs may come from sources other than the construction sector and could reveal the presence of additional existing C&I recovery capacity.



- 2. Environmental permit (Waste Licence) limits on annual inputs were also examined and the 75% of the limit maximum (factor utilised in the London Plan⁴) was applied where either:
 - there was no planning consent limit specified, or
 - the permit limit was less than the planning consent limit and the higher value more closely reflected the WDI 2011 input data.
- 3. Where actual inputs (recorded in the WDI) fell substantially below capacity limits defined by the permit or planning consent a view was taken on the realisitic nature of the permit/consent limit and judgement applied as follows:
 - a. If the input value was less than 50% of permit/consent maximum the actual input value was used plus 25% margin factor.
 - b. Where actual inputs exceeded any stated limit the highest value over the four year period was used as proof of the site's capability plus 10% margin factor where a value of similar magnitude occurred in more than a single year⁵.
- 4. The findings of the previous round of capacity review as reported in the Technical Report dated 11 November 2011 were examined. Those that involved site operator interview to determine best possible site input values were referenced.
- 5. Where a maximum value was not provided by a consent or permit, the WDI recorded input plus 25% was used for sites operating in 2011. This assumes that sites are generally operating at 25% under maximum design capacity.

Step 5: Accounting for Civic Amenity (CA) Site Capacity

The CA sites within the Plan Area are considered to be a special case as at a number of sites inputs are not fully recorded as incoming vehicles do not cross a weighbridge.

⁴ See Alterations to the London Plan Policies on Waste Technical Report October 2005

⁵ This is on the basis that many permit limits were historically set for charging purpose alone and did not necessarily reflect the true capacity limits of a site.





Therefore declared output values from each of the sites were examined too (as these would have been measured using weighbridges at receiving sites).

In the absence of consented maximum values, data for inputs and outputs associated with each site were examined for 2008-2011. The highest value that occurred across these four years was selected to provide an indicative maximum. Then recycling targets advised by the operating Boroughs were applied. Ealing & Hillingdon have provided revised values.

Table 2: CA Site Capacity Value Selection Process

Site Name	Year	Input	Output	Capacity Value Selected
			- ,	
	2009	51,559	50,129	
Forward Drive C A Site, Harrow	2010	42,913	45,611	51,559
	2011	44,622	46,556	
, _	,		,	,
	2008	32,338	33,390	
Space Waye Civic Amenity Site	2009	26,377	25,601	22 200
Space waye civic Amenity Site	2010	18,874	19,289	33,390
	2011	16,998	15,093	
	2008	26,575	26,575	
Townmoad Civic Amonity Site	2009	22,508	22,508	26,575
Townmead Civic Amenity Site	2010	20,169	20,169	
	2011	21,837	21,837	

Two of the CA sites are operated as part of a wider waste management operation - at Victoria Road and Twyford for which separate returns are not available. These are operated by WLWA. Direct inquiry was made of WLWA for indicative maxima design capacity and recycling rates. This gave a combined capacity value of 122,000 tonnes per annum across the CA site estate.

Step 6: Additional Sites

Dormant & Recently permitted Sites

As the site listing was drawn from the WDI of 2011 there are some additional sites granted consents since then. In addition some sites with consent may have been dormant in that year and so would not have shown up in the WDI data.



A review of the local planning authority online planning applications database plus the latest Environment Agency permit register for the plan area revealed a number of additional sites. Capacity values for these sites were either obtained from planning application/consents or from historical information and added to the totals. The Environment Agency also provided an updated listing for 2013. A number of operator contacts were made to clarify capacity. This exercise identified a further 406,000 tonnes of capacity

Stage 3: Screening out Non Qualifying Capacity

Step 7: Accounting for CDEW Capacity

As the apportionment is specific to MSW/C&I waste streams capacity at sites utilised for receipt of CDEW is not to be included.

As a proportion of capacity at some of the sites taken forward for assessment was attributed to CDEW by the WDI 2011 data, and CDEW capacity does not count towards apportionment, account needs to be taken of this. The % inputs assigned to CDEW in 2011 was therefore applied to the best estimate maximum capacity data on a site by site basis and the tonnage attributable to CDEW was then excluded from the capacity calculation.

Step 8: Accounting for Disposal

As the purpose of the apportionment is to demonstrate progress towards meeting the London Plan MSW/C&I recycling and composting targets as well as the zero waste to landfill target, capacity that involves transfer direct to landfill or disposal was also discounted.

The following approach was taken:

1. For certain types of sites, such as metal recycling facilities, it has been assummed that all the capacity contributes towards the diversion targets.





- 2. For specialist treatment plant the same was taken to be the case. This included all oil treatment plant. Capacity at the Mogden sewage treatment works was excluded.
- 3. For the remaining sites, the actual diversion rates achieved in 2011 as indicated by the WDI 2011 output data was used on a site by site basis. Where fates were indicated as 'landfill', 'transfer' or 'unknown' the values were counted towards disposal. Where they were registered as going on for 'recovery', 'treatment' or 'incineration' they were counted towards diversion capacity. The diversion rate applied to each site is shown in table A2.1.

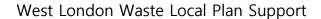
For the additional sites (those sites not identified from WDI 2011 – see step 6), judgements were made based on the site specific details of the planning consents and operator contact.

This generated a value of 1.64 million tonnes of capacity to count towards apportionment.

3 Conclusion

The exercise yielded a best estimate value of at least 1.64 million tonnes of existing capacity to recover C&I & MSW (therefore contributing to the London Plan apportionment) within the plan area.

Figure 1 illustrates the process followed.





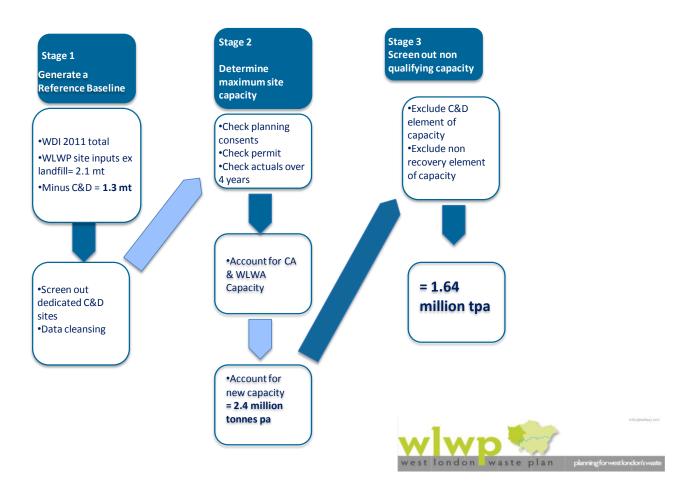


Figure 2: Flowchart of Capacity Assessment Methodology



Stage 9: Accounting for Sites that May be Reorientated

In order to avoid double counting of capacity at sites that have contributed to the existing capacity baseline but may also be brought forward in the plan as sites suitable for reorientation⁶, a further exercise was undertaken.

This involved calculating the site's total potential capacity by applying the agreed tonnage per hectare factor of 65,000 tpa/ha to the total area of the identified site (including the utilised and non-utilised area). The site's existing capacity was then taken to be included within that figure rather than added to it. This is shown in Table 3 below:

Table 3: Existing Sites Contribution Adjusted for Baseline Contribution

Site Name	Included Area (ha)	Existing Contribution (tpa)	Potential contribution @ 65,000t/he(tpa)	Potential additional contribution
Twyford Waste Transfer Station	1.24	17,967	80,600	62,633
Veolia/Brent Transfer Station & Depot	2.71	16,714	176,150	159,436
Greenford Depot (inc HWRC)	1.783	11,590	115,895	104,305
Rigby Lane Waste Transfer Station	0.91	26,301	59,150	32,849
Twickenham Depot	2.67		173,550	173,550
Quattro, Victoria Road, Park Royal	0.97		63,050	63,050
Total	10.28	72,572	668,395	595,823

Entries for existing contribution do not appear for two sites for the following reasons:

- While Twickenham depot is an active waste management site prior to 2013 it operated under an exemption so the EA WDI 2011 did not report data for this site.
- The Quattro site fell within the dedicated CDEW class of sites so no input was counted towards the LP (2011) apportionment.

⁶'Reorientation' means redevelopment of an existing site in such a way that its entire area is utilised for waste recovery and/or it is used more efficiently and as such its capacity is increased. A more accurate term might be 'reconfiguration'.



Stage 10: Accounting for Exempt Activties

The capacity assessment exercise has been led by the Environment Agency listing of operating permitted sites. However there is a group of waste management sites that operate under exemptions from permitting. These activities are deemed to not warrant a permit but can amount to some significant activities particularly those focussed on recycling. For example the *treatment of up to 3000 tonnes of specified waste materials in any seven day period.* Such an activity could contribute additional C&I or MSW capacity. The listing of registered exempt sites within the Plan Area revealed that there were a total of 691 activities registered in September 2013.

No assessment has been made of the actual contribution such sites make to current capacity. Therefore the value derived for the existing MSW/C&I management capacity in the Plan Area should be regarded as an underestimate of actual. See Appendix 3 for a fuller discussion.



4 Implications for Meeting the London Plan Apportionment

Applying the value arrived at above (1.64 mtpa) to the apportionment targets set by the London Plan on a year by year basis gives a pattern shown in Figure 3 below. This assummes that the existing capacity will remain stable throughout the period.

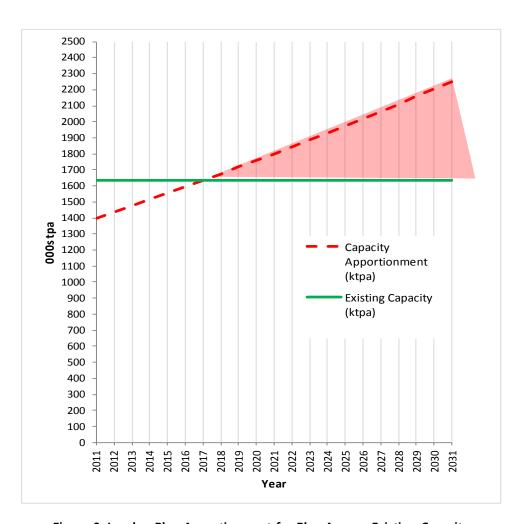


Figure 3: London Plan Apportionment for Plan Area vs Existing Capacity

This suggests that provision for additional capacity is needed from 2018 onwards in order to ensure that the London Plan C&I/MSW apportionment continues to be met. The red shaded area indicates the capacity gap.



Table 4 shows the values associated with the annual capacity shortfall and how the shortfall first appears in 2018.

Table 4: London Plan Apportionment for Plan Area vs Existing Capacity

	Capacity	Existing	Capacity
Year	Apportionment	Capacity	Shortfall
	(ktpa)	(ktpa)	(ktpa)
2011	1,399	1,636	237
2012	1,438	1,636	198
2013	1,477	1,636	159
2014	1,517	1,636	120
2015	1,556	1,636	80
2016	1,595	1,636	41
2017	1,636	1,636	1
2018	1,676	1,636	-40
2019	1,717	1,636	-81
2020	1,757	1,636	-121
2021	1,798	1,636	-162
2022	1,842	1,636	-206
2023	1,886	1,636	-250
2024	1,931	1,636	-294
2025	1,975	1,636	-339
2026	2,019	1,636	-383
2027	2,065	1,636	-429
2028	2,111	1,636	-475
2029	2,158	1,636	-521
2030	2,204	1,636	-568
2031	2,250	1,636	-614

4.1 Land Requirement

By applying a factor suggested by the GLA of 65,000 tonnes per hectare, the equivalent additional land requirement can be calculated and this is shown in Table 5 below:.

Table 5: Land Requirement to Meet London Plan Apportionment

Year	Capacity Shortfall (ktpa)	hectares
2018	-40	0.6
2019	-81	1.2
2020	-121	1.9
2021	-162	2.5
2022	-206	3.2
2023	-250	3.8
2024	-294	4.5
2025	-339	5.2
2026	-383	5.9
2027	-429	6.6
2028	-475	7.3
2029	-521	8.0
2030	-568	8.7
2031	-614	9.4



4.2 Site Needs

Table 5 indicates a capacity shortfall of 614,000 tonnes per annum by 2031.

Therefore, in order to conform with the London Plan, the Plan should allocate sites capable of delivering at least this capacity.

Sites identified as being capable of providing this additional capacity are those existing sites available for reorientation shown in Table 3 above together with the new sites shown in Table 6 below:

Included **Potential** contribution @ Site Name Area (ha) 65,000t/he(tpa) Forward Drive Depot 118,950 1.83 Western International Market 3.2 208,000 Total 5.03 326,950

Table 6: Proposed Additional Sites

It should be noted that availability of the Quattro site may be affected by safeguarding associated with the development of HS2 i.e. the site have been identified by HS2 for the tunnelling option (Option B). If Option B is selected and HS2 goes ahead this means that it would only become available later on during the Plan period post HS2 construction.

Table 7 below shows the cumulative additional contributon of sites identified and shows the implications of HS2 on the provision of capacity were it to go ahead and the full area of both safeguarded sites not be available for the full duration of the Plan period.

Table 7: Proposed Sites Capacity Contribution

Site Type	Potential additional contribution (tpa)
Existing (Table 3)	532,773
New sites (Table 6)	326,950
Sub total	859,723
Contingency (post HS2)	63,050
Grand Total	922,773





This table demonstrates that the sites proposed for allocation in the Plan will meet the London Plan apportionment to 2031. It should be noted that if it does transpire that the site identified for safeguarding for HS2 development does cease to be available then there is still sufficient capacity to meet the apportionment even though HS2 have given assurances that it would be made available post 2024.

5 Conclusion

A review of existing waste management sites within the Plan Area has revealed that taken together they could provide around <u>1.64 million tonnes per annum</u> of MSW and C&I management capacity.

Reorientation of certain existing sites would release land to manage around a further 532,773 tonnes per annum. Additional proposed sites would provide around 326,950 tonnes per annum.

Taking these capacities together <u>provides 922,773 tonnes per annum</u> which, together with the existing capacity identified of 1.64 million tonnes, is more than sufficient to meet the London Plan apportionment of 2.25 million tonnes tonnes per annum at 2031.



Appendix 1: Table A1.1 CDEW Threshold - Stage 2

			Grand		CDEW %
Site Name	C&I	MSW	Total	CDEW	input
Ashmead Road Depot	0		10	10	100%
British Rail Goods Yard	0		705	705	100%
L & B Haulage, Neasden	0		16,696	16,696	100%
Ruislip Depot Hazardous Waste Containment Bay	0		37,415	37,415	100%
X - Bert Haulage	0		65,260	65,260	100%
Quattro - Brentford	12	161	172,557	172,384	100%
Gowing & Pursey Waste Transfer Station	0	42	38,529	38,487	100%
Gowing And Pursey	0	115	68,769	68,654	100%
Trout Lane Depot Quattro Park Royal	54 0	1,243	11,429 148,840	11,375 147,597	100% 99%
Ace Waste - Neasden Goods Yard	0	641	32,219	31,578	98%
Yeoman Aggregates Limited	867	041	39,240	38,373	98%
Wallingford Road, Uxbridge	6	369	16,134	15,760	98%
Pears Road, Hounslow	0	117	4,952	4,835	98%
Quick Skips And Recycling Ltd	1,315		52,799	51,484	98%
Harvil Road, Harefield	25	2,121	80,850	78,704	97%
Generay Ltd	0	7,202	48,387	41,185	85%
St. Albans Farm, Feltham	65	17,030	66,441	49,346	74%
Paxton Recycling - Wealdstone	0	2,616	9,694	7,078	73%
Seneca Environmental Solutions Ltd	2,515	4,273	10,081	3,294	33%
Space Waye Civic Amenity Site	168	13,561	16,998	3,269	19%
Mayer Parry, Brentford	22,472	26,505	58,282	9,305	16%
London Auto Parts Limited	11,150		12,360	1,210	10%
Hayes Transfer Station	1,916	22,494	25,780	1,369	5%
Kershire West Ruislip	0	3,374	3,556	182	5%
Crows Nest Farm	8	4,276	4,490	205	5%
Greenford Depot	0	22,148	23,021	872	4%
Townmead Civic Amenity Site	0	21,658	21,837	179	1%
Greenford Depot Civic Amenity Site	25	2,536	2,582	21	1%
New Years Green Lane, Harefield	25	19,001	19,076	50	0%
Southall Waste & Recycling Centre	0	572	573	1	0%
Twyford Waste Transfer Station, Stonebridge	31	72,892 861	72,975 862	52 0	0% 0%
Acton Waste & Recycling Centre Victoria Road, South Ruislip	0	152,413	152,423	10	0%
Fourth Way Waste Transfer Facility	3,316	132,413	3,316	0	0%
Arlington Oil Reclamation Facility	10,165		10,165		0%
Cannon Hygiene, Park Royal	1,044	228	1,272		0%
Car Spares Of West Drayton Ltd	20,260	220	20,260		0%
Cranford Lane T S, Heathrow	0	1,295	1,295		0%
Footprint Fuels Biodiesel Plant Bedfont SR2009 No3	0	275	275		0%
Forward Drive C A Site, Harrow	0	44,622	44,622		0%
Goldstar Commercials	233		233		0%
Hayes	928	56	984		0%
Heathrow Japanese Spares Ltd	73		73		0%
Hep Oils	0	848	848		0%
High View Farm, Harefield	0	1,462	1,462		0%
Holloway Lane M R F	34,238	169,999	204,236		0%
Initial Washrooms (Brentford) Service Centre	1,137	475	1,611		0%
Mogden Sewage Treatment Works	2,190	15,234	17,425		0%
Specified Land	1,287		1,287		0%
Transport Avenue, Brentford	0	181,120	181,120		0%
Twickenham Biodiesel Plant EA/EPR/BP3334GU/A001	0	522	522		0%
Unit 2, Hannah Close	2,025	18,217	20,242		0%
Veolia, Alperton	0	107,900	107,900		0%
Wembley Car Breakers	308	0001	308		0%
Wembley Transfer Station & Recycling Facility	11,080	86,012	97,092		0%
West London Composting	659	53,556	53,556		0%
Whitton Salvage	658		658 2,106,583	906.044	0%
Grand Total			2,100,583	896,944	



Appendix 2 Table A2.1 Site by Site Breakdown of Capacity Estimate

		WDI 2011			Planning consent	Permit	75% Permitted	Best Possible Capacity		Est Possible Capacity after % CDEW		Est. Possible Capacity after % not Recovery
Operator	Site Name	Input	CDEW	CDEW %	Limits	Limits	Capacity	(Operator plus)		deducted	% Recovery	deducted
Ealing	Acton Waste & Recycling Centre 'Stirling Road	862		0%		5,000	3,750	4,123	100%	4,123	60%	
Ealing	Greenford Depot Civic Amenity Site	2,582	21	1%		75,000		14,438	99%	14,322	65%	
Harrow	Forward Drive, Harrow	44,622		0%				51,559	100%	51,559	50%	
Hillingdon	New Years Green Lane, Harefield	19,076	50	0%		75,000		27,000	100%			27,000
Hounslow	Space Waye North Feltham Trading Estate Pier Road	16,998	3,269	19%				33,390	81%	26,969	60%	
Richmond	Townmead Road Kew, London	21,837	179	1%				26,575	99%	26,356 123,330	55%	14,496 95,240
Brent WLWA	Twyford Abbey Road Park Royal Victoria Road South Ruislip Hillingdon			 				157,086		123,330	1	95,240
WEWA	victoria koda soutri kuisiip miningaan	38,835										_
London Auto Parts Limited	Land /premises at Alperton Lane Wembley HA0 1DX	12,360	1,210	10%		24,999	18,749	22,499	90%	20,296	100%	20,220
Car Spares Of West Drayton Ltd	Car Spares Of West Drayton Ltd	20,260	1,210	0%		24,999	18,749	24,999	100%	24,999		24,999
Butler Terry	Wembley Car Breakers Rear of 122 Edwards Yard Mount I	308		0%		624	468	468	100%	468		468
Franklin Trevor	Whitton Salvage	658		0%		2,499	1,874	1,200	100%	1,200	100%	1,200
Mr George Castell & Mr Ryan Castell	Goldstar Commercials	233		0%			0	291	100%	291	100%	29:
Mayer Parry Recycling Ltd	Transport Avenue Brentford TW8 9HA- EMR	58,282	9,305	16%		74,999	56,249	74,999	84%	63,025	100%	63,025
		92,101		0		128,120	96,090	124,456		110,280		110,203
Proper Energy Limited	Twickenham Biodiesel Plant EA/EPR/BP3334GU/A001	522		0%			0	652	100%	652	100%	653
Sharpes Recycle Oil Limited	Arlington Oil Reclamation Facility	10,165		0%		60,667	45,500	12,707	100%	12,707	100%	12,70
Footprint Fuels	Biodiesel Plant Bedfont SR2009 No3	275		0%		0	0	343	100%	343	100%	343
Hep Oils	Hep Oils	848		0%		24,999	18,749	1,060	100%	1,060		
Brent Oil Contractors Ltd	Fourth Way	3,316	0	0%		24,999	18,749	4,146	100%	4,145	100%	
		10,961				60,667	45,500	13,702		13,702		13,702
Thames Water Utilities Ltd	Mogden Sewage Treatment Works	17,425		0%		74,999	56,249	21,781	100%	21,781	100%	21,78
		17,425				74,999	56,249	21,781		21,781		21,781
Cannon Hygiene	Park Royal	1,272		0%			0	1,590	100%	1,590	0%	
Personnel Hygiene Services Ltd	Unit 1 Pump Lane Industrial Estate Hayes UB3 3NB	984		0%			0	1,230	100%	1,230		
Rentokil Initial Services Ltd	'Initial Washrooms (Brentford) Service Centre	1,611		0%		4,999	3,749	2,014	100%	2,014		
	(2.000.0)	3,867				4,999	3,749	4,834		4,834		C
	C N C	4 400	205	F0/	25.000	0.050	0	24000	95%	22.764	95%	22.45
Country Compost Ltd	Crows Nest Farm West London Composting Ltd	4,490 53.556	205	5% 0%	25,000 75,000	9,960 50,000	7,470 37,500	24,900 75,000	100%	23,761 75.000	95%	
West London Composting	west tondon composting tid	58,045	205	0%	100,000	59,960	44,970	99,900	100%	98,761	95%	93,336
	Unit 2 Hannah Close, Great Central Way, Neasden,											
Seneca Environmental Solutions Ltd	London, NW10 0UX	30,323	3,294	0%	393,000	225,000	168,750	393,000	100%	393,000	1	393,000
Heathrow Airport Ltd	Cranford Lane T S, Heathrow	1,295		0%		31,025	23,269	1,619	100%	1,619	83%	
Generay Ltd	Fifth Way, Wembley	24,193	20,592	85%		47,324	35,493	35,493	15%	5,283	43%	
Ealing LBC	Greenford Depot	23,021	872	4%		125,200	93,900	28,776	96%	27,685	95%	
SITA Wastecare Ltd	Hayes Transfer Station Rigby Lane	25,780	1,369	5%	260,590	375,950	281,963	32,225	95%	30,513	82%	
LJ Grundon & Sons Ltd	High View Farm, Harefield	1,462		0% 0%	12,000	24,882	18,662	1,828	100% 100%	1,828	95%	
Sita Environment Ltd Kershire Construction Ltd	Holloway Lane M R F Land at Goods Yard, West Ruislip Station	204,236 3,556	182	5%		149,999 24,700	112,499 18,525	224,660 4,445	95%	224,660 4,218	93%	
Paxton Recycling	Wealdstone	9,694	7,078	73%	25,000	24,700	18,749	18,749	27%	5,060		
Ron Smith (Recycling) Ltd	St. Albans Farm, Feltham	66,441	49,346	74%	150,000	254,000	190,500	10,749	15%	38,100		
WLWA (SITA)	Transport Avenue, Brentford	181,120	,540	0%	200,000	74,999	56,249	200,000	100%	200,000		
WLWA (SITA)	Victoria Road, South Ruislip	152,423	10	0%	248,000	776,128	582,096	248,000	100%	247,984		
WLWA	Twyford Waste Transfer Station, Stonebridge	72,975	52	0%		0	0	91,218	100%	91,153	18%	16,71
Veolia,	Alperton Central Depot Marsh Road Alperton Lane	107,900		0%		364,000	273,000	158,862	100%	158,862	52%	82,69:
Biffa	Wembley Transfer Station & Recycling Facility Marsh Roa	97,092		0%	1,288,590	25,000 2,523,206	18,750	154,569 1,593,443	100%	154,569 1,584,533	13%	20,639 896,256
		1,001,510			1,288,590	2,523,206	1,892,405	1,593,443		1,584,533		896,256
Total Existing		1,222,745			1,388,590	2,851,951	2,138,963	2,015,202		1,957,221		1,230,518
Additional Sites							1		1		1	1
Additional Sites Speculative Consent 47 Wallingford	Road Uxbridge			 	60,000		1	60,000	1	60,000	50%	30,000
Metal & Waste Recycling Limited				1	55,566	75,499	56,624	56,624	56,624	56,624		56,624
Day Group Ltd	Brentford Aggregate Materials Recycling Facility			1		775,000	581,250	620,000	50%	310,000	95%	
SITA Hanworth Trading Estate				1	17,000	,,,,,,,,,,	301,230	17,000	30%	17,000		
Hillingdon Hospital	Clinical Waste Incinerator			1	17,500	8,000	1	17,000		8,000		
Total Additional Capacity					77,000	858,499	637,874	753,624		451,624	33%	405,724
Grand Total Capacity				1	1,465,590	3,710,450	2,776,838	2,768,826	0		1	1,636,242



Appendix 3: Exempt Site

A search of a listing of registered exempt sites within the Plan Area provided by the Envrionment Agency was undertaken⁷. This revealed that there were a total of 691 activities registered in September 2013.

As the purpose of this exercise is to identify additional treatment capacity within the plan area only activities registered as exempt under the Treatment category ('T') were investigated further. This left a total of 390 registrations. Table A3.1 in Appendix 3 gives the breakdown by type.

There are a wide range of activities covered by the 'T' exemptions a number of which are likely to be relatively small scale and probably conducted as part of a wider non waste related business. Such activities should not be counted as separate stand alone waste management sites and were therefore excluded from further consideration. In addition, as exemptions can be registered on permitted waste sites there is a danger of double counting and in order to avoid this a check of addresses for the remaining exemptions under investigation was made and where these were shown to correspond to permitted operations these sites were also excluded. Furthermore exempt activities registered to certain bodies which suggested they were unlikely to be conducted as a commercial operation (e.g. the National Trust and the Wildfowl Trust) were also excluded. Table A3.2 in Appendix 3 gives the breakdown of the remaining exempt activities by type.

This process resulted in 95 registered exemptions remaining. These are summarised in Table 3 below.

⁷ It should be noted that two exemptions are not registered with the Environment Agency but with the local authority as Environmental Health Authority including T7:Treatment of waste bricks, tiles and concrete by crushing, grinding or reducing in size and such activities could also contribute towards capacity although likely to be for CDEW.



Table A3.1: Final Count of Screened Registered Treatment Exemptions in Plan Area

Paragraph		Grand
No	Description	Total
T1	Cleaning, washing, spraying or coating relevant waste eg wash waste plastic drums so that they can be reused or sold for reuse	2
T4	Preparatory treatments (baling, sorting, shredding etc)	27
T5	Screening and blending of waste	11
Т6	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising	14
Т8	Mechanical treatment of end-of-life tyres	3
Т9	Recovery of scrap metal	12
T10	Sorting mixed waste	9
T11	Repair or refurbishment of WEEE (Waste electrical and electronic equipment)	7
T12	Manual treatment of waste	5
T13	Treatment of waste food	1
T23	Aerobic composting and associated prior treatment	4
	Grand Total	95

Whilst many of these sites are likely to represent relatively small scale activities there may well be a number of them that do undertake significant waste transfer/treatment activities. For example the DS Smith Paper site at Wallingford Road operating as a transfer station for source segregated recyclable materials such as paper and card at a rate of 3000 tonnes per week⁸. Giving a potential annual amount of waste received per annum as 150,000 tonnes. This material is most likely to come from commercial sources.

As records of amounts of waste handled at exempt sites are not submitted to the Environment Agency and checks made of level of actual activity will be rare it is not possible to determine the actual scale of operation or its potential capacity contribution. Direct approach to a sample of operators may reveal useful information on capacity that may be supported by searches of planning records for key sites. At this stage it has been decided not to pursue this but suffice to

⁸ As per T4. Transfer for recycling counts under "recyclate sorted or bulked in London material recycling facilities"



say the above findings show that the overall capacity estimate is likely to be conservative as there is almost certainly additional capacity within the Plan Area not included in the estimate put forward.

Table A3.2: Registered Exemption count for Treatment Related Activities (no. of registrations)

Paragraph		
No	Description	Grand Total
	Cleaning, washing, spraying or coating relevant waste eg	
	wash waste plastic drums so that they can be reused or	
T1	sold for reuse	6
T2	Recovery of textiles	1
T4	Preparatory treatments (baling, sorting, shredding etc)	33
T5	Screening and blending of waste	19
	Treatment of waste wood and waste plant matter by	
T6	chipping, shredding, cutting or pulverising	28
T8	Mechanical treatment of end-of-life tyres	4
T9	Recovery of scrap metal	23
T10	Sorting mixed waste	13
	Repair or refurbishment of WEEE (Waste electrical and	
T11	electronic equipment)	7
T12	Manual treatment of waste	7
T13	Treatment of waste food	1
T14	Crushing and emptying waste vehicle oil filters	2
T15	Treatment of waste aerosol cans	6
	Treatment of waste toner cartridges by sorting,	
T16	dismantling, cleaning or refilling	5
T17	Crushing waste fluorescent tubes	43
	Physical treatment of waste edible oil and fat to	
T19	produce biodiesel	1
T20	Treatment of waste at a water treatment works	1
T23	Aerobic composting and associated prior treatment	11
T26	Treatment of kitchen waste in a wormery	2
	Sorting and denaturing of controlled medicines and	
T28	drugs for disposal	176
	Recovery of monopropylene glycol from aircraft	
T31	antifreeze fluids	1



Table A3.3: Registered Exemption count for Treatment Related Activities - screened by type of activity (no. of registrations)

Paragraph		
No	Description	Grand Total
	Cleaning, washing, spraying or coating relevant waste eg	
	wash waste plastic drums so that they can be reused or	
T1	sold for reuse	6
T2	Recovery of textiles	1
T4	Preparatory treatments (baling, sorting, shredding etc)	33
T5	Screening and blending of waste	19
	Treatment of waste wood and waste plant matter by	
T6	chipping, shredding, cutting or pulverising	28
T8	Mechanical treatment of end-of-life tyres	4
T9	Recovery of scrap metal	23
T10	Sorting mixed waste	13
	Repair or refurbishment of WEEE (Waste electrical and	
T11	electronic equipment)	7
T12	Manual treatment of waste	7
T13	Treatment of waste food	1
	Physical treatment of waste edible oil and fat to	
T19	produce biodiesel	1
T20	Treatment of waste at a water treatment works	1
T23	Aerobic composting and associated prior treatment	11



Table A3.4:Final Screened Exemption Listing by Operator

Count of Paragraph No Exemption Holder	T1	T2	T4	T5	Т6	Т8	Paragr T9	aph No	T11	T12	T13	T19	T20	T23
A.J.Day And Son	11	12	14	15	16	16	19	110	111	112	113	119	120	123
Aecom Ltd					1									
Aggregate Industries Uk Ltd				1										
Amec Recycling Services Ltd						1								
Arbormaster (Uk) Ltd					1									—
Bakkavor Foods Ltd. Bam Construction Ltd			1	1				1						
Bradford Swissport Ltd			1					1						
British Airways Plc			1											
C 4 P Trading Ltd									1					
Carillion Construction Ltd					1									
Contract Environmental Services Limited				4						1				-
DDS Demolition Ltd DHI Supply Chain Limited			1	1										
DHL Supply Chain Limited Direct Domestic Appliances U K Ltd									1					
D S Smith Paper Ltd			1											
Elite Energy Limited									1					
Enterprise Managed Services Ltd														1
Esd Management Ltd			1	4			1							
F M Conway Ltd. Farrukh Riaz				1		1								
First Mile Ltd						1					1			
Fit Out (U.K.) Ltd			1											
Fjl Recycling Ltd			1											
Fonetek Cellular Services Ltd									1					$\vdash \vdash \vdash$
Formoss Ltd.				1	_									\vdash
Fowles Crushed Concrete Ltd Genuine Solutions Group Plc			1	1	1		1							
George Dominic Percy			1		1									
Glassolutions Saint-Gobain Limited			1							1				
Gristwood & Toms Ltd					1									
Groundwork London														1
Hochtief (Uk) Construction Ltd				1	1									—
Horn Lane Metals Hutchins And Smith Metal Recycling Ltd							1							
J & J Transport Ltd				1										
J. Murphy & Sons Ltd					1									
Jackson Civil Engineering Group Ltd					1									
Jascots Winemerchants Ltd								1						
JC Decaux Uk Ltd			1							1				
Johnsons Moving Services Ltd Julia Buckingham														1
Katsouris Fresh Foods - Bakkavor Foods Ltd			1					1						
L. Lynch (Plant Hire & Haulage) Ltd							1							
Lend Lease Europe Ltd			2											
M Sullivan Managements Limited							1							
Makro Self Service Wholesalers Ltd. Matrec			1				1			1				
Metropolitan Support Trust (M S P)							1		1					
Mjf Business Services Ltd.			1											
Mr Jacques Marchadour T/A Delltek									1					
Muhammad Nadeem						1								
O'Connor Noel							1		-					\vdash
P K S Services P.J. Carey (Contractors) Ltd				1					1					\vdash
Potters Bar Recycling Ltd				1			1							\vdash
Premier Moves Ltd.			1		1		Ĺ	1						
Rashi Uk Ltd			1											
Recycling Partners Ltd			1					1		1				
Reston Waste Management Ltd			1				ļ							\vdash
Samer Abu Zahideh			1				 	1						- 4
Serco Ltd Shred-It Ltd.			1											
Slough Scrap Metals Ltd							1							
Soilfix Limited				1										
Tarmac Ltd				1										
Tata Steel Uk Rail Consultancy Ltd					1									\vdash
Trinity Activities	1		_				1	1						\vdash
Tritonz Limited Trueform Engineering Ltd			1				1							
Trueform Engineering Ltd Tube Lines Ltd			1				-							
Tyerest Ltd.	1													
Volker Stevin Limited					1									
Volkerfitzpatrick Ltd					1									
Wiles Greenworld Ltd			1					1						igwdapprox
Grand Total	2	0	27	11	14	3	12	9	7	5	1	0	0	4