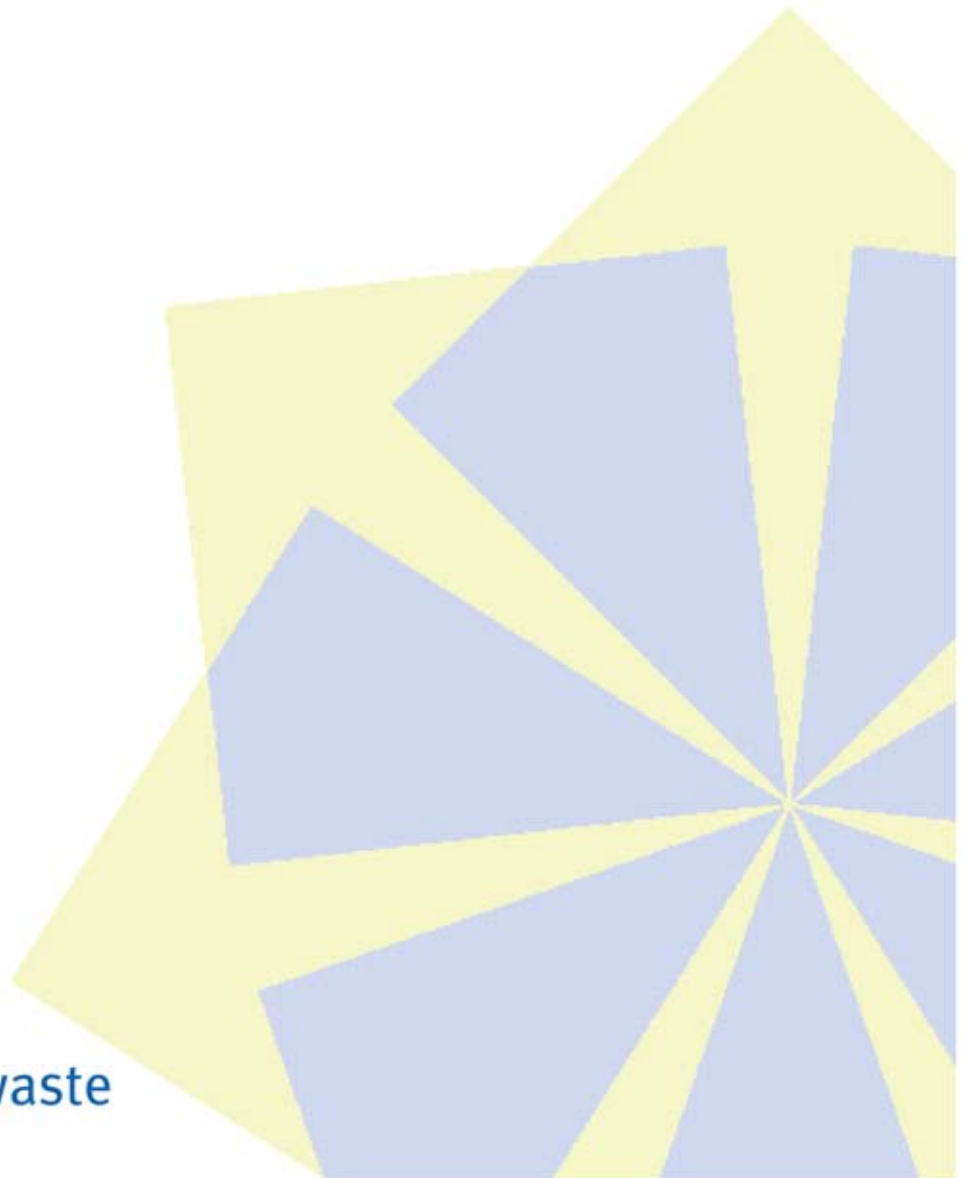




The North London Waste Plan Technical Report

May 2011

Planning solutions
for North London's waste



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Urdu

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North London Waste Plan

The North London Waste Plan

Technical Report

May 2011

Produced for
North London boroughs

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1 Introduction

- 1.1 The purpose of this report is to provide part of the evidence base required in making a sound waste development plan document (waste DPD) for north London. As such it is complementary to other reports produced for the North London Waste Plan and should be read in conjunction with the main 'North London Waste Plan' report. This report builds on the previous work undertaken in the Technical Report that was produced for the Preferred Options Consultation in October 2009.
- 1.2 In developing the evidence base, the seven north London Boroughs (Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest) have calculated how much land is likely to be required for waste management use during the fifteen year life of the plan, with consideration of future requirements beyond this timescale. In order to provide this land need, three different types of sites were considered: existing waste management sites, existing waste transfer sites and potential new sites.
- 1.3 While existing waste management and waste transfer sites are 'safeguarded' under the London Plan for waste use, the identification and selection of potential new sites requires the development of a robust methodology that allows sites to be evaluated and compared. This process uses both quantitative and qualitative methods, which are described in more detail in this report.

2 Waste Arisings

- 2.1 To fully enable the North London Waste Plan (NLWP) to allocate sufficient land for waste treatment use it is important to understand the types of waste produced within the Plan area and amount of the different types of waste being generated.

Sources of Waste Data

- 2.2 To fully understand the types, sources, disposal methods and end destinations there are many sources of data that can be used. Not all data sources are appropriate however and set out below are the sources of data and an explanation of how they will be used:

- London Plan 2004 projections and apportionment figures – These only apply to municipal and commercial and industrial waste (C&I). They are out of date and it is now recognised that the growth rate projection was too high. Although, figures were subjected to an examination in public, it is widely accepted that the growth in waste has changed dramatically since 2003;
- Revised draft London Plan 2009 projections and apportionment figures – Although these figures have not been fully adopted, they are the basis for more realistic apportionment figures and will be used in the new adopted version of the London Plan. Therefore they have been used to represent C&I waste, and also the apportionment targets for the purposes of this report;
- North London Waste Authority (NLWA) – The NLWA has a statutory responsibility to manage north London’s municipal waste and report the relevant tonnages to DEFRA via waste dataflow. Therefore the municipal waste arisings and disposal routes are accurately recorded and provide the source of the municipal waste data;
- Environment Agency Waste Data Interrogator 2009 – Is considered a reliable source of data and has been used for identifying the origins and final destinations for waste arisings generated in north London;
- Environment Agency Hazardous Waste Data Interrogator 2009 - Is considered a reliable source of data for providing the sources and amount of hazardous waste arising in north London and for identifying the final destinations for waste arisings;
- DEFRA Commercial and Industrial Waste Survey 2009 – This survey was undertaken by Jacobs to identify the C&I waste arisings in London and the South West region. The figures for the amount of C&I waste produced by north London were lower than that of the revised draft London Plan 2009 and therefore to ensure the NLWP is robust these sources have not been used. However, the composition and sources data is considered appropriate to use

as an update to the previous commercial and industrial waste survey undertaken by the Environment Agency 2003.

Municipal waste

- 2.3 Municipal waste is managed by the North London Waste Authority (NLWA) and includes household waste, kerbside collected recyclables, garden waste, household waste recycling centre waste, and some 'trade waste' collected from businesses. Total household waste accounts for around 75% of the municipal waste managed by NLWA.
- 2.4 In 2009/10 the NLWA managed just under 900,000 tonnes of municipal waste of which 36% was incinerated (with energy recovery) and 23% was recycled or composted, meaning that 60% of north London's municipal solid waste was managed in north London with 40% being landfilled outside the sub-region (Figure 2-1). These figures for landfill compare less well with previous years; the 2009-10 tonnage sent to landfill rose whereas for the previous three years the amount of municipal waste sent to landfill fell significantly, both in absolute tonnage terms and as a proportion of the total, since 2006-07 (see Table 2-1). However, the proportion of waste recycled/composted has remained fairly static. The reason for the rise in landfill was due to technical problems with the Edmonton Incinerator, although it is expected that in 2010-11 the proportion of north London's municipal waste incinerated will be back to previous levels of approximately 50%.

Table 2-1 NLWA Municipal Waste Management

Year	Landfill	%	Incineration with EFW	%	Recycled & Composted	%	Total
2009-10	358,799	40.6	327,937	37.1	197,195	22.3	883,931
2008-09	264,253	29.2	453,282	50.0	188,243	20.8	905,778
2007-08	292,497	31.0	461,948	48.9	189,938	20.1	944,383
2006-07	346,815	36.2	431,318	45.0	180,467	18.8	958,600

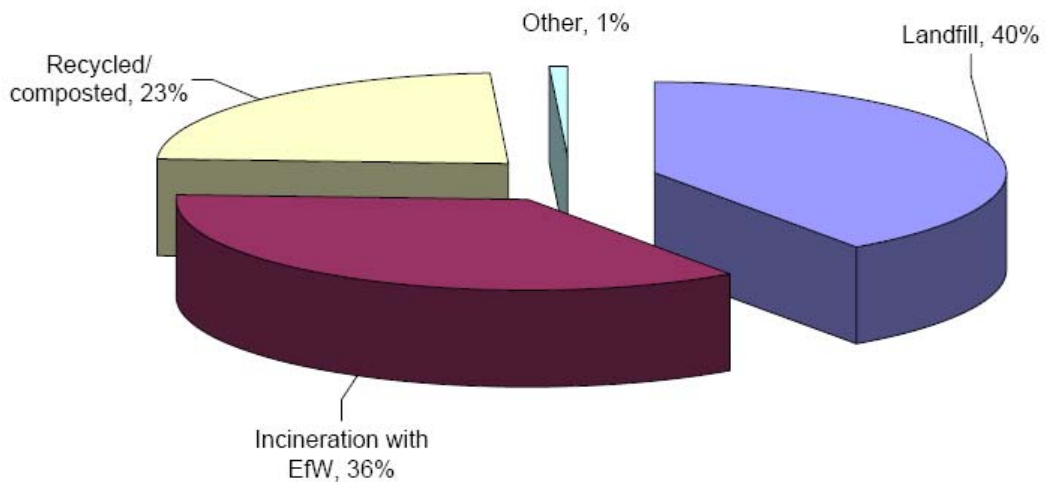


Figure 2-1 North London Waste Authority Municipal Solid Waste Management 2009-10

2.5 Figure 2-2 shows the different growth rates that have been used for projecting future Municipal Solid Waste (MSW) waste arisings. It can be seen that actual waste has steadily decreased from 2006 to 2009. In contrast, the London Plan (2008) projected that this would increase by approximately 2.2% per year. This explains why the projected London Plan (2008) data, seems to be far higher than the NLWA data and draft London Plan 2009 projections, as they have started from a lower point and growth was projected at a slower rate.

2.6 Data used by the NLWA begins in 2015 as this corresponds with the start date for their Private Finance Initiative (PFI) contract. At this point the draft London Plan data is only 15,000 tonnes higher than the NLWA figure, but the difference increases further to 103,000 tonnes by 2031. Although the NLWA data may be more soundly based, it is appropriate to base the calculations of this report on the draft London Plan data as the apportionment figures are based on this projection.

North London Municipal Waste Arising Comparisons

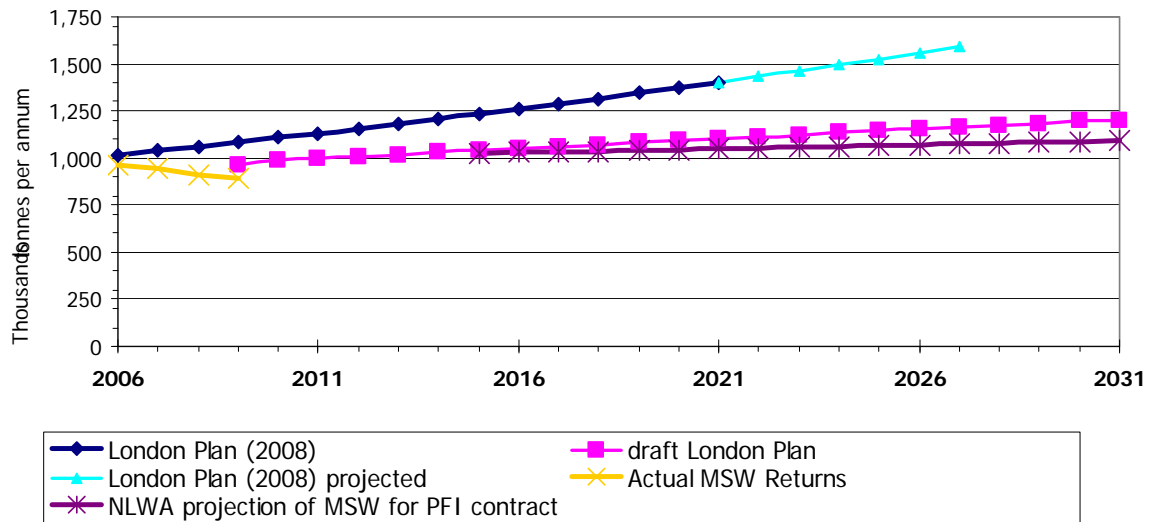


Figure 2-2 North London Municipal Waste Arising Comparisons

North London Waste Authority Procurement

2.7 As the statutory body with responsibility for managing north London’s municipal solid waste the NLWA is currently in the process of procuring a new contract for a long-term contract for management of its municipal waste. This is highly likely to involve the development of new infrastructure within north London that will help achieve the Authority’s targets for recycling and composting and diversion from landfill up to 2042. These needs have been considered in the development of the North London Waste Plan. As part of the procurement process an Outline Business Case (OBC) was developed to demonstrate to DEFRA how the contract will meet ambitious targets during the time NLWA applied for PFI credits. The following points have been taken from their OBC and form the basis of some of our assumptions for future waste management capacity:

- The NLWA is seeking to treat a total of 900,000 tonnes per annum of its municipal solid waste;
- At present this is based on an assumption that 600,000 tonnes per annum municipal solid waste will be converted into a fuel, which will then be disposed of via a separate contract;

- 150,000 tonnes per annum of food waste to be treated by an anaerobic digestion facility;
- 150,000 tonnes per annum of recyclates to be treated by Material Recovery Facility (MRF);
- Provision of facilities for bulking waste will be required;
- Provision of facilities for green waste will be required;
- Additional and replacement Household Waste Recycling Centres (HWRCs) are required;. The NLWA aims to distribute these facilities across the NLWP area with a site in the west, a site centrally located, and site in the east. This is to minimise the transport of waste and adhere to the proximity principal¹; and
- The facilities listed above will reduce the NLWA's need for the Edmonton EFW and therefore the site will be decommissioned. This view is also supported by the GLA who have stated that they anticipate the facility will be decommissioned by 2020².

2.8 Although it has been assumed for the purposes of this report that the above will occur, the procurement process may not mean that all the services delivered are the same as stated above because:

- The OBC is only a reference case and the procurement relies on the solutions and sites the open market will offer. This may result in different technologies, which offer better value for money yet still meet the NLWA's targets for recycling, composting and landfill diversion; and
- After the October 2010 Government Comprehensive Spending Review, the NLWA lost it's PFI credits.

Commercial and Industrial waste

2.9 Historically the UK has considered Commercial and Industrial (C&I) waste to be a distinct category of waste. However, with the implementation of the European Waste Catalogue³ (EWC) as a method for coding waste, much of this waste will

¹ *The proximity principles aims to deal with waste as close to source as possible and as a result reduces the transport requirements*

² *London's Wasted Resource: The Mayor's Draft Municipal Waste Management Strategy (p52) October 2010*

³ *Consolidated European Waste Catalogue from <http://www.environment-agency.gov.uk/static/documents/GEHO1105BJVS-e-e.pdf>*

increasingly be categorised as “Municipal Wastes”. The recent DEFRA Survey of Commercial and Industrial Waste Arisings for 2009 estimated that there was 962,000 tonnes of C&I waste produced in north London, and show a 638,000 tonnes reduction from the previous C&I survey in 2002/03 which estimated that 1.6 million tonnes of C&I waste was produced. The draft London Plan has estimated there is approximately 1,325,000 tonnes of C&I waste. This report will use the draft London Plan (2009) estimate because; it is used in the apportionment targets; and offers flexibility over the DEFRA 2009 estimate. This means that should the estimates drop below the draft London Plan (2009) figure more land than that required will potentially be available for waste use.

2.10 Figure 2-3 shows the composition of C&I waste in north London. The largest components of the C&I waste stream are mixed wastes with 43% and non-metallic wastes with 32%. The remaining six waste types make up 25% of the C&I waste stream.

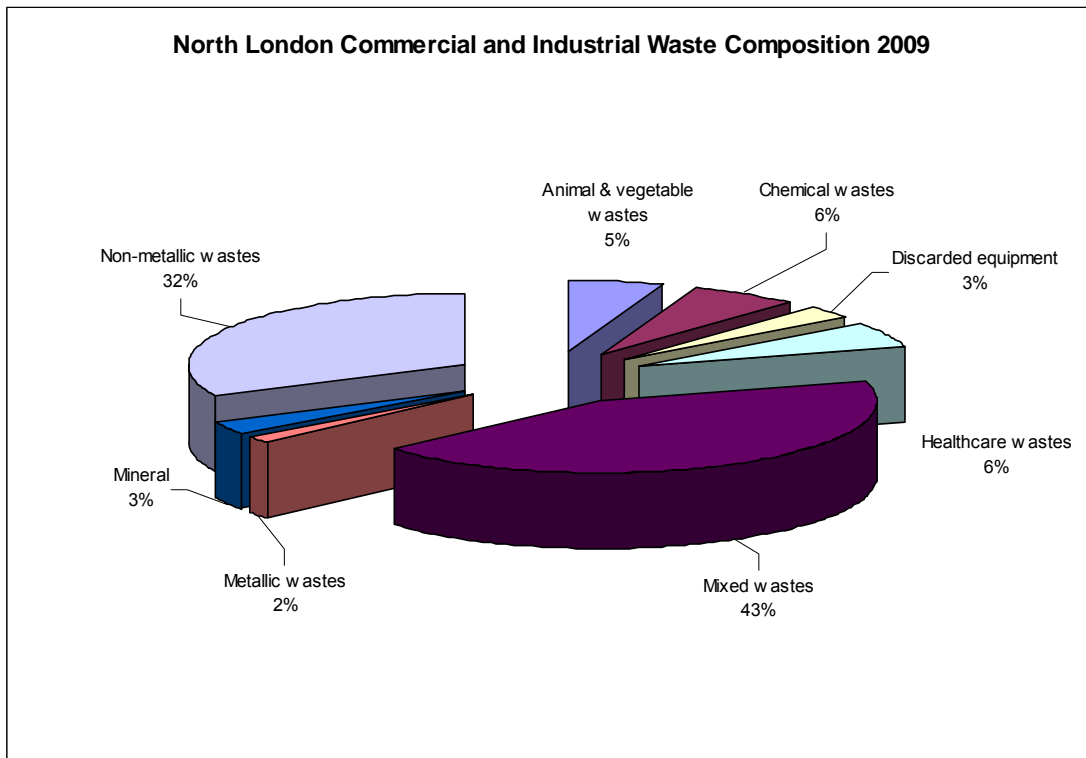


Figure 2-3 North London Commercial and Industrial Waste Composition 2009

2.11 Figure 2-4 shows the sources of C&I waste in north London, with the largest source of C&I waste being the retail and wholesale sector with 31%.

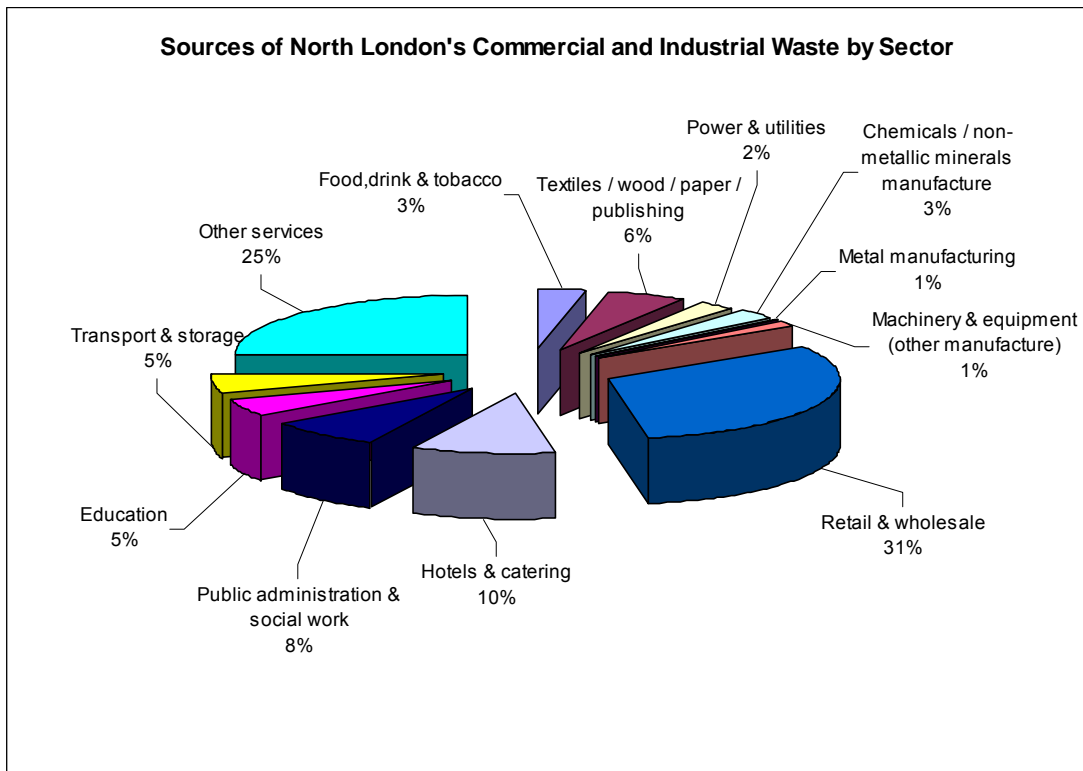


Figure 2-4 Sources of North London's Commercial and Industrial Waste by Sector 2010

Construction Demolition and Excavation Waste

- 2.12 Construction, demolition & excavation (CD&E) waste makes up almost half (48%) of London's total waste, and this is reflected in north London where CD&E waste accounts for 47% of the total waste arising. North London generates 22% of this type of waste in London.
- 2.13 Analysis of the most recent Environment Agency data for CD&E waste⁴ indicates that 1.165 million tonnes was removed from sites in north London while 1.195 million tonnes was received by sites in north London. Of the waste received by sites in north London: 40% was for treatment; 37% was for transfer and; 17% was for metals recycling. Of the waste removed from north London: 43% was recycled or reprocessed; 12% was landfilled and; 45% is 'unknown' though this is likely to be for treatment or transfer.

⁴ For the purposes of this analysis, construction and demolition waste refers to wastes categorised under chapter 17 of the European Waste Catalogue; from <http://www.environment-agency.gov.uk/static/documents/GEHO1105BJVS-e-e.pdf>

2.14 Currently in north London there are 2 licensed waste treatment sites that process approximately 42,000 tonnes⁵ per annum of CD&E waste. These sites have not been included in the waste treatment capacity, as CD&E waste is not included with the London Plan's (2008) apportionment targets, but will be safeguarded by the Plan.

Hazardous Wastes

2.15 Hazardous waste is waste that has been categorised as containing potentially damaging properties which may make it harmful to human health or the environment. It ranges from asbestos, chemicals and oil to old television sets and fluorescent tubes. It is not a large waste stream but a very sensitive one. Analysis of the latest data produced by the Environment Agency⁶ suggests a net export of around 57,215 tonnes per annum (2009) of hazardous waste from north London. However, the generation of hazardous is highly variable year on year as demonstrated in Figure 2-5. The average amount of hazardous waste produced between 2006 to 2009, (ignoring 2008 data as an exception) is 66,000 tonnes per annum.

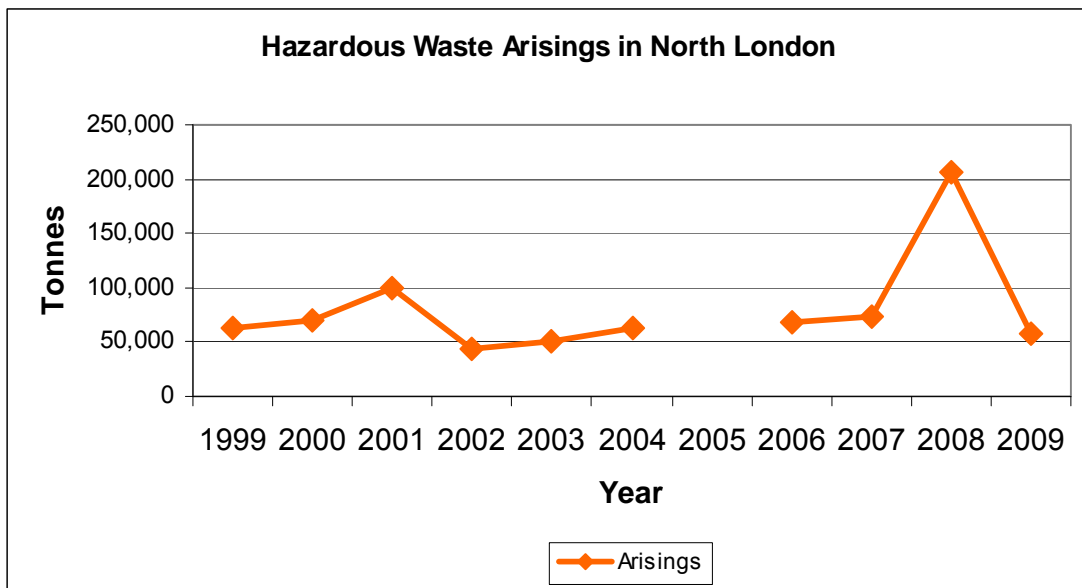


Figure 2-5 Hazard Waste Arisings in North London

2.16 Hazardous waste is not a homogeneous waste stream and requires numerous different treatment techniques and processes (see Figure 2-6). It also means that the

⁵ This capacity is not included within the capacity calculations.

⁶ The latest Environment Agency data is 2009. This shows a marked increase in the amount of hazardous waste arising in north London (2006 – 69,021 tonnes, 2007 – 72,829 tonnes - 2008). This change is due to changes in the classification of what is hazardous waste which resulted in more waste entering the hazardous category, rather than an increase in total waste.

treatment and disposal of hazardous waste can require specialised facilities which are geographically dispersed.

2.17 North London both exports and imports hazardous waste. In 2009 north London exported 57,215 tonnes of hazardous waste to 109 counties (or districts), described in over 150 different categories of hazardous waste (see Figure 2-7) whereas it imported 7,471 tonnes from 12 different regions of the UK using over 8 different categories. However, the vast majority of this was from London, the South East and the East of England.

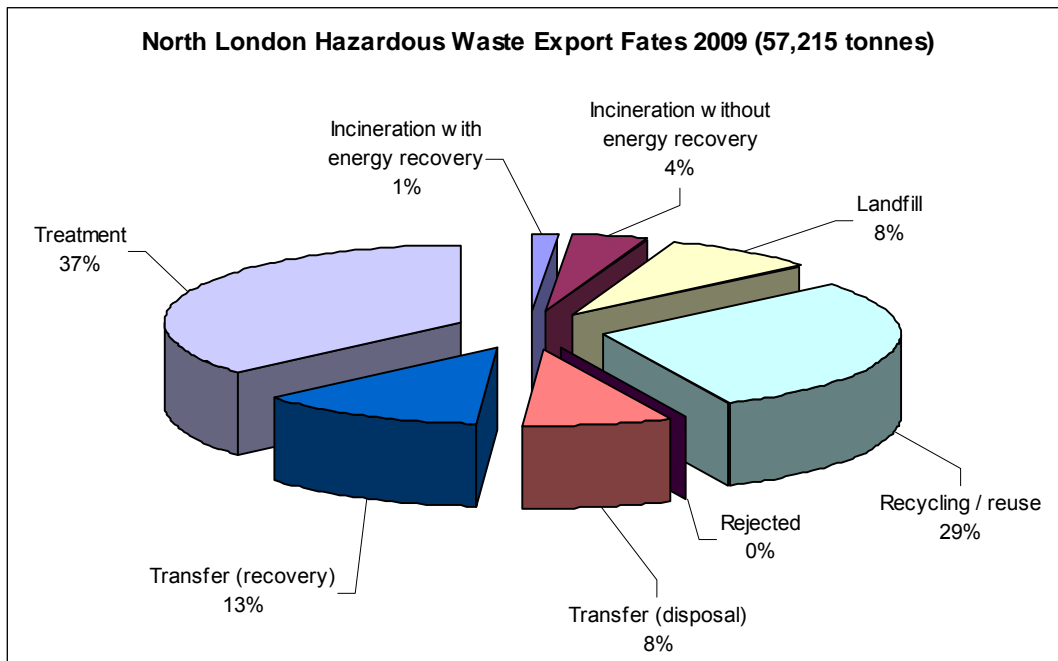


Figure 2-6 North London Hazardous Waste Export Disposal Methods, 2009

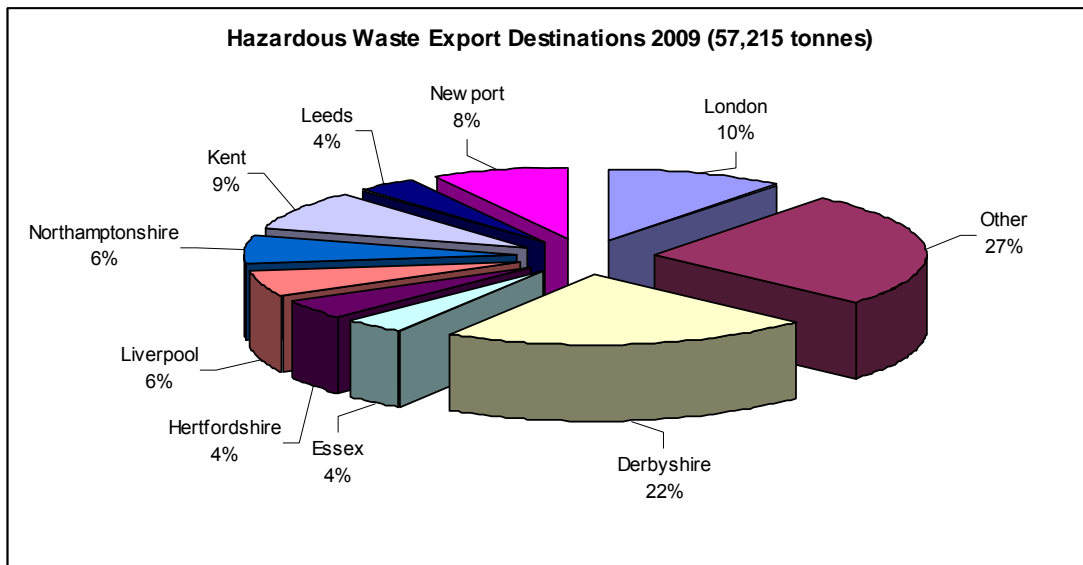


Figure 2-7 North London Hazardous Waste Export Destination, 2009

2.18 North London has existing hazardous waste facilities with a total capacity of 17,500 tonnes. A significant portion of this capacity is in the clinical (healthcare) waste incinerator at Edmonton.

Role of landfill in the disposal of waste

2.19 Landfill disposal accounted for just over 522,000 tonnes of north London's waste in 2009 and all of this had to be exported as north London has no landfill capacity. Figure 2-8 shows the different types of landfill.

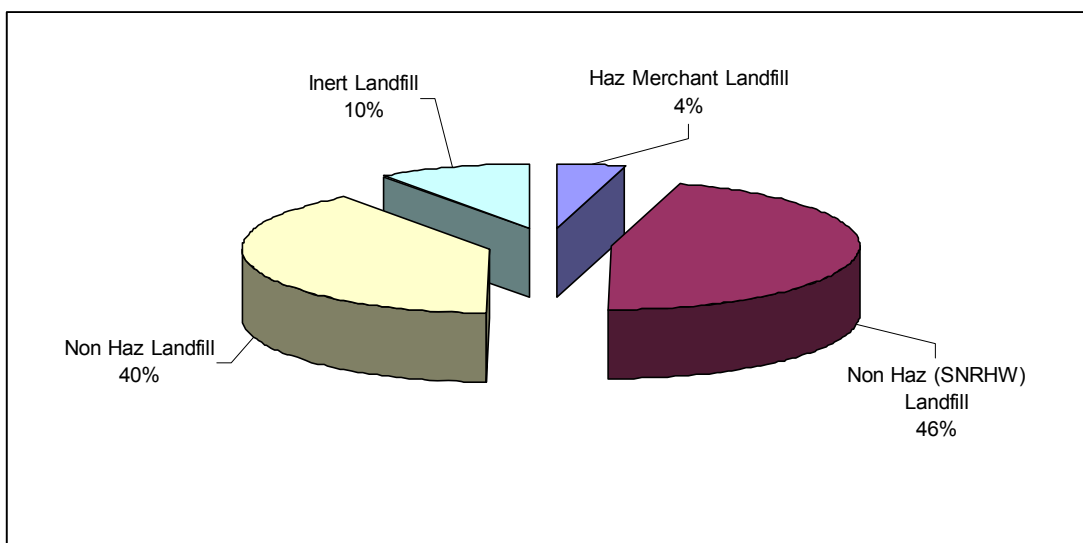


Figure 2-8 North London Landfilled waste, 2009

2.20 There are several different types of landfill, all of which play a different role in helping to manage north London's waste. Non-hazardous landfill usually accounts for residual household waste and commercial and industrial waste, whereas inert landfill usually accounts for construction, demolition and excavation waste. Hazardous waste landfills are highly specialised and only accept certain hazardous waste, while stable, non-reactive hazardous waste (SNRHW) landfill can be a 'cell' in a landfill that is specifically designed to accept SNRHW (e.g. asbestos) and landfill it separately from biodegradable waste.

2.21 Figure 2-9 shows the general locations of where non-hazardous waste for landfill from north London was exported to in 2009. The sizes of the arrows indicate the relative proportion of the 522,000 tonnes.

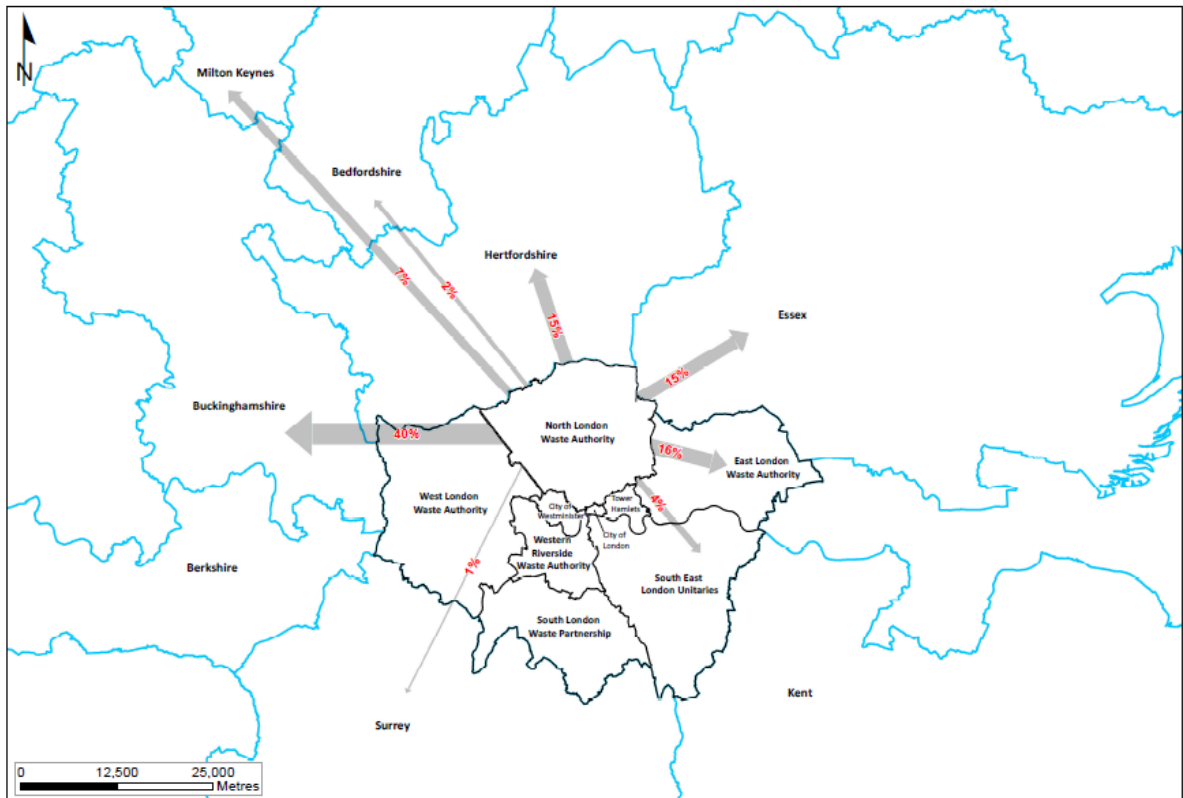


Figure 2-9 North London non-hazardous landfill disposal routes, 2009

Existing Waste Management Capacity

2.22 Data was gathered from the Environment Agency on all existing sites within the seven north London boroughs. All the licensed waste management capacity for the plan area is listed in Table 2-2. It is assumed for the purposes of this plan that all existing facilities will remain in use as waste management facilities for the duration of the plan, and have been duly safeguarded in line with the London Plan (2008). Table 2-3 shows existing waste handling capacities in north London including:

- Facility type – the different types of facilities licensed by the Environment Agency;
- Number of facilities – this shows the number of facilities of each type;
- Existing licensed capacity – the existing capacity per facility type;
- 75% of licensed capacity – the capacity of the existing facilities if they operate at 75% of their licensed capacity, based on the assumption in the London Plan (2004);
- Optimistic option – is the potential waste management capacity of the existing sites based on discussions with the site operators. This identified that some of the existing sites could increase their throughput of waste considerably by investing in new treatment technology. However, this was regarded as potentially uncertain and/or undeliverable;
- Preferred option – this is considered to be the most realistic representation of the waste management capacities in north London and is based on discussions with the waste operators (methodology outlined in section 5). The planning and environmental constraints were also assessed, to ensure the waste operator’s feedback is realistic. The preferred options passed this review. This will represent the treatment capacity available in north London and will be used in the following capacity gap calculations.

Table 2-2 Existing Waste Management Capacity in North London

Facility Type	Number of Facilities	Existing Capacity (tonnes)	75% of Licensed Capacity	Optimistic option (tonnes)	Preferred option (tonnes)
Transfer Facilities	27	2,935,246	2,201,435	N/A	N/A
Household, Waste Transfer Station and Reuse & Recycling Centres	9	700,955	68,495	53,742	63,226
Waste Treatment/Management Facilities					
Vehicle Dismantler	12	277,235	207,926	82,875	53,310
Metal Recycling Site	5	500,749	375,562	464,750	295,750
Physical Treatment Facility	5	863,999	647,999	608,650	585,999
Composting Facility	1	75,000	56,250	33,750	33,750

Facility Type	Number of Facilities	Existing Capacity (tonnes)	75% of Licensed Capacity	Optimistic option (tonnes)	Preferred option (tonnes)
Materials Recycling Facility	3	529,999	397,499	381,750	362,200
Total	62	5,182,228	3,886,671	1,625,517	1,394,235
Total capacity excluding Transfer Facilities	26	2,246,982	1,685,237	1,625,517	1,394,235

2.23 To summarise the information displayed in Table 2-2, there is approximately 5.2 million tonnes of waste handling capacity in north London, but this total includes a large proportion of waste transfer facilities capacity, which cannot be counted in the waste management capacity calculations, according to the London Plan (2008). Based on discussions with waste site operators there is 1.39 million tonnes of waste management capacity in north London and this figure has been used for the capacity gap calculations.

Table 2-3 Projected north London arisings and waste management capacity requirements for target years (tonnes)

Waste Arisings	2011	2016	2021	2027
Total MSW and C&I arisings	2,312,270	2,349,468	2,395,632	2,461,324
Total apportionment	1,320,900	1,504,066	1,698,712	1,949,229
Total existing and planned capacity	1,394,235	2,294,235	1,784,235	1,784,235
Additional capacity required to meet the apportionment targets ('gap')	-73,335	-790,169	-85,523	+164,994

2.24 To calculate the capacity gap the existing capacity was subtracted from the apportionment figures, (see Table 2-3). This resulted in the following:

- In 2011 there will be a surplus of waste management capacity of 73,335 tonnes per annum (tpa) in north London;
- In 2016 this surplus will have increased to 790,169 tpa. This is due to an additional 900,000 tonnes of treatment capacity available for the treatment of municipal waste as a result of the NLWA PFI procurement;
- By 2021 the capacity surplus will have decreased to 85,523 tpa as the Edmonton EFW will have been decommissioned resulting in the loss of 510,000 tpa; and

- Finally, in 2023 north London will have a capacity gap of 1,000 tonnes. By 2027 the capacity gap will have increased to a requirement of an additional 164,994 tpa of treatment capacity. This is due to a predicted increase in both MSW and C&I waste based on the revised draft London Plan (2009) figures.

2.25 Figure 2-10 illustrates the results identified in Table 2-3. There is a clear peak in the treatment capacity from 2016 to 2019 when the NLWA new capacity has come on line and the Edmonton EFW is still operational.

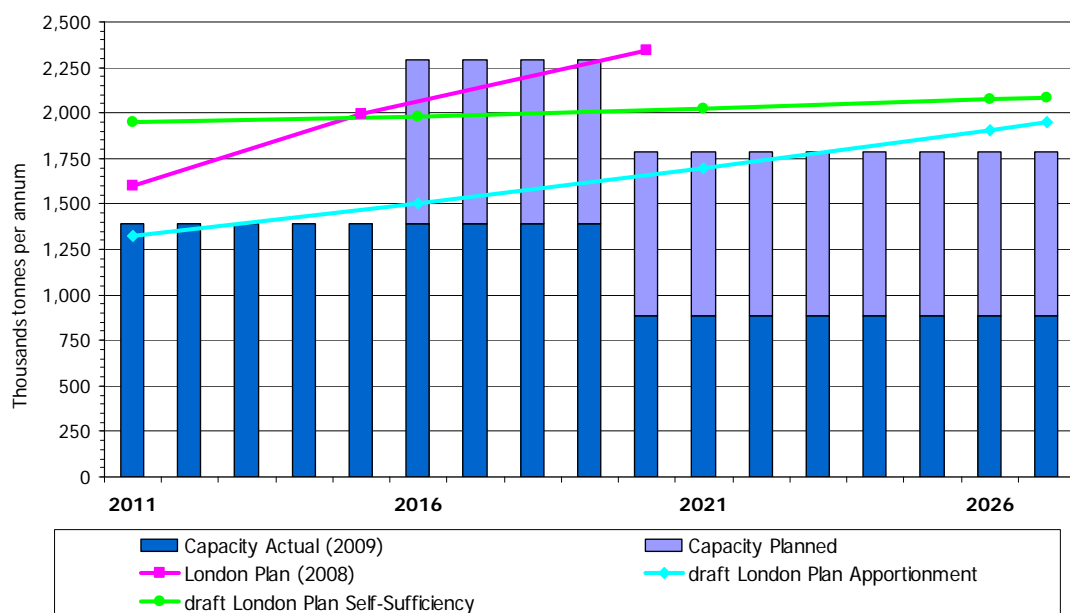


Figure 2-10 Comparison of London Plan (2008) and the draft London Plan waste arisings and apportionments with the phasing of capacity

Landtake Calculations

- 2.26 Having identified the 'gap' in north London's waste management capacity infrastructure, consideration needs to be given to the kinds of new facilities that might be required to fill it.
- 2.27 Waste management facilities may include reuse and preparation for re-use facilities, recycling centres, bulking and storage of recyclables facilities, composting plants, anaerobic digestion, mechanical separation and other biological treatment facilities and various thermal treatment facilities, or residual waste transfer or other advanced waste treatment technology facilities.

2.28 The London Plan 2008 suggested the types of facilities that will be required to manage London’s municipal solid waste in 2020 based on an assumption of the predicted percentage of waste that needs to be managed by certain types of facility. Based on this data, it was possible to calculate notional waste throughput of waste per hectare of land at 42,000 tonnes/ha. The draft London Plan is less prescriptive about the range, number and scale of facilities that are required to treat waste in London. Therefore the North London Waste Plan has developed its own methodology, grounded in actual throughput and landtake of facilities, for determining how much land is required to provide sufficient waste management infrastructure to meet the apportionment, and is based on available evidence.

2.29 Based on a review of published data for facility throughputs and facility landtake⁷ it has been calculated that an average figure of 50,000 tonnes per hectare annual throughput is achievable across a wide range of waste management facilities. This is only 8,000 tonnes per hectare higher than the London Plan (2008) figure of 42,000 tonnes per hectare. Figures used elsewhere range between 20,000 tonnes to 80,000 tonnes per hectare, and it is considered that this may be optimistic and therefore 50,000 tonnes per hectare offers a realistic and robust base line figure. Table 2-4 summarises the comparison of facility type and landtake.

Table 2-4 Comparison of London Plan and UK range of facility sizes and landtake

Comparison of London Plan and UK Range of facility size and landtake				
Data Source	London Plan (2008)		Typical UK Range	
Technology	Throughput (thousand tonnes/annum)	Landtake (hectare)	Throughput (thousand tonnes/annum)	Landtake (hectare)
MRF	42	0.90	20 - 300	0.2 - 3.0
Composting	19	1.25	15 - 45	1.0 - 7.5
MBT	125	1.75	65 - 300	2.5 - 14.0
AD	15	1.00	5 - 145	1.2 - 3.5
Gasification/pyrolysis	114	2.25	50 - 225	2.2 - 6.0

2.30 Using 50,000 tonnes per hectare it is possible calculate the landtake necessary based on the capacity gap figures. Table 2-5 shows the landtake required throughout the life of the Plan rounded to the nearest hectare. It is assumed that NLWA’s new infrastructure and the phasing out of the Edmonton EFW will impact on the capacity and phasing of land needed for new waste management facilities in north London. Because of the phasing of facilities required for the NLWA contract the surplus of

⁷ Defra Technology Guides (2007), Defra Economies of Scale – Waste Management Optimisation Study (200&) and ODPM Planning for Waste Management Facilities (2004).

land increases to 16ha, but reduces to 2ha when Edmonton is decommissioned. By the end of the Plan there is a need for 4ha of land to be allocated for waste use.

Table 2-5 Landtake requirements

Waste Arisings	2011	2016	2021	2027
Additional capacity required to meet apportionment (assuming average throughput of 50,000 tonnes per ha ('gap'))	-73,335tpa	-790,169tpa	-85,523tpa	+164,994tpa
Capacity/50,000tpa	-1.46	-15.80	-1.71	+3.29
Landtake rounded up to nearest hectare	-2ha	-16ha	-2ha	+4ha
Land required to meet apportionment	0	0	0	4ha

- 2.31 Assuming that the Authority's new infrastructure is delivered on time and performs at the expected levels, the decommissioning of the incinerator presents an opportunity for a further phase of waste related development at Edmonton at the end of the plan period. The London Borough of Enfield, as the local planning authority, intends to work in partnership with the North London Waste Authority and the future site operators to draw up a planning brief to establish a framework for the future waste development of the site.

3 Sites Assessment

- 3.1 The scoring criteria outlined in this section are based on the same site criteria as used in the Preferred Options Technical Report. Following feedback received during the Preferred Options consultation the scoring criterion for Historic Environment and Built Heritage was modified to reflect these comments.
- 3.2 To enable the selection of potential sites for hosting new or upgraded waste management facilities in the seven north London boroughs the following stages were undertaken:
- A long list of sites was established;
 - Site assessment criteria was established;
 - Sites were assessed against criteria; and
 - A shortlist of potential sites was created.
- 3.3 Planning Policy Statement 10 (PPS 10)⁸ states that sites must be allocated to support the pattern of waste management facilities set out in the regional spatial strategy (RSS). The London Plan is the RSS that covers north London and sets out the broad locations which are considered suitable for locating waste management facilities.
- 3.4 The London Plan has a number of policies which guide the allocation of waste sites:
- Policy 4A.22: Spatial policies for waste management
 - Policy 4A.23: Criteria for the selection of sites for waste management and disposal
 - Policy 4A.24: Existing provision – capacity, intensification, re-use and protection
 - Policy 4A.27: Broad locations suitable for recycling and waste treatment facilities

Establishing the long list of potential sites

- 3.5 A number of sources of information were used to establish a long list of potential sites, namely:
-

⁸ *Planning Policy Statement 10: Planning for Sustainable Waste Management (2006) Communities and Local Government www.communities.gov.uk*

- National Land Use Database of Previously Developed Land (2006);
- Existing broad locations suggested in the London Plan;
- North London Waste Authority waste management sites long list (NLWA and Knight Frank 2008);
- Existing licensed waste management facilities (Environment Agency 2007/08);
- Sites suggested through public consultation; and
- Further consideration by the seven borough NLWP Planning Officers Group (POG) members.

National Land Use Database- Previously Developed Land 2006

3.6 This database provides information of Previously Developed Land and Buildings in England that may be available for development, whether vacant, derelict or still in productive use. It provided the main source for preparation of the long list of sites in north London which was assessed during the Plan's production.

The London Plan (Greater London Authority) (GLA)

3.7 The London Plan identifies a number of Preferred Industrial Locations (PIL)⁹ and industrial business parks (IBP)¹⁰ as potential sites for waste management use and eight of these broad areas were identified in the north London area (see Table 3-1). Sites within these areas were included in the long list of sites.

3.8 The London Plan also suggests that Local Employment Areas, existing waste sites and brownfield sites may also be suitable for waste management uses. In addition the following reports were produced for the GLA and used to expand the list of sites.

- During 2005, Land Use Consultants and SLR Consulting Ltd produced a report for the GLA on existing waste capacity and the potential for new waste sites.
- Enviro Consulting Ltd carried out an inventory of waste facilities (both licensed and exempt) for the GLA in 2003 and this has been used as a check against our primary data.

⁹ Preferred Industrial Locations (PIL) are for businesses with less demanding requirements.

¹⁰ Industrial Business Parks (IBP) are for businesses requiring a high quality environment.

Table 3-1 Broad locations suitable for waste management use identified in the London Plan

Area Title	Borough
Northern Telecom, know as the North London Business Park (IBP)	Barnet
Great Cambridge Road (IBP)	Enfield
Brimmsdown (PIL)	Enfield
Freezwater/Innova Park (PIL)	Enfield
Central Leaside Business Area (PIL)	Enfield/Waltham Forest
Blackhorse Lane (PIL)	Waltham Forest
Lea Bridge Gateway (PIL)	Waltham Forest
Staples Corner (PIL)	Brent/Barnet

North London Waste Authority (Long List)

- 3.9 The North London Waste Authority’s long list contained 52 sites varying from individual sites to wider parcels of land, many of which were already identified as Strategic Industrial Locations within the north London area. The NLWA used areas of search identified as broad locations in the London Plan and employed Knight Frank estate agents to supplement this list by conducting a separate site search.

Licensed Waste Management Facilities

- 3.10 A list of licensed waste management facilities was obtained from the Environment Agency and filtered to establish all facilities managing municipal and commercial and industrial waste in the north London area.

Sites Suggested through Public Consultation

- 3.11 Eight sites were suggested during the Issues and Options consultation process for the North London Waste Plan. All of these sites were within the Strategic Industrial Locations suggested in the London Plan. Landowners also detailed sites that were or were not considered suitable for waste management use.
- 3.12 The long list was then circulated to the borough planning officers to seek comments on the suitability of each site for further consideration. The purpose of this was to allow boroughs to provide detailed, up-to-date local knowledge on the status of the sites in their borough which would not necessarily have been available from the published data sources but would influence whether they were suitable for inclusion on the list. For example, the grant of recent planning permission or the start of construction work related to uses other than waste on a site could impact deliverability for waste development during the Plan period. Each borough also had the opportunity to add any other suitable sites to the list at this stage.
- 3.13 The list was reduced by removing:

- Safeguarded sites, as defined by the London Plan; and
- Sites deemed unsuitable for various reasons as outlined below, as a result of consideration of the list by the borough planning officers.

3.14 Sites were removed, based on the up-to-date local knowledge of officers for the following reasons;

- Site already designated for residential use;
- Site recently developed; and
- Site designated for alternative use within an Area Action Plan (AAP).

3.15 It was considered that these types of sites would not realistically come forward for waste use within the timeframe of the plan.

Site boundary information

3.16 To enable each site to be assessed using the site assessment criteria, site boundaries were obtained by using Ordnance Survey (OS) coordinates and digitised freehold and leasehold boundaries from the Land Registry acquired. As site boundaries were in the form of land titles, some corrections to site boundaries were made in conjunction with boroughs and Local Development Plan information.

Rationalising the data

3.17 Some inconsistencies in OS coordinates caused some double counting of sites where the same sites were listed under different descriptions. Reviewing and checking of the data ensured elimination of such double counting.

Site Assessment Criteria

3.18 PPS10 provides a clear set of expectations on the range of issues that need to be considered in identifying and assessing sites for waste management use. These are:

- The physical and environmental constraints on development including existing and proposed uses on neighbouring land uses;
- The cumulative effect of previous waste facilities on the well being of the community; and
- The capacity of existing and proposed transport infrastructure to support the development including access to alternative modes.

3.19 Locational criteria are given as:

- Protection of water resources;
- Land instability;

- Visual intrusion;
- Nature conservation;
- Historic environment and built heritage;
- Traffic and access;
- Air emissions, including dust;
- Odour;
- Vermin and birds;
- Noise and vibration; and
- Litter.

Potential Land Use Conflict

- 3.20 PPS 10 provides risk based rather than opportunity based locational criteria and does not pick up on criteria that can define positive opportunities which can lead to land use conflict issues. Therefore, to allow for opportunistic criteria to be included in site assessment the following criteria were included:
- Sustainable transport opportunities (railheads and navigable waterways);
 - Proximity to major zones of development and the potential to supply decentralised energy; and
 - Opportunity for increased employment.
- 3.21 Finally, the responses to the issues and options consultation, the sustainability appraisal objectives and discussions with borough Planning Officers and Members Groups were combined with the PPS 10 and positively weighted criteria to produce a complete set of site assessment criteria.
- 3.22 The site assessment criteria were applied using a three stage process:
- Absolute Criteria (Showstoppers);
 - Primary sift criteria (proximity to various constraints using Geographical Information Systems [GIS]); and
 - Secondary sift criteria (site visit).
- 3.23 Scoring the sites against the criteria enabled the long list to be reduced to a shortlist of potentially suitable sites. The first two stages were designed to be objective by using GIS to score each site based on the agreed criteria.

3.24 Once the sites had been scored in the primary sift they were then visited for further scoring that could not be meaningfully undertaken in the GIS system.

Absolute Criteria

3.25 Some GIS-based site assessment criteria are considered to be ‘showstoppers’ and the location of a site within one of these areas resulted in it being immediately excluded from the site selection process.

3.26 Table 3-2 provides the policy justification for the absolute site assessment criteria.

Table 3-2 Policy justification for absolute site criteria

Criteria	Policy behind showstoppers	Source
Special Areas of Conservation (SAC) sites Site of Special Scientific Interest (SSSI)	These sites have statutory protection through international and EU conventions (Ramsar, 1971; Bern, 1979; Bonn, 1979) and directives (79/409/EEC; 92/43/EC) or should receive the highest possible planning protection as outlined in Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9).	English Nature
Special Protection Area (SPA),	Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Directive on the conservation of wild birds (79/409/EEC), also known as the Birds Directive, which came into force in April 1979.	English Nature
Ramsar sites	Designated Wetlands of International Importance. Sites receive statutory protection under the Wildlife & Countryside Act (WCA) 1981, and further protection is provided by the Countryside and Rights of Way (CRoW) Act 2000	Joint Nature Conservation Committee
Scheduled Ancient Monument	The Ancient Monuments and Archaeological Areas Act (1979) protects monuments whose preservation is given priority over other land uses.	English Heritage
Grade 1 or 2* listed building	These listed buildings have statutory protection through the Planning (Listed Buildings and Conservation Areas) Act 1990.	English Heritage
Sites located within flood zone 3b	Planning Policy Statement 25: Development and Flood Risk (PPS 25) requires Local Authorities to take a risk based approach to proposals for development in or affecting flood-risk areas. Sensitivity testing was applied to sites that are situated next to flood zone 3b.	Environment Agency
Metropolitan Open Land	Metropolitan Open Land was introduced in the Greater London Development Plan (GLDP, 1976) as a protective designation for open land within the urban area.	Boroughs

Criteria	Policy behind showstoppers	Source
Area within Local Environmental classifications (including allotments, green belt, green chains, green corridors, formal recreation land, Watling Chase Community Forest, Countryside Conservation Areas)	<p>PPS 10 recommends that Green Belts are protected but recognises that particular locational need may justify development of certain waste management facilities. However, the Plan is identifying land not technologies, therefore green belt is identified as a showstopper to prevent inappropriate development.</p> <p>Although the other local environmental classifications are non-statutory the sensitivity of the other areas of open spaces was considered by the boroughs to be sensitive enough to be classed as a showstopper.</p> <p>PPG2: Green Belts states there are five purposes of including land in the Green Belt which are as follows:</p> <ul style="list-style-type: none"> • to check the unrestricted sprawl of large built-up areas; • to prevent neighbouring towns from merging into one another; • to assist in safeguarding the countryside from encroachment; • to preserve the setting and special character of historic towns; and • to assist in urban regeneration, by encouraging the recycling of derelict and other urban land. 	<p>Forestry Commission – Community forest</p> <p>Local Environmental classification - Boroughs</p>
Sites less than 0.25 hectares in area	Following the review of published data, sites below 0.25ha were deemed to be too small for waste management uses (though existing sites of less than 0.25ha are safeguarded for waste management use under the London Plan).	

Primary site criteria

3.27 The sites were assessed against proximity to the primary criteria by using a GIS system. The site boundaries and GIS layers relevant to each criterion were entered into a GIS system which scored each site against the criterion according to the agreed scoring system. The criteria consisted of the following types of designations:

Nature Conservation Areas

3.28 PPS10 states ‘considerations will include any adverse effect on a site of international importance for nature conservation (Special Protection Areas, Special Areas of Conservation and Ramsar Sites) or a site with a nationally recognised designation (Sites of Special Scientific Interest, National Nature Reserves).’

Table 3-3 Nature conservation scoring

Score	Location
1	Less than 500m from internationally/nationally designated nature conservation site
3	Greater than 500m and less than 1km from internationally/nationally designated nature conservation site
5	Greater than 1km from internationally/nationally designated nature conservation site

Locally Important Nature Conservation Areas

- 3.29 The use of these designations and the scoring reflects their local importance. SINC's have no statutory protection and development on or near SINC's may require mitigation. Local Nature Reserves are a statutory declaration and must be managed to maintain their special features. Ancient woodland is not a statutory designation. Distances chosen reflect the need to protect and/or mitigate against negative impacts on such areas.

Table 3-4 Locally important nature conservation scoring

Score	Location
1	Contains or potentially impacts a Site of Importance for Nature Conservation (SINC), Local Nature Reserve (LNR), Lee Valley Park, Wildlife Corridor or Ancient Woodland.
3	Less than 100m from a SINC, LNR, Lee Valley Park, Wildlife Corridor or Ancient Woodland.
5	Greater than 100m from a SINC, LNR, Lee Valley Park, Wildlife Corridor or Ancient Woodland.

Archaeology

- 3.30 Planning Policy Statement 5 – Planning for the Historic Environment (PPS 5)¹¹ states "Development plans should reconcile the need for development with the interests of conservation including archaeology. Detailed development plans should include policies for the protection, enhancement and preservation of sites of archaeological interest and of their settings." Therefore the following scoring was adopted for archaeological criteria:

¹¹ Planning Policy Guidance 16 – Archaeology and Planning (PPG 16) (1990) Communities and Local Government www.communities.gov.uk

Table 3-5 Archaeological scoring criteria

Score	Location
1	Site contains nationally or regionally important archaeological site
3	Site contains known archaeological site.
5	Site contains no known archaeological sites.

Flooding

- 3.31 Planning Policy Statement 25: Development and Flood Risk (PPS 25)¹² states that "In areas at risk of river or sea flooding, preference should be given to locating new development in Flood Zone 1. If there is no reasonably available site in Flood Zone 1, the flood vulnerability of the proposed development can be taken into account in locating development in Flood Zone 2 and then Flood Zone 3." Therefore the following scoring criteria with regard to flooding were used:

Table 3-6 Flooding scoring criteria

Score	Location
1	Site within flood zone 3a
3	Site within flood zone 2
5	Site within flood zone 1

Transport for London Road Network (TLRN) and Strategic Road Network (SRN)

- 3.32 With regard to road transport, PPS 10 states: "Considerations will include the suitability of the road network and the extent to which access would require reliance on local roads."
- 3.33 Sites near to major trunk roads are therefore considered more favourably than sites further away so that routing of vehicles to and from sites is more likely to be on suitable roads and less likely to impact on local or residential roads. The distances chosen reflect the urban environment in north London.

¹² Planning Policy Statement 25: Development and Flood Risk (2006) Communities and Local Government www.communities.gov.uk

Table 3-7 Transport for London Road Network / Strategic Road Network scoring criteria

Score	Location
1	Site is greater than 500m from TLRN/SRN
3	Site is between 500m and 250m from TLRN/SRN
5	Site is less than 250m from or has direct access to TLRN/SRN

Land Stability

- 3.34 Land stability is clearly an important factor when considering whether a site is suitable for development and PPS 10 states that: “Locations, and/or the environs of locations, that are liable to be affected by land instability will not normally be suitable for waste management facilities.” Therefore the following scoring criteria were used with regard to land stability:

Table 3-8 Land stability scoring criteria

Score	Location
1	Site is over mine workings/underground workings/old landfill sites
3	Site is within 250m of mine workings/underground workings/ old landfill sites
5	Site is not over mine workings/underground workings/ old landfill sites

Historic Environment and Built Heritage

- 3.35 Planning Policy Statement 5 - Planning and the Historic Environment (PPS5)¹³ describes the need for Local Authority’s development plan documents to have regard to the setting of a listed building and historic land when considering new development. PPS10 also states: “considerations will include any adverse effect on a site of international importance (World Heritage sites) or a site or building with a nationally recognised designation (Scheduled Ancient Monuments, Conservation Areas, Listed Buildings, Registered Historic Battlefields and Registered Parks and Gardens).” Therefore the scoring criteria used with regard to historic environment and built heritage are:

¹³ Planning Policy Guidance 15 – Planning and the Historic Environment (PPG 15) (1994) Communities and Local Government www.communities.gov.uk

Table 3-9 Historic Environment and Built Heritage

Score	Location
0	Site is less than 500m from internationally/nationally designated site
3	Site is greater than 500m and less than 1km from internationally/nationally designated site
5	Site is greater than 1km from internationally/nationally designated site

Public Rights of Way

- 3.36 Public Rights of Way (PROW) are protected by the Countryside and Rights of Way Act 2000. Site scores are determined on the basis that a site containing a PROW will present more difficulty in deliverability as the PROW may have to be diverted or access granted to the site to maintain the PROW. However, a PROW that runs along the edge of a site is clearly less of a potential issue than a PROW that crosses a site and some sensitivity testing of PROW criteria may be necessary.

Table 3-10 Public Rights of Way scoring criteria

Score	Location
1	Site contains Public Right of Way
5	Site does not contain Public Right of Way

Conservation Area

- 3.37 Local planning authorities have a duty, in exercising their planning powers, to pay special attention to the desirability of preserving or enhancing the character or appearance of conservation areas. The distances used reflect the urban environment within north London.

Table 3-11 Conservation Area scoring criteria

Score	Location
1	Site or part of site is in a conservation area
3	Site is within 100m of a conservation area.
5	Site is 100m or greater from a conservation area

Railheads and navigable waterways (weighted)

- 3.38 Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS 10) states that any site assessment should consider the proximity of existing transport infrastructure to support sustainable movements of waste.

Table 3-12 Proximity to railheads and/or navigable waterway scoring criteria (weighted)

Score	Location
1	Site is 500m or greater from a railhead or navigable waterway
3	Site is less than 500m from railhead or navigable waterway or has potential for access to rail or navigable waterways.
5	Site has established access to railhead or navigable waterway

Employment Opportunities

- 3.39 Employment opportunities from waste management facilities were seen as a positive benefit for north London. Therefore sites that were nearer to areas of high unemployment were likely to be preferable for development over a similar scoring site that was not near an area of high unemployment. An area of high unemployment was defined as a Lower Super Output Area (LSOA) with employment deprivation of greater than 7%¹⁴, as the unemployment rate for London was 6.7%¹⁵. The distances were chosen to represent the need for employment opportunities to be accessible to areas of high unemployment.

Table 3-13 Employment opportunities scoring criteria

Score	Location
1	Site is 1.5km or greater from an area of high unemployment.
3	Site is less than 1.5km from an area of high unemployment.
5	Site is within an area of high unemployment

Decentralised Energy Opportunities (weighted)

- 3.40 PPS 10 (paragraph 20) requires that when identifying suitable sites for waste management, opportunities to co-locate waste management facilities and reprocessing should be considered.
- 3.41 Also, the London Plan states in Policy 4A.23 that wherever possible, opportunities should be taken to include provision for Combined Heat and Power (CHP) and Combined Cooling Heat and Power (CCHP) and to accommodate various related facilities on a single site. Areas that might benefit from CHP or CCHP, used in the assessment of sites, were major development/regeneration areas (as defined by the individual local authorities) and the distances chosen reflect the positive benefits of co-locating sites when considering the transportation of heat and power.

¹⁴ English Indices of Deprivation 2007, www.communities.gov.uk

¹⁵ Local unemployment information, October 2008, www.statistics.gov.uk

Table 3-14 Decentralised energy opportunities (weighted) scoring criteria

Score	Location
1	Site is 1.5km or greater from a major development/regeneration area.
2	Site is between 500m and 1.5km from a major development/regeneration area.
3	Site is 500m or less from a major development/regeneration area.
5	Site is within a major development/regeneration area.

3.42 This primary sift of sites removed any sites that registered as a showstopper and the remaining sites were scored in order of suitability.

Other Criteria Considered

Aerodrome Safety

3.43 Aerodrome safety refers to the potential of new development to affect existing aerodrome (airport) operations; this criterion was removed as it was considered not applicable to north London.

Air Quality Management Areas (AQMAs)

3.44 This criterion was removed as all north London boroughs are designated AQMAs and therefore all sites would score the same.

Controlled Waters

3.45 This criterion was removed as all new facilities will be required to have sufficient measures to protect controlled waters, as regulated by the Environment Agency. Additionally there are specific requirements to ensure this as set out in Policy NLWP3.

Source Protection Zone

3.46 This criterion was removed as all new facilities will be required to have sufficient measures to protect source protection zones. Additionally there are specific requirements to ensure this as set out in Policy NLWP3.

Sensitive Receptors

3.47 This GIS based assessment criterion was removed in favour of a visual inspection at site visit stage, which is considered more specific and appropriate.

Co-location potential

3.48 This GIS based assessment criterion was removed as visual inspection at site visit stage is more appropriate.

Secondary site sift criteria

3.49 To further assess the suitability of the site a site visit was conducted where a number of secondary criteria were assessed.

3.50 All sites (apart from those removed by absolute criteria and for deliverability reasons) were subjected to a final assessment. This involved a physical inspection of the site and evaluation of its potential against a number of scored criteria. Sites were scored on the following criteria:

Site Configuration

3.51 An assessment was made of the layout of the site with regard to suitability of the ground surface and whether the land had been previously developed.

Table 3-15 Site configuration scoring criteria

Score	Location
0	Site requires significant changes to site layout
3	Site requires only minor modifications to existing layout
5	Site requires no change to existing layout

Existing uses/buildings on site

3.52 An assessment was made on the type, size and layout of existing buildings on site and whether they were potentially compatible with waste uses e.g. an industrial warehouse could be compatible with waste use.

Table 3-16 Existing uses/building on site scoring criteria

Score	Location
0	Existing site uses/buildings incompatible with feasible waste development
5	Existing uses/buildings potentially compatible with feasible waste development

Proximity to residential areas, schools and hospitals (weighted)

3.53 An assessment was made on the impact of the site on local sensitive receptors. If the site was very close to residential areas, an assessment was made on whether mitigation measures would reduce any potential impact on residents e.g. screening of site from sensitive receptors.

Table 3-17 Proximity to residential areas, schools and hospitals scoring criteria (weighted)

Score	Location
0	Site is proximate to and would negatively impact on residential areas, schools and hospitals
3	Site is proximate to and could, without appropriate mitigating measures impact negatively on residential areas, schools and hospitals
5	Site is either not proximate to residential areas, schools or hospitals or would not impact negatively

Site access from trunk roads

3.54 The existing access to the site was considered in terms of whether it was accessible from main trunk roads or whether access to the nearest trunk road was a potential if the site was to be developed.

Table 3-18 Site access from trunk roads

Score	Location
0	Site has poor road access with little feasible chance of improvement or new access
3	Site has poor existing access but feasible possibilities for development of new and appropriate access routes
5	Site has good and appropriate existing access

Routing of vehicles to site e.g. conflict with residential roads, roads past schools (weighted).

3.55 Access to the site was assessed in terms of whether the site was currently accessed via residential roads or roads past other sensitive receptors e.g. schools.

Table 3-19 Routing of vehicles to site

Score	Location
0	Given physical site access, the development of the site for waste use would impact negatively on surrounding uses through routing of vehicles
5	Given physical site access, the development of the site for waste use would not impact negatively on surrounding uses

Visual intrusion on surrounding area

3.56 The visual intrusion on the immediate surrounding area was assessed on the basis of the land use in the area, e.g. if the area is largely industrial the visual impact would be less than if the area was residential.

Table 3-20 Visual intrusion on surrounding area

Score	Location
0	The development of the site for waste use would have a negative visual impact on surrounding development that it would not be practicable to mitigate through design
3	The development of the site for waste use would have some negative impact, but this could be mitigated through appropriate design solutions
5	The development of the site for waste use would not have any negative impact

Potential for advantageous co-location of facilities with existing industrial, commercial or mixed use developments

3.57 The potential for co-location was based on whether there were existing industrial or commercial uses surrounding the site and on the size of the site itself. For example, if the site was large then it could be feasible that waste facilities and industrial facilities could co-locate on the site, or that two different waste developments could co-locate on the site.

Table 3-21 Potential for advantageous co-location of facilities

Score	Location
0	The development of the site offers no feasible potential for co-location
5	The development of the site offers some potential for feasible co-location

3.58 Site scoring was carried out in a computer database which contains Ordnance Survey mapping information over which the GIS based absolute criteria were applied, automatically generating a score. The secondary site criteria were manually entered into the database, generating more scoring data and the information is stored on each site in a "Site Sheet". This site sheet was generated based on a unique site identification number and became the master record for the site assessment process.

4 Potential Sites

Scoring

- 4.1 All sites assessed by the North London Waste Plan were subject to the scoring criteria outlined in section 3.

Sensitivity Testing

- 4.2 Sensitivity testing was carried out for each site to check the scoring under the GIS-based scoring criteria. Testing was required as some sites were scored as being subject to a constraint when the site boundary and the constraint boundary were merely touching. The site scores affected by this were amended accordingly.

Weighting

- 4.3 In line with national and regional guidance some criteria may be considered more important than others and some criteria may have relevant local significance. To emphasise the importance of such criteria, weighting was applied to effectively treble the score attributed to those criteria for every site. Within the North London Waste Plan the following criteria were weighted:

- Proximity to railheads and/or navigable waterways;
- Proximity to decentralised energy opportunities;
- Vehicles Routing; and
- Proximity to residential areas, schools and hospitals.

- 4.4 Proximity to sustainable transport, proximity to housing and schools and vehicle routing were weighted as important local criteria to ensure that waste facilities and their associated traffic movements do not have a detrimental affect on local communities. Proximity to decentralised energy opportunities was weighted as the NLWP and the London Plan considers that waste is an important factor in contributing to London's energy needs.

Review of Scoring

- 4.5 A review of all the scores for the existing sites set out in schedules A & B, and the new sites set out in schedule C was undertaken in light of feedback from the Preferred Options Consultation. Where appropriate the scores may have been changed to reflect this feedback. See Appendix A, B, C, and D for updated site sheets with the amended scores.

5 Deliverability Assessment

Introduction

- 5.1 At the Preferred Options stage of the North London Waste Plan, a deliverability assessment of the top 30 sites identified in the Preferred Options Technical report was undertaken in October 2009. This information has subsequently been refined for the submission version of the Plan due to the time that has elapsed since the previous assessment. The deliverability assessment aimed to evaluate the deliverability of new and existing sites in order that selected sites could be taken forward in Schedules A, B and C of the final Plan. The sites within these schedules are set out below.
- 5.2 The latest assessment was carried out in March 2011 and aimed to update the assessment of the sites considered previously and in addition sought to collect information not previously obtained in order to strengthen the assessment. This was necessary because, in the time since the original assessment, existing waste sites may have closed or expanded, and new waste sites may have been developed. For existing waste management sites it was also important to confirm the operating capacity of each site to ensure the capacity gap calculations were based on the most realistic up-to-date figures available.

Follow Up Deliverability Assessment Methodology

- 5.3 Tables 5-1 to 5-4 detail the sites subject to the latest deliverability assessment.

Table 5-1 Schedule A, Existing Treatment Sites

Site number	Borough	Site Name	Postcode
4195	Barnet	LAL - GRS Ltd	NW7 3HU
4200	Barnet	Savecase Ltd	NW9 6HD
41754	Barnet	Apex Car Breakers	NW7 3EX
10039	Enfield	ELV Ltd	N18 2PD
10032	Enfield	ELV Ltd	N18 3PH
4205	Enfield	Enfield Metal Recycling	EN2 9BW
10036	Enfield	Environmental Tyre Disposals	N18 3QX
99	Enfield	Greenstar MRF	N90BD
10041	Enfield	Lea Valley Motors Ltd	N18 2PG
10079	Enfield	Londonwaste composting	N18 3AG
10011	Enfield	Metal & Waste Recycling Group Ltd	N18 2ED
10040	Enfield	Plasterboard Recycling UK Ltd	N18 3HT
10043	Enfield	Polkacrest Ltd	N18 3AG

Site number	Borough	Site Name	Postcode
10021	Enfield	Polkacrest Ltd	EN2 8JL
10012	Enfield	Pressbay Ltd	EN3 7NJ
10038	Enfield	Redcorn Ltd	N18 3PS
10080	Enfield	Londonwaste Ltd EfW	N18 3AG
10083	Hackney	Braydon Motor Company	E5 8QY
10017	Haringey	Brantwood Auto Breakers Ltd	N17 0RU
10072	Haringey	Brantwood Auto Recycling Ltd	N17 0DT
10073	Haringey	2B's Motor Cycles	N15 3AP
4175	Haringey	O'Donovan (Waste Disposal) Ltd	N15 4QF
4180	Haringey	Redcorn Ltd	N17 8DP
10016	Haringey	Restore Community Projects	N17 9LJ
41753	Waltham Forest	B J Electronics	E17 9HQ
10071	Waltham Forest	BD&G parts for Rover	E10 7QY
41756	Waltham Forest	T J Autos (UK) Ltd	E10 7QN
41757	Waltham Forest	Walthamstow Salvage	E10 7PY
100741	Waltham Forest	Baseforce Metals	E10 7QX
10003	Waltham Forest	Exectec Limited	E4 8DS
Reuse and Recycling Centres			
Site number	Borough	Site Name	Postcode
10006	Barnet	Summers Lane	N12 0RF
10019	Camden	Regis Road	NW5 3EW
10008	Enfield	Barrowell Green	N21 3AU
10082	Haringey	Hornsey High Street	N8 7QB
10015	Haringey	Park View Road	N17 9AY
4190	Islington	Hornsey Street	N7 8HU
10018	Waltham Forest	48 Kings Road	E4 7HR
10081	Waltham Forest	Gateway Road	E10 5BY
10026	Waltham Forest	South Access Rd, Walthamstow	E17 8AX

Table 5-2 Schedule B, Existing Transfer Sites

Site number	Borough	Site Name	Postcode
10030	Barnet	Cripps Skips Limited	NW2 1LR
10075	Barnet	GBN Services Ltd	N11 1HJ
10029	Barnet	McGovern Brothers (Haulage) Ltd	NW2 1BG
10004	Barnet	PB Donoghue (Haulage & Plant Hire) Ltd	NW2 1RR
10005	Barnet	Waste Recycling Group (WRG)	NW2 1LN
4185	Barnet	Winters Haulage	N11 1HJ
41755	Enfield	Budd Skips	N18 3HQ
10035	Enfield	Greater London Waste Disposal Ltd	EN3 7PJ
10076	Enfield	Hunt Skips	N18 1SY
10077	Enfield	J O'Doherty Haulage	N18 3BH
10078	Enfield	London Waste Recycling Ltd	N18 3HR
10034	Enfield	Oakwood Plant Ltd	N18 3BH
10033	Enfield	Powerday Plc	EN3 7UA
10031	Enfield	Tuglord Enterprises Ltd (Howard Waste)	N18 3PP
4205	Enfield	Enfield Skips Limited	EN2 9BH
10037	Enfield	Personnel Hygiene Services Ltd	N18 3PR
10024	Hackney	Millfields Waste Transfer Station	E5 0AR
4170	Haringey	Biffa Waste Services Ltd	N17 0UN
4175	Haringey	O'Donovan (Waste Disposal) Ltd	N15 4QF
4190	Islington	Hornsey Street, N7 8HU	N7 8HU
3360	Waltham Forest	Bywaters (1986) Ltd	E10 5BY
10001	Waltham Forest	Dem'cy Contractors Ltd	E10 7PY
10002	Waltham Forest	G&B Compressor Hire	E10 5PB
10027	Waltham Forest	GBN Services Ltd	E10 7JN

Table 5-3 Schedule C, New Sites

Site number	Borough	Site Name	Postcode
23	Barnet	Site on Edgware Rd and Geron Way	NW2 6LJ
37	Barnet	Victory Park	NW2 6ND
174	Barnet	Network Rail land at Aerodrome Road	NW4 4UB
68	Enfield	Martinbridge Industrial Estate	EN1 1SP
70	Enfield	Nobel Road Enfield	N18 3BH
94	Enfield	Building premises, Kynoch Road	N18 3BH
96	Enfield	Makanji House, Kynoch Road	N18 3BH
111	Haringey	Marsh Lane Haringey	N17 0XB
121	Haringey	Friern Barnet former Sewage Treatment Works (Pinkham Way)	N11 3PW
6	Waltham Forest	Rigg Approach	E10 7QN

Table 5-4 New Sites from Preferred Options Consultation

Site number	Borough	Site Name	Postcode
143	Barnet	Garrick Industrial Estate	NW9 6AQ
176	Barnet	Connaught Business Centre	NW9 6AA
65	Enfield	Ponders End Industrial Estate	EN3 7SR
86	Enfield	Land on the north east side of Willoughby Lane, Tottenham	N18 3HF

5.4 The following methodology was adopted to assess the deliverability of all sites in the long list derived from the process outlined in Section 3 on establishing the long list:

- Site visits were undertaken to identify land owners/occupiers. The visits were also used to identify any potential operational constraints for the development of existing sites.
- In order to source remaining land owner/occupier details, land ownership and/or leasehold searches were undertaken with Her Majesty's Land Registry (HMLR). This was also used to confirm site boundaries.
- Using the data from the site visits and HMLR searches, telephone interviews were conducted to: enquire about the land availability of new

sites; confirm the operating capacity of existing waste sites; and identify the potential for redevelopment of existing transfer sites during the life of the Plan.

Site Visits

- 5.5 Site visits were undertaken in the last week of February 2011 to identify the site occupiers, owners and managing agents, and the nature of the existing use. Building type and potential value of existing buildings for redevelopment were also noted.
- 5.6 To ensure the requirements of the London Plan are met, assessment of a site's practical deliverability were undertaken during site visits. This sought to ensure that no site would be considered feasible for inclusion in the Plan if it was unlikely to be practical to develop for waste management uses.
- 5.7 Site visits therefore made an assessment based upon the following detailed criteria:
- Site size and layout;
 - Surrounding uses e.g. is the site small and immediately adjacent to residential properties therefore preventing any mitigation measures required for redevelopment;
 - Access constraints e.g. is the existing access road suitable for the reorientation/development or intensification of the site; and,
 - Location e.g. is the site in the Green Belt or MOL and therefore the reorientation/development or intensification of existing waste sites is not suitable inline with the scoring criteria.

Land Ownership Searches

- 5.8 To identify the different land owners and lease holders for the sites in tables 5-1 to 5-4, searches of Her Majesty's Land Registry (HMLR) were undertaken to obtain the land registry titles and plans. There are two ways of searching HMLR for land ownership and lease holder information as set out below:
- Search of the Index Map (SIM) Search – this requires site boundaries to be sent to the HMLR, who search for all freehold and leasehold data within the boundary; and
 - Direct Access Postcode Search – this is undertaken by accessing the HMLR website and undertaking land searches using the appropriate postcode for a parcel of land.
- 5.9 For the purposes of this assessment the Direct Access Postcode Search was used for sites in single ownership and SIM Search was used for large sites with multiple ownership as this was considered the most efficient approach. The information

gathered for the sites/part of sites was used to provide contact information freeholders and leaseholders.

Land Availability Telephone Interviews

- 5.10 The land availability telephone interviews were undertaken using the land ownership information and contact details provided by the HMLR searches and supplementary information from the site visits.

Using the information provided by the HMLR searches contact details of the property section/head office for the land owners were identified. Contact was then made with the property section/head office for the land owners stating that information was being collected on behalf of seven north London Boroughs who are responsible for identifying and allocating land for waste management use in north London. The relevant parties were then informed that the NLWP was required to allocate a number of sites and were seeking confirmation on whether land in their ownership would potentially be available.

- 5.11 Where land ownership information gathered from HMLR was incomplete the occupiers of the properties were contacted using the information gained from site visits and supplemented by internet searches.
- 5.12 When seeking to identify deliverable sites there are potential circumstances which may lead to negative responses or protracted discussions which would impact on the deliverability of a site to meet the required timescales. Some of these circumstances are as follows:
- Where the number of landowners was more than 20, the same approach was adopted as that used previously in the Preferred Options deliverability assessment. Where sites had 20 or more landowners it was considered they were unlikely to come forward for development due to the difficulty of reaching a sales agreement. As such, site owners were not contacted and the site was discounted from further consideration; and
 - Additionally it was found that HMLR data for several sites was not available and the information that was available was out of date, resulting in difficulty in contacting some landowners.
- 5.13 The NLWA was also contacted as part of the deliverability assessment process to verify the needs of the PFI procurement contract. Discussions took place regarding:
- The sites they own and are developing as part of their long term procurement;
 - The sites that they still have an interest in and are trying to procure; and
 - How, as a minimum, the NLWA's 'needs' had been considered in compliance with guidance contained in PPS 10.

Results

5.14 For the purposes of this report the results have been broken down into the following three sections in order to clearly demonstrate those sites deliverable and suitable for the North London Waste Plan for the next fifteen years:

- Existing Waste Treatment Sites - Schedule A;
- Transfer Sites - Schedule B;
- New Sites - Schedule C and sites suggested at consultation; and,
- Edmonton Eco Park.

New Sites

Table 5-5 New Sites that have been assessed for deliverability, taken from Schedule C and consultation suggestions

Site number	Borough	Site Name	No of Owners	Deliverable	Justification
23	Barnet	Site on Edgware Rd and Geron Way	7	Yes	Owners have stated the site is not available for waste use. However, the site is identified for waste use as part of the approved hybrid planning permission which establishes a masterplan and framework for the comprehensive regeneration of the Brent Cross Cricklewood Area.
37	Barnet	Victory Park	3	No	Owners have stated the site is not available for waste use. In addition, the site is identified as a rail freight facility as part of the approved hybrid planning permission which establishes a masterplan and framework for the comprehensive regeneration of the Brent Cross Cricklewood Area.
143	Barnet	Garrick Industrial Estate	15	No	Owners have stated the site is not available for waste use.
174	Barnet	Network Rail land at Aerodrome Road	1	No	Owners have stated the site is not available for waste use and the site has planning permission for B1 light industrial use,
176	Barnet	Connaught Business Centre	16	No	Owners have stated the site is not available for waste use
65	Enfield	Ponders End Industrial Estate	22	No	The site is within the North East Enfield Area Action Plan, and is identified as part of the Ponders End Place Shaping Priority Area where it is earmarked for new mixed use waterfront development
68	Enfield	Martinbridge Industrial Estate	3	No	Owner has stated the site is not available for waste use.
86	Enfield	Land on the north east side of Willoughby Lane (Former Gas Holders), Tottenham	4	No	National Grid has stated the site is not available. The site is within the Central Leaside Area Action Plan, and is identified as part of the Meridian Water Place Shaping Priority Area where a new sustainable urban mixed use community is planned.
70	Enfield	Nobel Road Enfield	3	No	Owners have stated the site is not available for waste use
94	Enfield	Building premises, Kynoch Road	2	No	Owners have stated the site is not available for waste use

Site number	Borough	Site Name	No of Owners	Deliverable	Justification
96	Enfield	Makanji House, Kynoch Road	4	No	Owners have stated the site is not available for waste use
41758	Enfield	G Park	21	No	Over 20 landowners so discounted. The site is within the North East Enfield Area Action Plan, and has received planning permission for B1 use.
111	Haringey	Marsh Lane Haringey	2	No	Owners have stated the site is not available for waste use
121	Haringey	Friern Barnet former Sewage Treatment Works (Pinkham Way)	2	Yes	Site is being used as part of the NLWA procurement and a planning application for waste use is currently being progressed
112	Haringey	Leeside Trading Estate	35	No	Over 20 landowners so discounted
6	Waltham Forest	Rigg Approach	24	No	Over 20 landowners so discounted
41759	Waltham Forest	Thames Water Site	1	No	Owners have stated the site is not available for waste use - the site is designated MOL and any development of the site would need to be compatible with MOL policies
41760	Waltham Forest	Gas storage facility site	1	No	Owners have stated the site is not available for waste use. The site is designated in the emerging Northern Olympic Fringe Area Action Plan as suitable for mixed use / residential redevelopment in the event of decommissioning by National Grid.

- 5.15 Table 5-5 shows that of the 16 new sites, the respondents for 13 sites indicated a strong negative response to the likelihood of their site becoming available for waste management use during the plan period. These sites were excluded from further consideration. An exception to this is the 'Site on Edgware Road/Geron Way' (Site 23). The site owner/occupier had indicated previously that the site would not become available and therefore was not contacted again. However, the site has since been identified as part of the replacement for a rail-linked waste handling facility as part of the comprehensive regeneration of the Brent Cross Cricklewood Area. The London Borough of Barnet has approved an outline planning application for a waste management facility on this site. . In light of the ongoing negotiations regarding this site it is still being considered as potentially deliverable.
- 5.16 This is one of two new sites identified for inclusion within the Plan as shown in Table 5-6.

Table 5-6 – News sites for Inclusion in the Plan

Site number	Borough	Site Name	Area (ha)
23	Barnet	Site on Edgware Rd and Geron Way	3.28
121	Haringey	Friern Barnet former Sewage Treatment Works (Pinkham Way)	5.95
Total			9.23

- 5.17 The North London Waste Authority confirmed they are currently developing a planning application for Site 121.

Existing Waste Treatment Sites

- 5.18 In line with the deliverability assessment outlined in Section 5; all of the existing waste treatment sites were visited to confirm the following:
- Whether they were still in operation; and
 - Site boundaries were correct.
- 5.19 Owners of sites were also contacted to determine operating capacities and suitability for inclusion in the existing waste treatment capacity calculations. Table 5-7 shows that, of the 41 sites visited and contacted; 4 new sites have begun operating; 6 sites have closed down; 2 sites no longer treat waste and; 31 sites are operational.
- 5.20 Of the 31 operational sites and 4 new sites, the treatment capacity for 3 has not been included in the capacity calculations (see Section 2 and Table 2-3 for a breakdown). This is primarily because two of the sites sort and grade construction, demolition and excavation waste, which is not included in the apportionment targets set by the London Plan. The other site has a licence but this has not been used in

recent years. These sites have therefore been discounted to ensure that treatment capacity of existing sites is not over calculated. All sites in Table 5-7 will be safeguarded for future waste use for the life of the Plan.

Table 5-7 Existing Waste Treatment Sites

Site number	Borough	Site Name	Capacity Included	Status
4195	Barnet	LAL - GRS Ltd	No	Operational
4200	Barnet	Savecase Ltd	Yes	Operational
41754	Barnet	Apex Car Breakers	Yes	Operational
10039	Enfield	ELV Ltd	Yes	Operational
10032	Enfield	ELV Ltd	Yes	Operational
4205	Enfield	Enfield Metal Recycling	No	Closed down
10022	Enfield	Maskellann Metals	Yes	New site
10036	Enfield	Environmental Tyre Disposals	No	Closed down
99	Enfield	Biffa / Greenstar MRF	Yes	Operational
10041	Enfield	Lea Valley Motors Ltd	Yes	Operational
10079	Enfield	London Waste Composting	Yes	Operational
10011	Enfield	Metal & Waste Recycling Group Ltd	Yes	Operational
10040	Enfield	Plasterboard Recycling UK Ltd	No	Closed Down
10043	Enfield	Polkacrest Ltd	Yes	Operational
10021	Enfield	Polkacrest Ltd	Yes	Operational
10012	Enfield	Pressbay Ltd	Yes	Operational
10038	Enfield	Redcorn Ltd	No	Operational
10080	Enfield	Londonwaste Ltd EFW	Yes	Operational
66	Enfield	Kedco	Yes	New site
10083	Hackney	Braydon Motor Company	Yes	Operational
10017 & 10072	Haringey	Brantwood Auto Breakers Ltd	Yes	Operational
10073	Haringey	2B's Motor Cycles	No	Closed Down
41752	Haringey	O'Donovan (Waste Disposal) Ltd	No	Operational
4180	Haringey	Redcorn Ltd	Yes	Operational
10016	Haringey	Restore Community Projects	Yes	Operational
41753	Waltham Forest	BJ Electronics	Yes	New site

Site number	Borough	Site Name	Capacity Included	Status
10071	Waltham Forest	BD&G parts for Rover	No	No longer treats waste
41756	Waltham Forest	T J Autos (UK) Ltd	No	No longer treats waste
41757	Waltham Forest	Walthamstow Salvage	No	Closed Down
10074	Waltham Forest	Argall Metal Recycling Limited	Yes	New site
10074	Waltham Forest	Baseforce Metals	No	Closed Down
10003	Waltham Forest	Exectec Limited	Yes	Operational
Reuse & Recycling Centres				
10006	Barnet	Summers Lane	Yes	Operational
10019	Camden	Regis Road	Yes	Operational
10008	Enfield	Barrowell Green	Yes	Operational
10082	Haringey	Hornsey High Street	Yes	Operational
10015	Haringey	Park View Road	Yes	Operational
4190	Islington	Hornsey Street	Yes	Operational
10018	Waltham Forest	48 Kings Road	Yes	Operational
10081	Waltham Forest	Gateway Road	Yes	Operational
10026	Waltham Forest	South Access Rd, Walthamstow	Yes	Operational

Existing Transfer Sites

- 5.21 All existing transfer stations were visited to confirm their boundaries and the deliverability/suitability for future reorientation and consequent contribution to the calculation of treatment capacity of existing sites. The assessment took into consideration the size of the site and whether it was subject to an absolute constraint as outlined in Section 3.
- 5.22 The size assessment was based on the principles outlined in the Preferred Options Technical Report, which stated:
- The minimum land take for a waste management facility is 0.9 hectares according to the London Plan; however in practice a small MRF can be located on a 0.25ha site. Therefore the assumption in the North London Waste Plan that a minimum site size of 0.25ha is required for a waste management facility is valid and recognises that the inclusion of a number of existing smaller sites capable of contributing to the land requirement in north London. The inclusion of smaller sites also allows for the development of smaller scale waste treatment processes located close to the waste arising which can encourage the development of community waste management solutions, or the development of new waste management technologies that can provide locally tailored treatment solutions.
 - This assumption is based on the review of existing UK waste management facilities comparing facility size with land take as shown in Table 5-8.

Table 5-8 Comparison of London Plan and UK range of facility sizes and land takes

Comparison of London Plan and UK Range of facility size and land take				
Data Source	London Plan		Typical UK Range	
Technology	Throughput (ktpa)	Land take (ha)	Throughput (ktpa)	Land take (ha)
MRF	42	0.90	20 - 300	0.2 - 3.0
Composting	19	1.25	15 - 45	1.0 - 7.5
MBT	125	1.75	65 - 300	2.5 - 14.0
AD	15	1.00	5 - 145	1.2 - 3.5
Gasification/pyrolysis	114	2.25	50 - 225	2.2 - 6.0

- 5.23 Table 5-9 shows details of the transfer stations that were assessed for possible reorientation and inclusion in the calculation of treatment capacity of existing sites. It also provides justification for their inclusion or exclusion and the size in hectares of those sites to be included in the land take calculations. All existing transfer stations will be safeguarded, but not all sites will be included within the potential land take calculations.

Table 5-9 Schedule B, Transfer Sites

Site number	Borough	Site Name	Status	Included	Justification	Size
10030	Barnet	Cripps Skips Limited	Operational	No	Too small and in Brent Cross redevelopment	0.11
10075	Barnet	GBN Services Ltd	Operational	Yes	Site is suitable for reorientation	0.37
10029	Barnet	McGovern Brothers (Haulage) Ltd	Operational	No	Site is part of Brent Cross redevelopment	0.87
10004	Barnet	P B Donoghue (Haulage & Plant Hire) Ltd	Operational	Yes	Site is suitable for reorientation	0.76
10005	Barnet	Waste Recycling Group (WRG)	Operational	No	Site is Brent Cross redevelopment	2.43
4185	Barnet	Winters Haulage	Operational	Yes	Site is suitable for reorientation	1.39
41755	Enfield	Budd Skips	Operational	No	Too small and in Metropolitan Open Land and Lea Valley conservation area	0.1
10035	Enfield	Greater London Waste Disposal Ltd	Operational	No	Too small	0.06
10076	Enfield	Hunt Skips	Operational	No	Too small	0.14
10077	Enfield	J O'Doherty Haulage	Operational	Yes	Site is suitable for reorientation	2.21
10078	Enfield	London Waste Recycling Ltd	Operational	No	Too small and in Metropolitan Open Land and Lea Valley conservation area	0.11
10034	Enfield	Oakwood Plant Ltd	Operational	Yes	Site is suitable for reorientation	0.69
10033	Enfield	Powerday Plc	Operational	Yes	Site is suitable for reorientation	0.5
10031	Enfield	Tuglord Enterprises Ltd (Howard Waste)	Operational	Yes	Site is suitable for reorientation	0.3
4205	Enfield	Enfield Skips Limited	Operational	No	Located in the Green Belt	0.63
10037	Enfield	Personnel Hygiene Services Ltd	Operational	No	Too small	0.11
10024	Hackney	Millfields Waste Transfer Station	Operational	No	The site is a Council Transfer Station and Reuse & Recycling Centre	0.62
4170	Haringey	Biffa Waste Services Ltd	Operational	No	Too small	0.18
41751	Haringey	O'Donovan (Waste Disposal) Ltd	Operational	No	Too small	0.12
4190	Islington	Hornsey Street, N7 8HU	Operational	No	New council site - RRC, transfer and depot	1.05
5	Waltham Forest	Bywaters (1986) Ltd	Operational	Yes	Site is suitable for reorientation	3.63
10001	Waltham Forest	Dem'cy Contractors Ltd	Operational	No	Too small	0.09

Site number	Borough	Site Name	Status	Included	Justification	Size
N/A	Waltham Forest	G & B Compressor Hire	Closed	No	Relocated	N/A
10027	Waltham Forest	GBN Services Ltd	Operational	Yes	Site is suitable for reorientation	0.95

5.24 As shown in Table 5-9, it can be seen that:

- 8 sites were too small to be considered for reorientation to waste treatment facilities based on the threshold of 0.25ha;
- 2 sites have been discounted because they are in use as local authority sites co-locating transfer facilities, vehicle depot, and reuse and recycling centres;
- 1 site has closed down; and,
- 4 sites were not considered, as they are located within the Brent Cross regeneration area. As part of the potential Brent Cross and Cricklewood regeneration replacements sites for 10029 (McGovern Brothers (Haulage) Ltd), 1004 (PB Donoghue (Haulage & Plant Hire) Ltd) and 10030 (Cripps Skips Limited) may become available and will be considered to be windfall sites. Site 23 (Edgware Rd and Geron Way) is identified as the replacement for Site 10005 (Waste Recycling Group).

5.25 Table 5-10 shows details of existing Transfer Station sites sized between 0.25 – 0.9ha. This is to identify the land available from sites that fall between the threshold sizes of the London Plan’s figure (0.9ha) and the NLWP figure (0.25ha). These sites may be suitable for reorientation into local, decentralised community waste treatment facilities and as a result will be included in the calculations of land available from the reorientation of transfer stations. The inclusion of these smaller sites also provides the plan with flexibility and greater scope to develop facilities. It is clear that a range of site sizes and locations are required to allow the development of the likely range of waste management operations that will be needed to manage north London’s waste.

Table 5-10 Transfer Sites Suitable for Reorientation

Site Number	Borough	Site Name	Size
10031	Enfield	Tuglord Enterprises Ltd (Howard Waste)	0.3
10075	Barnet	GBN Services Ltd	0.37
10033	Enfield	Powerday Plc	0.5
10034	Enfield	Oakwood Plant Ltd	0.69
Total land available from sites smaller than 0.9ha			1.86
10027	Waltham Forest	GBN Services Ltd	0.95
4185	Barnet	Winters Haulage	1.39
10077	Enfield	J O'Doherty Haulage	2.21
5	Waltham Forest	Bywaters (1986) Ltd	3.63
Total land available from sites over 0.9ha			8.18
Total for all sites			10.04

5.26 Table 5-10 also identifies that there is 8.18ha available from larger sites greater than 0.9ha that are suitable for reorientation. This gives a combined total of 10.04ha land currently used for transfer activities in north London that is suitable for taking forward for inclusion within the Plan.

Edmonton Eco Park

5.27 The Edmonton Eco Park is the largest singular site in use for waste management purposes at 15.26ha in north London. The Edmonton EcoPark is identified in the Plan as a key existing site with land developable for waste use available in the plan period. Enfield Council is committed to working in partnership with the NLWA to prepare a planning brief to determine the scope of any future development over the plan period. This section of the Technical Report considers how the site is used at present and the future development potential, although more detailed work on this would form part of the planning brief process. At present there are a number of facilities on the site including:

- Energy From Waste (EFW) – waste treatment;
- In Vessel Composting (IVC) – waste treatment;
- Clinical Waste Treatment – waste treatment; and
- Bulk Waste and Recycling Transfer Station – waste transfer.

5.28 Figure 5-1 illustrates the areas of the site that are currently in use for waste treatment, waste transfer and areas set aside of other uses and landscaping. The NLWA are making the whole of the Edmonton site available for bidders in their long term procurement. However, for the purposes of the Plan it important to identify areas currently used for waste management and areas that could be available in the future for consideration in the planning brief process.

5.29 Using figure 5-1, the land take of each area has been shown in table 5-11. This shows that there is 5.48ha used for Energy From Waste, In Vessel Composting and clinical waste treatment which are likely to remain in operational use during the early phases of the plan. It also shows areas which are currently not fully used for waste management operations and therefore may be available in the future if operational aspects were rationalised as part of a wider development.

5.30 It is assumed that the EFW will be decommissioned in 2020 as part of the future redevelopment of the site. In addition there could be changes to the way that the Bulky Waste and Recycling Transfer Station is used. Overall up to 9.75ha could become available during the period of the plan. However, the scope and extent of any future development would need to be considered in greater detail. Given the mixture of existing waste uses on site, the planned development of the site as the waste procurement process and the decommissioning of the incinerator, it is considered that a planning brief would provide the most appropriate platform to

assess future development opportunities as part of a holistic vision for this site and the wider Central Leaside Area Action Plan area.

Table 5-11 Current Land take at Edmonton Eco Park

Current Facilities	Land take (ha)	Potential land availability in the Plan period
EFW	3.65	3.65
In Vessel Composting	1.4	0
Clinical Waste Treatment	0.43	0
Bulky Waste and Recycling Transfer Station	2.02	2
Other facilities and landscaping	4.46	3.3
Ash storage	0.81	0.8
Area essential for site operation	2.49	0
Total	15.26	9.75

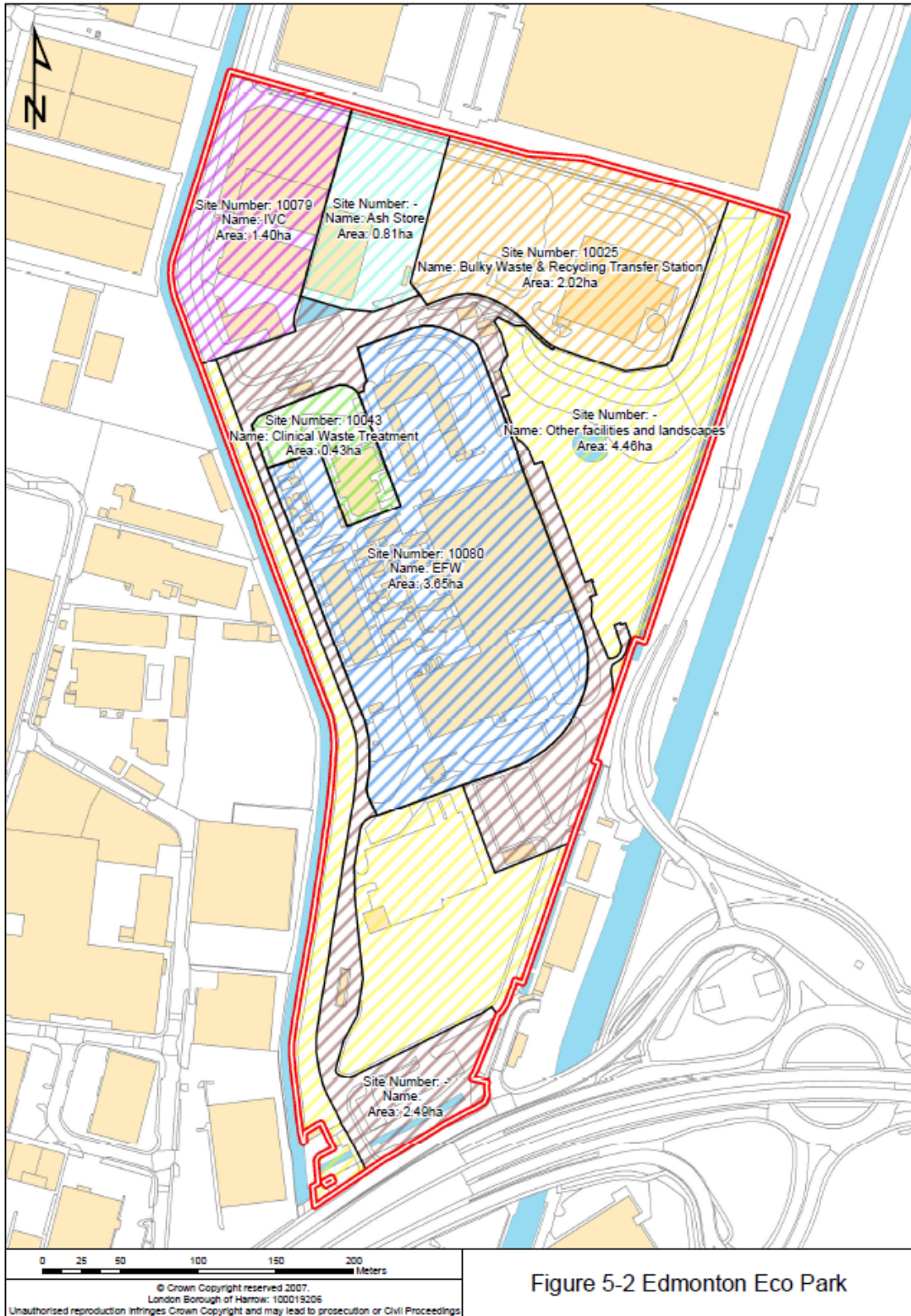


Figure 5-2 Edmonton Eco Park

Figure 5-1 Edmonton Eco Park and its uses

6 Meeting Apportionment

- 6.1 At present, within the north London area there is 2,569,567 tonnes of municipal, commercial and industrial waste produced per annum based on the revised London Plan (2009). Furthermore, there is 1,394,235 tonnes of waste treatment capacity based on figures confirmed by existing sites operators. Table 6-1 highlights the land requirement calculations and shows the treatment capacity against the revised London Plan 2009 apportionment figures and shows the area of land required to be allocated for waste use at five year intervals up to the end of the Plan in 2027.
- 6.2 There is a surplus of treatment capacity throughout the life of the Plan until 2023 when 1ha is required; this requirement then increases so that it is necessary to allocate 4ha to meet the capacity gap by 2027.

Table 6-1 Land requirement calculations

	Units	2012	2016	2021	2027
Apportionment (amount of waste north London needs to manage in draft London Plan 2009)	tonnes	1,320,900	1,504,066	1,698,712	1,949,229
Existing and planned capacity	tonnes	1,394,235	2,294,235	1,784,235	1,784,235
Additional capacity required to meet apportionment (capacity gap)	tonnes	-73,335	-790,169	-85,523	+164,994
Land required to meet apportionment (based on average throughput of 50,000 tonnes per hectare)	ha	0	0	0	4

- 6.3 A sequential approach is required to facilitate the development of waste treatment facilities in north London. Developers are first required to consider existing waste treatment sites (schedule A), then existing waste transfer sites. Only if they can demonstrate that no sites are suitable can they put forward development on a newly allocated site identified in the plan (set out in schedule C). In exceptional circumstances, sites that have not been allocated can be put forward provided they meet certain criteria and these will be considered as windfall sites. To ensure that north London meets its apportionment table 6-2 shows the land available for development for waste purposes against allocation need.

Table 6-2 Land Availability

Type of Land	Land Included 2011	Land Included 2016	Land Included 2021	Land Included 2026
Schedule B – Transfer sites (ha)	10.08	10.8	10.8	10.8
Schedule C – New Sites (ha)	9.23	9.23	8.94	8.94
Key site – Edmonton Eco Park (ha)	5.3	5.3	9.75	9.75
Total (ha)	24.57	24.57	29.02	29.02
Allocation Need (ha)	0	0	0	4
Difference(ha)	+24.57	+24.57	+29.02	+25.02

- 6.4 Table 6-2 demonstrates that the Plan has identified a larger area of land to be than required for waste treatment use/developed during the Plan period. This is to ensure that there is flexibility and contingency incorporated into the document to enable it to adapt to possible changes in future waste needs.
- 6.5 To ensure there is sufficient flexibility incorporated into the Plan, a worse case scenario has been reviewed to ensure that enough land will be allocated to meet treatment capacity need. Table 5-12 demonstrates a worse case scenario where; NLWA fail to procure a new long term contract with 900,000tpa of treatment capacity within the Plan period, and Edmonton EFW is decommissioned with a loss of 510,000tpa in treatment capacity.

Table 6-3 Worse case scenario

	Units	2012	2016	2021	2027
Apportionment (amount of waste north London needs to manage in draft London Plan 2009)	tonnes	1,320,900	1,504,066	1,698,712	1,949,229
Existing and planned capacity	tonnes	1,394,235	1,394,235	884,235	884,235
Additional capacity required to meet apportionment (capacity gap)	tonnes	-73,335	109,831	814,477	1,064,994
Land required to meet apportionment (based on average throughput of 50,000 tonnes per hectare)	ha	0	2.19	16.28	21.29
Total land identified for inclusion within the Plan (ha)	ha	24.57	24.57	29.02	29.02
Difference	ha	+24.57	+22.38	+12.74	+7.73

6.6 Table 6-3 shows that even with a worse case scenario, the Plan ensures that there is suitable contingency/flexibility to provide adequate land meet the increase in treatment capacity needs. It is not considered realistic that Edmonton EFW and the NLWA procurement would both be unavailable for treating north London's MSW. This is because the NLWA will need to treatment its waste or incur Landfill Allowance Trading Scheme penalties and increased disposal costs.