



Land at Arlington Works, Arlington Road, Twickenham, TW1 2BB

Waste planning policy considerations

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 This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS OHSAS 18001:2007)

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Comments



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1. Introduction

1.1 The brief

Waterman Infrastructure & Environment Ltd (Waterman) was instructed by Sharpe Refinery Service Ltd (hereafter "Sharpe's" or the "applicant" as the case may be) to report upon the impact of waste planning policies influencing the redevelopment of its waste facility at Arlington Works, Arlington Road, Twickenham. It is intended this report accompanies Sharpe's planning application.

1.2 Report structure

At section (2) we provide a description of the site including its history and various uses. Section (3) sets out relevant waste planning policies included in The London Plan and the West London Waste Plan and our responses to these policies. At section (4) we summarise the current use of the site for waste management activities, whilst in section (5) we consider the potential for other waste management uses for the site. At section (6) we assess the site against criteria set out in relevant policy. Section (7) draws together the conclusions of this work.

1.3 Limitations

This report was undertaken in accordance with a scope of works agreed between Waterman and Sharpe's as documented in Waterman fee letter (including: WIE12815-100-170223-MM-FeeProp) and with Waterman's standard Terms of Appointment.

The benefit of this report is made to Sharpe Refinery Service Ltd.

Waterman has endeavoured to assess all information provided to them during this work, but makes no guarantees or warranties as to the accuracy or completeness of this information.

The scope of this investigation does not include an assessment for the presence of asbestos containing materials within or below buildings or in the ground at the site.

The conclusions resulting from this study are not necessarily indicative of future conditions or operating practices at or adjacent to the site.



2. The site

This report concerns a site known as Arlington Works. The site, and the works that lie within it, are at Arlington Road, Twickenham, approximate post code TW1 2BB. Arlington Road is generally residential in character, with elegant and impressive detached and semi-detached houses, punctuated by maisonettes and relatively low-rise blocks of flats. The site is accessed from Arlington Road and lies in a pocket of land between residential development to the north, Twickenham Studios to the east and south and a railway line to the west. The works perform a waste management activity¹, and this use has been safeguarded by the Development Plan. A site location plan is presented elsewhere in the applicant's submission.

2.1 Site description

Arlington Works is accessed from a relatively long and narrow site road oriented south east – north west. The north-western end of the access turns sharply by 90 degrees to form a central spine road continuing to the south-western boundary of the site. It is noted that uses lie either side of this spine road:

- to the north west structures associated with the treatment of waste oil, including tanks and bunding;
- to the east car parking and workshops;
- to the south east two late Victorian terraced buildings; and
- to the south west telecommunications equipment (mast).

The site is somewhat irregular in shape, being approximately 77m long and 40m wide, narrowing to approximately 20m wide at the southern boundary with Twickenham Studios.

2.2 Historic and current use of the site

The applicant reports the Works was purchased with sitting tenants in 1958 and was initially used as a metal drum reconditioning plant (emptying, cleaning, reconditioning and finally spraying) working in close association with British Petroleum at Sunbury upon Thames. The applicant explains flatbed trucks were used to transport the drums in and out of the site initially and later, when oil recycling commenced, small tankers were used to collect waste engine oil from the local area. We understand the oil was heated, filtered and was produced as Recycled Fuel Oil (RFO). The RFO was supplied to industries where it was burnt to produce heat; for example, to laundries, producers of tarmac coated road-stone and coal fired power stations to assist in initiating ignition. The applicant explains that in time, 40 tonne tankers were used to transport larger volumes of oil creating economies of scale and a greener footprint. The applicant no longer uses its own transport but is fully reliant on the many waste carrier companies (e.g. Veolia, Viridor, Cleansing Service Group). The applicant explains that changes in legislation prevented the burning of RFO by its traditional customers as their plants were not deemed to be compliant with the Waste Incineration Directive (WID). Additionally, the number of coal fired power stations has reduced considerably over the years.

The applicant informs that fuels contaminated with water and water contaminated with oils (such as oil interceptor waste and engineering soluble / cutting / emulsions) began being treated on site. We understand this enabled the site to receive wastes for recovery and disposal. The applicant now primarily deals with water contaminated with up to about 5% oil. Waste engine oils and redundant fuels such as gas oil / diesel are still accepted but have become a small component of the business.

The oily water wastes are treated with heat, filtration and chemicals. The treated water is discharged to foul sewer (under a trade effluent consent). Processed RFO is sold within the waste industry, some is rerefined back into a base oil in England, France and Germany and the rest is burnt for energy recovery in

¹ Which is counted against London's pooled apportionment targets.



WID compliant plants often in Europe. Solids and sludges from tank cleaning and filtering are removed by road tanker for further treatment and disposal. All the RFO and its sludges are moved off site outside the London area.

The applicant informs that waste is received in to the site from all over the UK with very little collected from London since there are precious few engineering works in the locality. Waste data appears to show that the site receives material arising from the London area, however this is not quite what it seems, it is instead a quirk of the waste recording system. The applicant asserts the waste which comes from a waste transfer station in Wembley, whilst appearing therefore to be locally arising, does in fact come from far further afield.

The applicant also confirms that: since before 1958 other tenants, both residential and commercial, have operated from the site mainly as sole traders with varying professions; today there are some 17 or so tenants on site with trades that include car body repairs; carpentry; upholstery; the recording, composing and practising of music; metal fabrication and storage facilities. Most tenants have been actively working from the site for over 10 years.

The planning history to this site will be set out elsewhere in the applicant's submission.



3. Planning matters

3.1 **Pre-application liaison**

The applicant (through its planning agent Indigo Planning Ltd (Indigo)) embarked on a pre-application liaison exercise with London Borough of Richmond upon Thames (LBRuT) in its capacity as the local planning authority in November 2016. The proposals included designs by Brookes Architects Ltd (BAL) and sought to *"redesign and replace the existing out-dated employment space on the site with modern, more neighbourly employment floorspace."* The scheme proposed *"the removal of the existing industrial use on the site to provide a mixed use scheme with employment space and 23 new residential units."² The proposals included existing and proposed plans; elevations; views; design and access statement; transport statement and a pre-application planning statement summarising the submission. Reasons advocated for the redevelopment included that:*

- the current uses on the site were "an annoyance to surrounding residents" and "not compatible with the nearby residential dwellings due to smells and noise";
- the Buildings of Townscape Merit could be successfully incorporated into the redevelopment scheme and be used to provide design cues for the proposed new buildings;
- it served to retain an employment generating use on the site, consistent with planning policy;
- it would create space for approximately forty-eight new jobs; and
- there "is an overwhelming need for the provision of all types of housing across London and in Richmond" and that the proposal would "go some way in addressing the borough's housing need".

In response to the submission, officers of the council explained that the site was one which had been safeguarded for waste management purposes and invited the applicant to take this into account.

Subsequently, the applicant revised its scheme (updated site plan included at Appendix A), engaged with its advisors and later reconvened a meeting with the council³. The council confirmed its advice in its letter dated 12 February 2018. We attach extracts of the advice at Appendix B to this report. LBRuT subsequently confirmed⁴ the loss (on redevelopment of Arlington Works) could be compensated by providing capacity of *"another hazardous waste stream"*.

3.2 The Development Plan

The applicant has set out elsewhere in its submission the Development Plan policies it considers relevant to its proposals. This report is presented as an appendix to the applicant's submission, and its focus is limited to those policies concerning the loss of a site in an existing waste management use. Planning law requires that applications for planning permission must be determined in accordance with the Development Plan, unless material considerations indicate otherwise. The Development Plan policies of relevance include those in:

- The London Plan⁵;
- LBRuT Local Plan⁶; and

² The applicant has since revised its scheme, including increasing the number of residential units to 24. ³ Meeting held on 22 June 2017.

⁴ Email LBRuT to Indigo 18 April 2018 11:27 hours.

⁵ Mayor of London, "The London Plan – the spatial development strategy for London consolidated with alterations since 2011)", March 2016.

⁶ London Borough of Richmond Upon Thames Local Plan, Publication Local Plan incorporating Inspector's Final 'Main Modifications' as published May 2018 and 'List of Council's Additional Modifications to Local Plan Publication version' as published December 2017; subject to additional minor modifications to the Plan to cover any necessary updates on adoption, adopted 3 July 2018.



the West London Waste Plan (WLWP)⁷;

material considerations include:

- the National Planning Policy Framework (NPPF)8;
- Planning Practice Guidance (PPG)9;
- Supplementary Planning Documents (SPDs) and Supplementary Planning Guidance (SPG)¹⁰ (for example those at the local level); and
- other relevant guidance documents, plans or policies at the European, national, regional or local level, such as:
 - National Planning Policy for Waste (NPPW)¹¹; and
 - the Waste Management Plan for England¹².

In London certain decisions may fall to be considered by the Mayor of London. The circumstances where applications for planning permission of potential strategic importance ("PSI applications") must be determined by him in place of the local planning authority are laid down in:

• The Mayor of London Order¹³.

3.2.1 The London Plan

The London Plan explains that the Mayor's waste strategies set out to achieve approaches that deliver the greatest climate change mitigation benefits. The strategies include:

- becoming self-sufficient:
 - which involves creating "positive environmental and economic impacts from waste processing"¹⁴; and
- enhancing waste capacity by:
 - increasing processing capacity, including:
 - · introducing new capacity; and
 - · co-locating waste facilities and manufacturing activities;
 - ensuring planning decisions (for waste management development) take account of various criteria including:
 - locational suitability and impact on amenity;
 - · the nature and scale of the proposed activity;
 - · the proximity of the waste source to the receiving site; and
 - · the transport and environmental impact of collection, transfer and disposal movements;
 - ensuring policy formulation takes account of various matters including:

¹¹ Department for Communities and Local Government, "National Planning Policy for Waste", October 2014.

¹² Defra, *"Waste Management Plan for England"*, December 2013.

¹³ HMSO, "The Town and Country Planning (Mayor of London) Order 2008", 6 April 2008.

¹⁴ London Plan Policy 5.16 (A)(b).

 ⁷ Published jointlyby the London Boroughs of Brent, Ealing, Harrow, Hillingdon, Hounslow, Richmond upon Thames and Old Oak and Park Royal Development Corporation, *"West London Waste Plan"*, July 2015.
 ⁸ Department for Communities and Local Government, *"National Planning Policy Framework"*, March 2012.
 ⁹ Department for Communities and Local Government, *"Planning Practice Guidance"*, 29 November 2016.
 ¹⁰ Such information prepared by London Borough of Richmond Upon Thames and adopted as a SPD or as SPG - for example including: Affordable Housing; Contaminated Land; Design Quality; Planning Obligations; Refuse and Recycling Storage Requirements; Residential Development Standards; Small and Medium Housing Sites; Sustainable Construction Checklist Guidance Document etc.



- providing adequate capacity¹⁵ for apportioned waste¹⁶; and
- making good the loss of an existing waste management site¹⁷ through planning policy in local plans.

London Plan Policy 5.17 (Waste Capacity) is therefore relevant to the applicant's proposals. Bullet (H) of the policy (subtitled LDF Preparation) directs the London boroughs to prepare their own planning policies in a particular way. In short, it requires that if over the passage of time

"an existing waste management site is lost to non-waste use"

then there must be planning policies which ensure that

"additional compensatory site provision"

is made.

The London Plan therefore requires that policy makers take account of the loss of sites and that they provide for their replacement over the plan period. London Plan Policy 5.17 also includes criteria against which proposals for new waste management sites should be evaluated when taking planning decisions and, as we note above, these include factors such as:

 locational suitability; impact on amenity; proximity to the waste source; and the impact of collection, transfer and disposal movements.

In this way the London Plan enables land use to evolve from one use to another in a plan led fashion. It therefore provides for uses which may become undesirable in one location to transition over time to better suited, more sustainable locations elsewhere.

3.2.2 The West London Waste Plan

Policy WLWP 2 (Safeguarding and Protection of Existing and Allocated Waste Sites) responds to the planning policy formulation requirement of London Plan policy 5.17 (H). In extract it provides that:

- "Land accommodating existing waste management uses in West London will be protected for continued use for waste management..."
- ...Development for non-waste uses will only be considered on land in existing waste management use... if compensatory and equal provision of capacity for waste, in scale and quality, is made elsewhere within the West London Boroughs".

Paragraph 6.3.2 of the written statement to the WLWP amplifies that the safeguarding applies:

• "...unless an equal and compensatory suitable, acceptable and deliverable site can¹⁸ be provided..."

Given the origins of the policy include London Plan Policy 5.17(H), we consider the use of the word "can" to be significant.

"Can" means "is able to", and by extension that capability exists to cater for change. In drafting the wording policy makers exercised choice in finding expressions that best suited their goals. It is notable they did not choose to say "must" or "is" provided. We interpret "can" to mean where an *"equal and compensatory suitable, acceptable and deliverable site"* is able to be provided then it would be permissible to lose a site in existing waste management use. We further note such circumstances could

¹⁵ London Plan Policy 5.17 (F and G(a)).

¹⁶ London Plan (2011), apportioned waste is: "A given proportion of London's total MSW and C&I waste (expressed in tonnes) allocated to each individual borough for which the borough must identify sufficient sites for managing and processing waste within their Local Plans". The apportionment targets concern municipal and commercial & industrial wastes (including the hazardous element).

¹⁷ London Plan Policy 5.17 (H).

¹⁸ Emphasis added by Waterman.



include cases where it is obvious that existing consented capacity is of such a scale that the loss of a site makes little material difference. Planning policy therefore caters for the redevelopment of an existing waste site prior to the actual delivery of the compensatory capacity itself.

Appendix 2 of WLWP provides a list of the known (lawfully permitted) waste management sites in the area. It identifies the applicant's site, we extract as in the table below.

Table 1: Extract from Appendix 2 of WLWP

Operator Name	Facility Name	Site Activity	Borough	Counted Against Apportionment?
Sharpe's Recycle Oil Ltd	Arlington Oil Reclamation Facility, Twickenham	Oil Reclamation Facility	Richmond	\checkmark

3.2.3 Reflections on planning policy

The requirement to prepare Local Development Frameworks (LDFs) speaks to London's strategic vision which includes managing growth without *"having unacceptable impacts on the environment"*¹⁹; and ensures London becomes a city that is *"...a world leader in improving the environment locally and globally..."*²⁰.

It is intended that both the London Plan and the WLWP exert their effect over a time horizon (the plan period); the London Plan looks forward to 2036-2041, the WLWP to 2031. Accordingly, it would appear consistent with policy to embark on proposals for the redevelopment of Arlington Works providing that appropriate compensation can be provided over the plan period.

Presumably, the policy approach in the WLWP caters for candidate waste sites to be brought forward for consideration and screened in the normal way during the evolution and adoption of allocations.



4. Waste arisings managed by the current facility

The applicant has researched whether there is a demonstrable need in the Plan Area for the capability Arlington Works brings to the waste management sector. The site, along with all other waste management facilities authorised by an Environmental Permit, is required to submit waste returns data to the Environment Agency (EA) on a quarterly basis. The returns describe wastes received by, and despatched from, each site by use of the European Waste Catalogue (EWC) code system. The EA collates the data for all sites and releases it annually in the form of the "waste data interrogator" (WDI). In addition, for hazardous waste, sites receiving hazardous waste make further returns for each consignment of waste. These data are collated and released annually in the form of the "hazardous waste data interrogator" (HWDI). The data sets also include information on the geographical origin and destination of wastes.

We have used WDI data for 2013 – 2015 and HWDI data for 2015 and have established that Arlington Works received on average approximately 9,452 tonnes per year for the period 2013 – 2015. The site accepts a wide range of wastes which are predominantly treated to a greater or lesser degree at the site. Seven waste streams make up about 75% of the waste input to the site over the three-year period and are set out in the table below.

EWC code	EWC code description
12 01 06	Mineral-based machining oils containing halogens (except emulsions and solutions)
12 01 09	Machining emulsions and solutions free of halogens
13 02 05	Mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06	Synthetic engine, gear and lubricating oils
13 02 08	Other engine, gear and lubricating oils
13 05 07	Oily water from oil/water separators
13 08 01	Desaltersludges or emulsions

Table 2: Key waste streams accepted at Arlington Works

These waste streams have been subject to further consideration for the year 2015:

- the tonnages of these wastes received by Arlington Works from London accounts for approximately 17% of its inputs, the remainder being imported from outside the London area;
- approximately 38,000 tonnes of these waste streams arose in London, of which 8% were received by sites in the West London Waste Authority (WLWA)²¹ area – 3% specifically by sites in LBRuT reasonably assumed to be Arlington Works itself; and
- approximately 12,000 tonnes of these waste streams arose in the WLWA area, of which 17% were received by sites in the WLWA – 8% specifically by sites in LBRuT reasonably assumed to be Arlington Works itself.

What is also apparent is that approximately 80% of these wastes arising in London are sent out of London and over 83% of these wastes arising in WLWA area are sent out of the WLWA area.

In terms of the products of waste treatment at Arlington Works, other than treated water which is discharged to foul sewer, all other products of treatment are despatched by road for further treatment or recovery at sites outside the London area. The WLWP considers the issue of need at paragraph 3.5.1 of the written statement, where it states:

²¹ West London Waste Authority - West London's statutory waste disposal authority. The WLWA's main function is to arrange the disposal of waste collected by its six constituent Boroughs.

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• "...Hazardous waste requires a range of specialist facilities for treatment and disposal, but it is not anticipated that substantial additional need for new capacity locally will arise and so land allocations specifically for the development of additional hazardous waste management capacity have not been identified in this Plan."

In summary, the WLWP is satisfied with the status quo; it does not identify an overcapacity nor a shortfall. An underlying principle of the WLWP is that it assists in achieving net self-sufficiency²². The WLWP emphasizes that the objectives include providing *"for the sustainable management of an amount of waste equivalent to the amount arising within the Plan Area"* and the plan recognises that *"waste also moves into and out of the Plan area for management"*²³. The cross-boundary movement of waste (including into and out of London itself) is therefore an acknowledged, and seemingly supported, feature of the waste planning process.

Arlington Works is not proximal to much of the waste it receives and Waterman has established that 83% of the material received at Arlington Works comes from sources outside of London. The sources lie across east and west Midlands, east, south east, south and southwest England and South Wales. Specifically identified sources include those (clockwise from north) in: Northampton, Milton Keynes, Basildon, Thanet, Brighton and Hove, Portsmouth, Poole and Stroud. Clearly these sources lie a long way away and transportation over such distances consumes resources in both environmental and economic terms. Waterman established that Arlington Works received about:

- 3% (or about 1,200 tonnes) of the regionally generated waste²⁴; and
- 8% (or about 950 tonnes) of the locally generated waste²⁵.

In terms of taking steps to enhance the waste capacity at Arlington Works challenges include that:

- the access route to the site is ill-equipped for waste delivery vehicles²⁶, including that vehicles must travel through relatively narrow streets; and
- the site lies adjacent to residential receptors and the operations are such that impacts to amenity (including noise and odour) are difficult to prevent.

Waterman is not alone in identifying the shortcomings of the site for waste uses, and we refer to policy formulation work at the local level which included ranking sites in terms of suitability. The work demonstrated that the site has unfavourable characteristics and it was ranked 286th out of 309 assessed sites²⁷.

²² Defined in the glossary to the WLWP as the: "Situation where there [is] a balance between incoming and outgoing waste such that the Plan area deals with an equivalent amount of waste to that produced within its area."
²³ Paragraph 3.9.1 of the written statement to the WLWP.

²⁴ At a regional level about 38,000 tonnes of the typical waste streams (received at Arlington Works) arise in London itself. About 3% (1,200 tonnes) of this is received at Arlington Works.

²⁵ At a local level about 12,000 tonnes of the typical wastes treams (received at Arlington Works) arise in the West London Waste Authority (WLWA) area. About 8% of this is received at Arlington Works.

²⁶ Typically, the site is attended by HGV tankers of up to 33,000 litre capacity.

²⁷ Over 300 sites potentially suitable for waste use, including the Arlington site, were ranked in terms of suitability as part of the policy formation of the WLWP. This process is detailed in one of the WLWP evidence base documents, the 'Site Selection and Assessment Process – Summary Report' prepared by BPP Consulting in July 2014. The site scored poorly against the WLWP site selection criteria, and was ranked 286 out of the 309 sites initially selected.



5. The potential for other waste uses to occupy the site

5.1 Developing site assessment criteria

In response to the safeguarding policies the applicant has researched whether the site might be suitable for alternative waste uses. It approached its work under this heading through reviewing national, regional and local policy, and guidance. The various planning considerations are translated into criteria which are then used to assess the suitability of the site to support a new or enhanced waste use.

5.1.1 Planning for Waste Management Facilities: A Research Study (ODPM, 2004)²⁸

This research study examined the planning considerations associated with waste management facilities. It contains profiles for twelve different types of waste management facility, each of which include indicative site criteria, such as site area, and a scoping matrix to facilitate the identification of any potentially significant effects of the facility, such as typical vehicle movements and emissions. The twelve *"principal waste management facility types"* include composting, anaerobic digestion, processing of recyclables and landfill. The facility types are typically those for the management of household and similar commercial and industrial waste.

The study does not consider in detail sites for the management of industrial wastes such as construction and demolition waste, oily wastes, agricultural wastes, waste from the extractive industries or waste water. However, it does include a summary of key issues likely to be relevant to such sites, including air emissions / odours, land contamination, noise and visual impact.

5.1.2 National Planning Policy for Waste²⁹

The National Planning Policy for Waste sets out detailed waste planning policies. It outlines that waste planning authorities should identify sites and / or areas for new or enhanced waste management facilities in appropriate locations. It establishes the following steps waste planning authorities should follow in preparing local plans:

- "identify the broad type or types of waste management facility that would be appropriately located on the allocated site or in the allocated area in line with the waste hierarchy, taking care to avoid stifling innovation;
- plan for the disposal of waste and the recovery of mixed municipal waste in line with the proximity
 principle, recognising that new facilities will need to serve catchment areas large enough to secure the
 economic viability of the plant;
- consider opportunities for on-site management of waste where it arises;
- consider a broad range of locations including industrial sites, looking for opportunities to co-locate waste management facilities together and with complementary activities. Where a low carbon energy recovery facility is considered as an appropriate type of development, waste planning authorities should consider the suitable siting of such facilities to enable the utilisation of the heat produced as an energy source in close proximity to suitable potential heat customers; and
- give priority to the re-use of previously-developed land, sites identified for employment uses, and redundant agricultural and forestry buildings and their curtilages."

In addition, it sets out the following criteria against which waste planning authorities should assess the suitability of sites and / or areas for new or enhanced waste management facilities:

• "the extent to which the site or area will support the other policies set out in this document;

²⁸ Office of the Deputy Prime Minister (2004) 'Planning for Waste Management Facili ties: A Research Study'.
 ²⁹ Department for Communities and Local Government (2014), 'National Planning Policy for Waste'.

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- physical and environmental constraints on development, including existing and proposed neighbouring land uses, and having regard to the factors [...] to the appropriate level of detail needed to prepare the Local Plan;
- the capacity of existing and potential transport infrastructure to support the sustainable movement of waste, and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport; and
- the cumulative impact of existing and proposed waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential."

It provides further locational criteria to be used in testing the suitability of sites and areas in the preparation of local plans, including protection of water quality, land instability, traffic and access, and potential land use conflict.

5.1.3 London Plan waste site criteria

Policy 5.17 (Waste Capacity) of the London Plan sets out the following criteria against which proposals for waste management should be evaluated:

- "local suitability;
- proximity to the source of waste;
- the nature of the activity proposed and its scale;
- minimising waste and achieving high reuse and recycling performance;
- achieving a positive carbon outcome of waste treatment methods and technologies (including the transportation of waste, recyclates and waste derived products) resulting in greenhouse gas savings. Facilities generating energy from waste will need to meet, or demonstrate that steps are in place to meet, a minimum CO₂eq performance of 400 grams of CO₂eq per kilowatt hour (kwh) of electricity produced. Achieving this performance will ensure that energy generated from waste activities is no more polluting in carbon terms that [sic] the energy source it replaces;
- the environmental impact on surrounding areas, particularly noise emissions, odour, air quality and visual impact and impact on water resources; and
- the full transport and environmental impact of all collection, transfer and disposal movements and, in particular, the scope to maximise the use of rail and water transport using the Blue Ribbon Network.

The following will be supported:

- developments that include a range of complementary waste facilities on a single site;
- developments for manufacturing related to recycled waste;
- developments that contribute towards renewable energy generation, in particular the use of technologies that produce a renewable gas; and
- developments for producing renewable energy from organic/ biomass waste.

Wherever possible, opportunities should be taken to provide combined heat and power and combined cooling heat and power.

Developments adjacent to waste management sites should be designed to minimise the potential for disturbance and conflicts of use.



Suitable waste and recycling storage facilities are required in all new developments."

5.1.4 West London Waste Plan

The West London Waste Plan (WLWP)³⁰ was prepared jointly by the London Boroughs of Brent, Ealing, Harrow, Hillingdon, Hounslow, Richmond upon Thames, and the Old Oak and Park Royal Development Corporation. It sets out how and where waste will be managed to the period ending 2031 and identifies sufficient sites to deal with all waste in the plan area.

Policy WLWP 4 deals with Ensuring High Quality Development and states all waste development proposals will be required to demonstrate the following:

- "development will be permitted only where it can be shown that unacceptable impact to local amenity will not arise from the construction and operation of a facility;
- adequate means of controlling noise, vibration, dust, litter, vermin, odours, air and water-borne contaminants and other emissions are incorporated into the scheme;
- the development is of a scale, form and character appropriate to its location and incorporates a high quality of design, to be demonstrated through the submission of a Design and Access statement as appropriate;
- active consideration has been given to the transportation of waste by modes other than road, principally by water and rail and this has been incorporated into the scheme or proven not to be practicable;
- transport directly and indirectly associated with the development will not exceed the capacity of the local road network or result in any significant adverse impact on the amenities of the area. Where necessary, this is to be demonstrated by a Transport Assessment;
- an appropriate BREEAM³¹ or CEEQUAL³² rating, as specified in Borough and OPDC development plans, will be achieved;
- the development has no significant adverse effects on local biodiversity and it can be demonstrated that there will be no significant adverse impacts or effects on the integrity of an area designated under the "Habitats Directive";
- there would not be a significant impact on the quality of surface and groundwater. The development incorporates the principles of Sustainable Drainage Systems (SUDS) unless evidence is provided to justify alternative drainage methods;
- there will be no increased flood risk, either to the immediate area or indirectly elsewhere. Where necessary, this is to be demonstrated by a Flood Risk Assessment;
- Green Travel Plans have been considered, where appropriate;
- the site does not contain features, or will not lead to substantial harm to, or loss of significance of, any heritage assets such as conservation areas, archaeological sites, listed buildings etc.; and
- there is no foreseeable adverse impact on health, and where necessary this is to be demonstrated by a Health Impact Assessment.

In addition:

³⁰ West London Waste Plan (2015), available from http://www.wlwp.net/index.html (accessed 25/07/2017) ³¹ BREEAM: Building Research Establishment Environmental Method – an established method of assessing, rating and certifying the sustainability of buildings.

³² CEEQUAL: Civil Engineering Environmental Quality Assessment and Award Scheme – a UK industry evidence scheme for assessing environmental and sustainability performance in civil engineering, infrastructure, landscaping and public realm projects.

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 adjacent development proposals which would prevent or prejudice the use of safeguarded sites for waste purposes will be resisted unless suitable."

WLWP Site Selection and Assessment Process³³

Over 300 sites were initially selected and assessed as part of the WLWP site selection process. Through a process of assessing constraints and deliverability, the list of suitable sites was reduced to those contained in the proposed submission plan. The deliverability assessment identified new and existing sites suitable for future development as waste management sites. One of the WLWP evidence base documents, the Site Selection and Assessment Process summary report³⁴, catalogued and summarised the process applied to identify sites for inclusion in the WLWP. Three types of assessment criteria were used to screen the long list of sites to produce a short list.

Criteria 1: Absolute criteria or "show stoppers"

- sites of national or international conservation interest and listed buildings identified within the site;
- sites within Flood Zone 3b; and
- insufficient site area (sites of less than 0.5 ha were considered likely to be too small for waste management uses to meet WLWP needs).

Criteria 2: Computer based criteria

Using GIS, proximity to the following features from the site boundaries were identified:

- areas of nature conservation;
- archaeological features;
- flood zones 3 and 2;
- historic land and buildings;
- Public Rights of Way; and
- conservation areas (architectural).

Sites were assigned a score of 1, 3 or 5 with the higher score corresponding to distance from the feature; a higher score indicates a potentially more suitable use. Sites were scored higher the nearer they were to access points to infrastructure such as the Transport for London Road Network (TLRN), the Strategic Road Network (SRN), railheads and navigable waterways / canals.

Criteria 3: site visit criteria

The criteria included site configuration, existing uses / buildings, visual intrusion on surrounds, and potential for advantageous co-location of facilities with existing industrial, commercial or mixed use developments.

Other criteria

Further weighting was applied to additional criteria to reflect local significance, such as distance from residential areas, schools and hospitals and routing of vehicles (e.g. conflict with residential roads, roads past schools). A site's score was increased the further it was from these criteria.

 ³³ Based on the findings of the 'Site Selection and Assessment Process – Summary Report' prepared by BPP Consulting in July 2014 (Version 1.2, Final Issue) which formed part of the WLWP evidence base.
 ³⁴ BPP Consulting (2014) 'Site Selection and Assessment Process – Summary Report', version description 'Final Issue – updated', version number 1.2.



Development of shortlist

Using the scoring process described above, a shortlist of new and existing sites suitable for future development as waste management sites was compiled. Shortlisted sites came from either of four categories:

- sites in existing waste use;
- land adjacent to sites in existing waste use;
- · land within existing industrial areas; or
- land adjacent to existing industrial areas.

Subsequently, the sites identified as broadly suitable for waste use were assessed in terms of the likelihood of their deliverability during the plan period of the WLWP. The deliverability assessment used the following criteria:

- the area of the site was greater than 0.5 ha;
- the site scored well in the original assessment; and
- for existing sites, there were no constraints that would reduce potential for redevelopment e.g. Greenbelt.

Following this assessment, the final list of sites was established. The total area available for waste management development was identified as 15.47 ha, considered sufficient to accommodate facilities with capacity to deliver the apportionment requirements of the London Plan.

5.2 Site suitability assessment

5.2.1 Establishing the relevant site area

In turning to assess the site's potential to support alternative waste uses, we begin by establishing the size of the existing waste management site.

Total site area

The total site area, as described in section (2.1), amounts to about 0.3ha³⁵.

Site area expressed in the WLWP

The WLWP states the site as being 0.23 ha³⁶ in size.

Area dedicated to the waste use

Waterman was puzzled as to why there was a difference between the total site area (0.3ha) and the area quoted in the WLWP (0.23ha). It was therefore decided to investigate whether other land uses were in progress at the site and we report our findings below.

Non-waste uses

Having visited the site, and having understood more of the planning history, the occupation and uses the land has been put to over time, we understand the following uses have been ongoing for an unbroken period of at least the last ten years:

³⁵ For the avoidance of doubt this measurement includes the site road discussed in section (2.1) above. ³⁶ WLWP evidence base, "Potential Sites Assessment", Mouchel, January 2011. This report: lists Arlington Works as one of the *"existing waste management facilities in west London to be safeguarded"*; identifies the site as an existing Transfer Station; and assumes the site area to be 0.23 hectares.



- manufacturing (e.g. the making of articles (such as furniture and metalwork), altering, maintaining, ornamenting, repairing and adapting for sale);
- music composition, recording and rehearsal;
- offices;
- stores; and
- vehicle body work repair and refurbishment.

Areas of shared use include:

- the site access and spine road;
- vehicle parking;
- canteen,
- shower; and
- toilet facilities.

Waste facility

We understand the functionally connected elements of the waste facility include:

- 1) a boiler room;
- 2) laboratory, offices and stores (clustered together in part of the terrace referred to above); and
- 3) a tank farm.

Taken together, the elements dedicated to the waste use amount to approximately 0.05 ha³⁷.

Discussion

There is an importance to establishing the size of the site and, on the face of it, it appears there is ambiguity as to what size one should consider. A means of resolving this is to recall that planning policy, and in this case the WLWP, safeguarded those sites *"lawfully permitted"³⁸* to manage waste. It is therefore important to recollect here that the London Borough of Richmond upon Thames (LBRuT) issued a certificate confirming the lawful use in 1994. The certificate confirms the use:

• "...the refining of waste oil (other than petroleum products) (to include the use of fuel storage tanks in this connection)";

and, by means of a plan, the area over which the use the applies, namely:

"...the land specified in the Second Schedule hereto and [edged] RED..."

It is of course a principle of planning law that the details of any such certificate shall be conclusively presumed from the certificate itself. For the avoidance of doubt then, the lawfully permitted use may only be taken to apply to the area shown in the Second Schedule.

We reproduce the certificate³⁹ in Appendix C, and as will be seen the area is broadly comparable with the area we identify above (entitled Waste facility). Accordingly, though we do not measure with extreme precision in this report, the magnitude we took forward for our suitability analysis was a site of about 0.05ha.

³⁷ Brookes Architects Ltd, dated 23/06/2017.

³⁸ Footnotes 28 and 31 of the WLWP.

³⁹ Reference 94/2139/S191, LBRuT, Certificate of Lawful Use or Development, *"Use for the refining of waste oil (other than petroleum products) (to include the use of fuel storage tanks in this connection)"*, issued 18 October 1994.



5.2.2 Sizing of facilities

Typical site areas

The national and regional guidance summarised above establish criteria that can be used to assess the suitability of sites for new or enhanced waste management facilities. One of the key criteria that, in the WLWP particularly, determines a site's suitability for a waste use is that of site area. Suitable site areas (or perhaps more commonly, "land take") identified in both the ODPM study and the WLWP evidence base are detailed below.

ODPM

The ODPM study reviewed what it considered to be the twelve principal waste management facility types and identified the land take for each facility type, which we summarise in the table below.

Type of waste management facility	Throughput (tonnes/annum)	Typical site area (hectares)
Anaerobic digestion – small scale plant	5,000	0.15
Small scale facilities – civic amenity sites / bring sites	10,000 - 50,000	> 0.5 – 1
Anaerobic digestion – centralised plant	40,000	0.6
Wastetransfer	120,000	0.7
Mechanical and biological treatment	50,000	< 1 – 2
Small scale thermal treatment	50,000	< 1 – 2
Composting – kitchen / catering waste covered by the Animal By-products Order	25,000	1 – 2
Processing of recyclables	50,000	1 – 2
Pyrolysis and gasification	50,000	1 – 2
Composting – green waste only	25,000	2 – 3
Large scale thermal treatment	250,000	2 – 5
Landfill	250,000	5 – 50

Table 3: Typical size and area of various waste management facilities (ODPM study)

WLWP

The land take identified in the WLWP evidence base was based on three sources of information, one of which was the throughput figures given in the 2008 version of the London Plan (which has since been superseded by the 2016 version). These throughput figures are summarised in the table following.



Facility type	Throughput per facility (tonnes/annum)	Land take per facility (ha)
Materials reclamation facility (recycling)	42,000	0.9
Anaerobic digestion	15,000	1
Composting	19,000	1.25
Mechanical biological treatment	125,000	1.75
Gasification / pyrolysis	114,000	2.25

Table 4: Throughput and land take of various types of waste facility according to the London Plan 2008

The WLWP also recognises that sites of less than 0.5 ha are likely to be too small for waste management uses. As part of the WLWP site selection process, sites less than 0.5 ha in area were deemed to be less than optimal for waste management uses and were immediately excluded from the selection process. Note that Arlington Works was only taken through the complete assessment process for the purpose of maintaining an audit trail of all existing waste facilities.

However, as it was deemed that the WLWP area is one with constrained site availability, it was considered appropriate to assess against the smallest / most compact site footprint possible for various types of waste facility. This approach led to the identification of minimum footprint requirements, which we present in the table below.

Facility type	Tonnage	Building footprint	Site footprint	Notes
RDF (refuse derived fuel)	40,000	0.34	0.41	Lancing 40ktpa (kilo-tonnes per annum) excluding pre- processing
ABT (anaerobic biological treatment)	90,000	0.08	0.65	Building footprint = vessel excluding maturation pad
MHT (mechanical heat treatment)	150,000	0.28	0.78	Autoclave
EfW (energy from waste)	60,000	0.40	0.96	Exeter EfW 60ktpa
MRF (materials recovery facility)	50,000	0.28	1.00	ODPM
ATT (advanced thermal treatment)	96,000	0.34	1.68	Gasification
MBT (mechanical biological treatment)	100,000	0.44	1.80	Defra 2013

Table 5: Minimum site footprint requirements for waste management facility types, adapted from WLWP data compendium⁴⁰

The areas of the sites proposed for allocation in the WLWP, and therefore considered suitable for waste management use, ranged from 0.91 to 3.2 ha.

Discussion

The least demanding land take we identify (ODPM study) is that for small scale anaerobic digestion, requiring a site area of at least 0.15 ha. The facility type with the smallest land take identified in the

⁴⁰ WLWP 'Evidence Base: Data Compendium' report, Version 1.1, issued July2014. Available from <u>http://wlwp.net/documents.html</u> (accessed 09/08/2017).



WLWP data compendium is for the manufacture of refuse derived fuel (RDF), requiring a site area of 0.41 ha. The approach underpinning the WLWP, as set out in the data compendium, considered the smallest / most compact site footprints possible for various waste facilities. The footprint for an RDF site therefore represents an absolute minimum.

The safeguarded site (that is to say the portion lawfully permitted to manage waste) is of a scale insufficient to support any of the waste management facility types identified in the ODPM study or the WLWP.

5.2.3 WLWP assessment of the site

Three types of assessment criteria, absolute, computer based and site visit criteria, were used to screen potentially suitable sites as part of the WLWP site selection process. As well as site area, these criteria included the presence of listed buildings, flood risk, proximity to areas of nature conservation and access to infrastructure. A scoring system of 1 to 5 was attributed to each of the criteria. As the local significance of some criteria was considered more important than others, weighting was applied to effectively double the score attributed to those criteria. Weighted criteria comprised the following:

- proximity to the Transport for London road network and strategic road network;
- vehicle routing;
- distance from residential areas, schools and hospitals; and
- proximity to sustainable transport options.

The WLWP assessed Arlington Works and scored it poorly against the site selection criteria:

- it ranked 286th out of the 309 assessed sites (attaining a score of 67 out of approximately 115⁴¹);
- 87 of the 309 sites were existing waste management facilities, and Arlington Works ranked 75th out of these 87.

We also note the site was not one of the existing waste management sites submitted to the WLWP Site Deliverability Assessment, and therefore was considered not to have potential for development as a waste management facility.

We present the WLWP assessment at Appendix D.

5.3 Conclusions

The site commonly referred to as Arlington Works hosts various activities and uses. The element lawfully permitted to manage waste, and which is protected in planning policy through safeguarding, amounts to approximately 0.05ha in size.

Waterman has reviewed the size of the permitted site against documents stating the likely land take of alternative waste management uses finding that the smallest land take, of 0.15ha, was found to relate to small scale anaerobic digestion. Overall, the conclusion Waterman comes to is that the site is of a scale insufficient to support the waste management facility types identified in the ODPM study, or the WLWP.

Notwithstanding the physical size of the safeguarded site, the suitability of it being able to support waste management development warranted further investigation. We note for example it scored poorly in independent studies undertaken for the WLWP. Challenges with using the site include the access route and that it lies close to potentially sensitive receptors.

⁴¹ The WLWP evidence base documents do not clarify the highest possible score, so this number has been estimated on the basis of available information.



6. Waste Capacity, WLWP and apportionment

6.1 Ascribing capacity to the site

6.1.1 Applicant's contention

The safeguarding provided to the site through planning policy ensures that development for non-waste uses will only be considered "...*if compensatory and equal provision of capacity*..." is made. The WLWP amplifies that the safeguarding applies "...*unless an equal and compensatory suitable, acceptable and deliverable site can be provided*...". The use of the word "*can*" implies that planning policy caters for the redevelopment of a waste facility to a non-waste use prior to the actual delivery of the compensatory capacity itself.

In section (4) we established that Arlington Works received about:

- 3% (or about 1,200 tonnes) of the regionally generated waste⁴²; and
- 8% (or about 950 tonnes) of the locally generated waste⁴³.

We observe that if the compensatory capacity is sized to avoid drawing in waste from far and wide then it may be appropriate to settle on an average figure of about 1,000⁴⁴ tonnes per annum (p.a.). Such a level appears consistent with delivering against strategic objectives, such as self-sufficiency and proximity, and to cater for regionally and locally generated waste arisings.

6.1.2 LBRuT's contention

LBRuT take the view that the relevant capacity should be calculated from a three-year rolling average of the amount of material treated at the site. Its Waste Sites Monitoring Report⁴⁵ reveals the application site rolling average (2013-2016) to be 9,512 tonnes. An extract of the data is presented at Appendix E along with revised mapping of the site⁴⁶.

For reasons unknown to the applicant officers of the council have however chosen to consider that 12,000 tonnes⁴⁷ should instead be catered for. During the course of pre-application liaison LBRuT confirmed in writing to the applicant's agent:

- "Policy 5.19 of the London Plan, extract below, addresses your query and would need to be complied with in any future submission. London Plan Policy 5.19, Planning Decisions, B Development proposals that would result in the loss of existing sites for the treatment and/or disposal of hazardous waste should not be permitted unless compensatory hazardous waste site provision has been secured in accordance with Policy 5.17H^{*48}; and
- "We have already confirmed that following the London Plan, policy 5.19, 12,000 tonnes of another hazardous waste stream, is fine."⁴⁹

⁴³ At a local level about 12,000 tonnes of the typical waste streams (received at Arlington Works) arise in the West London Waste Authority (WLWA) area. About 8% of this is received at Arlington Works. ⁴⁴ The sum being 950 + 1200/2 = 1,075 tonnes.

⁴⁵ <u>https://www.richmond.gov.uk/media/15088/waste_sites_monitoring_report_2016_17.pdf</u>, accessed 22/6/2018.
 ⁴⁶ Subsequent to submissions made by the applicant on 9 October 2017 at the Examination in Public of the London Borough of Richmond upon Thames Local Plan, and concluded byway of Report to the London Borough of

Richmond upon Thames - Report on the Examination of the Richmond upon Thames Local Plan, Planning Inspectorate, Ref: PINS/L5810/429/10, dated 26 April 2018.

⁴⁷ Reported verbally by LBRuT during a pre-application liaison meeting on 22 June 2017.

⁴² At a regional level about 38,000 tonnes of the typical waste streams (received at Arlington Works) arise in London itself. About 3% (1,200 tonnes) of this is received at Arlington Works.

⁴⁸ Email LBRuT to Indigo 13 April 2018 14:25 hours.

⁴⁹ Email LBRuT to Indigo 18 April 2018 11:27 hours.



6.1.3 Apportionment

Table 1 above was reproduced from the WLWP and it confirms that Arlington Works is to be counted against the apportionment figures for London's waste. We note however that, in practice, the waste market place disregards administrative borders. As an example, the applicant notes the activity of the London Boroughs of Brent, Ealing and Hounslow. These councils lie within the WLWP area and serve about 250,000 households, and they provide kerbside municipal collections of motor oil to a proportion of these⁵⁰. Rather than use Arlington Works, itself in the WLWP area, they appear to choose to reprocess or dispose of the material they collect to the firms as follows: LB Brent to OSS Group Ltd, Knowsley in Merseyside; LB Ealing to Walker Malcolm t/a Malary Environmental Services, and LB Hounslow to Malary Environmental. Waterman assumes⁵¹ the reference to Malary Environmental Services and Malary Environmental are a reference to Malary Ltd, Cambridge.

6.2 Hazardous waste capacity in the area

The applicant has reviewed publicly available quarterly returns data from the EA for several hazardous waste sites in the London area. The sites included:

- Associated Reclaimed Oils, Royal Borough of Greenwich;
- Brent Oil Contractors, Wembley, London Borough of Brent;
- Heathrow Airport Ltd, London Borough of Hillingdon; and
- Williams Environmental, Silvertown, London Borough of Newham.

The applicant compared the capacity used at the sites versus the permitted capacity and has calculated the difference. The unexploited capacity is shown in the table below.

Operator Name	London Borough	Site Activity	In WLWP area?	Counted Against Apportionment?	Unexploited capacity ⁵² (tonnes)
Associated Reclaimed Oils	Royal Borough of Greenwich	Oil Reclamation Facility	No	Unknown	7,843
Brent Oil Contractors	London Borough of Brent	Oil Reclamation Facility	Yes	Yes	1,978
Heathrow Airport Ltd	London Borough of Hillingdon	CDE waste processing/transfer	Yes	No	18,794
Williams Environmental	Silvertown, London Borough of Newham	Oil Reclamation Facility	No	Unknown	22,077
					Total 50,692

Table 6: Unexploited hazardous waste capacity

The applicant asserts the table above demonstrates there is adequate available capacity to compensate for any loss occasioned through the redevelopment of its waste facility to non-waste uses. It further

⁵⁰ Local Authority Waste and Recycling Information Portal, at

http://laportal.wrap.org.uk/LWARBBoroughServices.aspx, select "Collections Services data download", view the spreadsheet at tab entitled "Kerbside Collection" row 30, and tab entitled "Disposal routes" row 35.

⁵¹ https://environment.data.gov.uk/public-register/view/index

⁵² Three year rolling average for the years 2013, 2014 and 2015.

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observes the unexploited hazardous waste capacity in the WLWP area is shown to be in excess of 20,000 tonnes, again a sum more than adequate in compensation. The data used in devising the table above is presented at Appendix F.



7. Conclusions

Arlington Works hosts various activities and uses. The element lawfully permitted to manage waste, and which is protected in planning policy through safeguarding, amounts to approximately 0.05ha in size.

Waterman has reviewed the size of the permitted site against documents stating the likely land take of alternative waste management uses finding that the smallest land take, of 0.15ha, was found to relate to small scale anaerobic digestion. Overall, the conclusion Waterman comes to is that the site is of a scale insufficient to support the waste management facility types identified in the ODPM study, or the WLWP.

Notwithstanding the physical size of the safeguarded site, the suitability of it being able to support waste management development warranted further investigation. We note for example it scored poorly in independent studies undertaken for the WLWP. Challenges with using the site include the access route and that it lies close to potentially sensitive receptors.

The strategic vision for London includes managing growth without *"having unacceptable impacts on the environment"*⁵³; and ensures London becomes a city that is *"...a world leader in improving the environment locally and globally..."*⁵⁴. It is intended that both the London Plan and the WLWP exert their effect over a time horizon, the London Plan looks forward to 2036-2041, the WLWP to 2031. In light of this the applicant argues the policy requirement is to make good the loss of an existing waste site to non-waste use over the plan period. Accordingly, it would appear consistent with policy to embark on proposals for the redevelopment of Arlington Works providing that appropriate compensation can be provided over the plan period. In cases where existing consented capacity is of such a scale that the loss of a site makes little material difference, perhaps little weight should be placed on the safeguarding policy. The applicant further argues that the use of the word *"can"*, as opposed to other terms urging certainty is proof that policy makers intended that it would be permissible for redevelopment to take place prior to the actual delivery of a replacement facility.

We observe that if the compensatory capacity is sized to avoid drawing in waste from far and wide then it may be appropriate to settle on an average figure of about 1,000 tonnes p.a. Such a level appears consistent with delivering against strategic objectives, such as self-sufficiency and proximity, and would appear to cater for regionally and locally generated waste arisings.

The applicant has reviewed publicly available data, and its analysis demonstrates adequate available capacity to compensate for any loss occasioned through the redevelopment of its waste facility to non-waste uses. It further observes the unexploited hazardous waste capacity in the WLWP area is shown to be in excess of 20,000 tonnes p.a.

⁵³ London Plan Policy 1.1 (B)(b).
 ⁵⁴ London Plan Policy 1.1 (C)(e).



APPENDICES

A. Plans.

Proposed Mixed Use Scheme Ground Floor Site Plan, Brookes Architects, Ref: 4786 3 10 Rev P4, dated 14/05/18.



Do not scale from this drawing Area Schedule - Offices Commercial 1 per 90m² + 1 per 500m² (visitor) = 8 cycles NSA (m²) NSA (ft²) Level Туре 454 ft² <u>Residential</u> 1 per 1 bed unit + 2 per 2 bed unit + 1 per 40 units (visitor) = 42 cycles 00 - Ground Floor Office / Commercial 42 m² 01 - First Floor Office / Commercial 42 m² 454 ft²

3 Bedrooms B1 (A) Office

·		01 - First Floor
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- Marthan	J	Unit 10

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C2			
00 - Ground Floor	Office / Commercial	51 m ²	553 ft ²
01 - First Floor	Office / Commercial	51 m ²	553 ft ²
C3	····	· · · · · · · · · · · · · · · · · · ·	
00 - Ground Floor	Office / Commercial	40 m ²	429 ft ²
01 - First Floor	Office / Commercial	40 m ²	429 ft ²
C4		· · · · · · · · · · · · · · · · · · ·	
00 - Ground Floor	Office / Commercial	38 m ²	410 ft ²
01 - First Floor	Office / Commercial	38 m ²	409 ft ²
C5			
01 - First Floor	Office / Commercial	41 m ²	442 ft ²
00 - Ground Floor	Office / Commercial	41 m ²	443 ft ²
C6		••••••	
01 - First Floor	Office / Commercial		528 ft ²
00 - Ground Floor	Office / Commercial	49 m²	528 ft ²
C7			
00 - Ground Floor	Office / Commercial	43 m ²	468 ft ²
01 - First Floor	Office / Commercial	43 m ²	468 ft ²
Total	·	610 m ²	6568 ft ²
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Area Schedule - Residential						
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				-	70710	
Unit 1		2		74 m²	797 ft ²	
Unit 2	Residential	2	3	62 m ²	667 ft ²	
Unit 3		2	4	62 m²	667 ft ²	
Unit 4	Residential	1	2	51 m²	545 ft ²	
Unit 5	Residential	3	4	76 m²	819 ft ²	
Unit 6	Residential	3	4	76 m²	823 ft ²	
Unit 7	Residential	1	2	51 m²	545 ft ²	
Unit 8	Residential	2	4	76 m²	815 ft ²	
Unit 9	Residential	2	4	76 m²	815 ft ²	
Unit 10	Residential	1 · `	2	51 m²	545 ft ²	
Unit 11	Residential	3	4	76 m²	819 ft ²	
Unit 12	Residential	3	4 · · · ·	76 m²····	823 ft ²	
Unit 13	Residential	1	2	51 m²	545 ft ²	
Unit 14	Residential	2	4	76 m²	815 ft ²	
Unit 15	Residential	2	4	76 m²	815 ft ²	
Unit 16	Residential	1	2	51 m²	545 ft ²	
Unit 17	Residential	3	4	76 m²	819 ft ²	
Unit 18	Residential	2	4	72 m²	776 ft ²	
Unit 19	Residential	2	4	71 m²	769 ft ²	
Unit 20	Residential	2	4	78 m²	840 ft ²	
Unit 21	Residential	2	3	62 m²	672 ft ²	
Unit 22	Residential	2	3	62 m²	672 ft ²	
Unit 23	Residential	3	4	101 m ²	1088 ft ²	
Unit 24	Residential	3	4	101 m ²	1088 ft ²	
Total Units: 24				1684 m ²	18124 ft ²	

Total Units: 24

Site Area Approx. 2965m²

 11/06/2018
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Updated Design ev Description

Public Consultation DWG Issue to Consultants Issued to Consultants

Sharpe Refinery Service Ltd.

Redevelopment of: Arlington Works Twickenham TW1 2BB Drawing

Project

PROPOSED

Mixed Use Scheme Ground Floor Site Plan Scale

Date Drawn Checked 1:200@A1 BrookesArchitects Upstairs at The Grange Bank Lane, London SW15 5JT T 020 8487 1223 F 020 8876 4172 E info@brookesarchitects.co.uk www.brookesarchitects.co.uk

4786

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B. London Borough of Richmond Upon Thames pre-application liaison advice, extracts from letter dated 12 February 2018.

- LP34 'New Housing'
- LP35 'Housing Mix and Standards'
- LP36 'Affordable Housing'
- LP37 'Housing Needs if Different Groups'
- LP39 Infill, Backland and Backgarden Development'
- LP40 'Employment and Local Economy'
- LP41 Offices'
- LP42 'Industrial Land and Business Parks'
- LP44 'Sustainable Travel Choices'
- LP45 'Parking Standards and Servicing'

Supplementary Planning Guidance (SPG) / Documents (SPDs)

- Design Quality SPD (2006)
- Residential Development Standards SPD (2010)
- Small and Medium Housing Sites SPD (2006)
- Sustainable Construction Checklist SPD (2011)
- Affordable Housing SPD (2014)
- Front Garden and Other Off-Street Parking Standards SPD (2006)
- Planning Obligations SPD (2014)
- East Twickenham Village Planning Guidance SPD

West London Waste Plan (WLWP) (2015)

All London Plan, Core Strategy, Development Management Plan, Local Plan policies and Supplementary Planning Guidance and Documents referred to in this letter are available to view on the Council's website (<u>www.richmond.gov.uk</u>).

Following on from your meeting with Wendy Wong Chang, the Council has had an opportunity to look at the plans in some detail in the context of the site.

The main issues for consideration would be:

- Principle of redevelopment and re-use of site
- Design, Massing and Layout
- Sustainability and renewable energy targets
- Parking and transport considerations
- Impact on existing residential amenity

Principle of Redevelopment

Loss of Employment and loss of Waste Management Site

Core Strategy Policy CP19 seeks to retain land in employment use in order to support a diverse and strong local economy in Richmond.

The criteria set out in the emerging Local Plan Policy LP42 and DMP Policy DM EM 2 should be addressed when considering the loss of employment / industrial space. The use of industrial space (outside of the locally important industrial land and business parks) will only be permitted where:

- Robust and compelling evidence is provided which clearly demonstrates that there is no longer demand for an industrial based use in this location and that there is not likely to be in the foreseeable future. This must include evidence of completion of a full and proper marketing exercise of the site at realistic prices both for the existing use or an alternative industrial use completed over a minimum period of two continuous years in accordance with the approach set out in Appendix 5; and then
- 2. A sequential approach to redevelopment or change of use is applied as follows:
 - a. Redevelopment for office or alternative employment uses.
 - b. Mixed use including other employment generating or community uses.

Each borough has been allocated an amount of London's waste that it is required to positively plan for and manage. This includes ensuring that sufficient capacity is identified to meet the apportioned

targets in the London Plan (2011).

The prepared jointly by London Boroughs of Brent, Ealing, Harrow, Hillingdon, Hounslow, Richmond Upon Thames, and Old Oak Common and Royal Development Park Corporation (OPDC) West London Waste Plan (WLWP) forms part of the Local Plan:

The WLWP identifies and safeguards sites for waste management facilities in the area to deal with West London's waste over the period up to 2031. These were selected through a rigorous process lasting a number of years where the public and industry were invited to express their opinions and suggest suitable sites. Site no. 335 is the existing 0.23ha Arlington Works, in Richmond upon Thames. It is acknowledged that the applicants submitted Waste Plan refers to the portion of land being lawfully permitted to manage waste as approximately 0.05ha. The report includes a copy of the land use certificate granted permission under 94/2139/S191 which indicates that only the land portion of the land is subject to permission for change of use to the waste oil refinery, being the northern part of the site. Whilst it is acknowledged that the use is limited to only a portion of the site. the single point of access as a right of way to the facility would be considered as ancillary to the function of the waste oil refinery. Further, it is evident that the existing BTM's are currently used as part of the waste oil refinery. It would therefore be considered that these buildings are used as ancillary to the function of the waste oil refinery. On this basis, whilst there is some merit to the lawful use of the site being limited to a portion less than 0.023 hectares, it would need to be demonstrated that the use of the remainder of the site is not currently and has not previously been associated with the waste use for a period of 10 years.

Policy WLWP 2 - Safeguarding and Protection of Existing and Allocated Waste Sites states that land accommodating existing waste management uses in West London will be protected for continued use for waste management.

Existing sites which have been allocated as having the potential for capacity expansion by redevelopment (Table 5-1) and new sites with potential for development for waste management facilities (Table 5-2) are also to be safeguarded.

To ensure no loss in existing capacity, re-development of any existing waste management sites must ensure that the quantity of waste to be managed is equal to or greater than the quantity of waste for which the site is currently permitted to manage, or that the management of the waste is being moved up the waste hierarchy.

Development for non-waste uses will only be considered on land in existing waste management use, (or land allocated in Table 5-2) if compensatory and equal provision of capacity for waste, in scale and quality, is made elsewhere within the West London Boroughs.

In addition, land in employment uses should be retained in employment use for business, industrial or storage purposes, as outlined under Policy LP40 of the emerging Local Plan. The borough has a very limited supply of industrial land and is categorised as "restrictive transfer" by the Mayor of London. This means the Council should take a restrictive approach to the transfer of industrial land to other uses. The criteria set out in LP42 must be met even if WLWP policy 2 could be satisfied.

It is noted that whilst the adjacent Twickenham Film Studios is identified within the emerging Local Plan as a Key Employment Site, Arlington Works is not.

New Residential Use

The proposed residential use as part of a mixed use development would only be considered acceptable provided it does not result in any loss of existing employment floorspace unless the requirements of the aforementioned policies have been addressed and that comprehensive and equal provision for waste handling is made elsewhere in London. The proposal needs to ensure it does not have any negative impact on the employment use nor the successful operation of that use and any neighbouring businesses in terms of access, servicing or any conflict such as hours of operation, noise, to address the requirements of Policy DMDC2. The scheme submitted for Pre-App suggests separate access for the commercial and residential elements which could possibly address



C. Certificate of Lawful Use or Development.

TOWN AND COUNTRY PLANNING ACT 1990, sects. 191 and 192 (as amended) Town and Country PLanning General Development Order 1988 (as amended) Art. 26A

Certificate of Lawful Use or Development

94/2139/S191

Council

The(a) London Borough of Richmond upon Thames

hereby certify that on(b) 23rd August 1994

the [use] [operations] [matter] described in the First Schedule hereto in respect of the land specified in the Second Schedule hereto and [edged] [hatched] [coloured] (c) RED on the plan attached to this Certificate, [was] [would have been] lawful within the meaning of section 191 of the Town and Country Planning Act 1990 (as amended) for the following reason[s]

The use began more than ten years before the date of this application.

Principal Planning Officer

Signed

authorised officer

On behalf of(*)_____

.....

Date 18 October 1994

Delete any words in square brackets which do not apply

FIRST SCHEDULE (d)

Use for the refining of waste oil (other than petroleum or petroleum products) (to include the use of fuel storage tanks in this connection).

(a) Insert name of Council

(b) Insert date of application to Council

(c) Insert colour used on plan

(d) Full description of use; operations or other matter, if necessary by reference to details in the application or submitted plans, including a reference to the use class, if any, of the Use Classes Order within which the certificated use falls

CONTINUED OVERLEAF

Land at Arlington Works, Arlington Road, Twickenham

Notes:

- 1 This certificate is issued solely for the purpose of section [191] [192] of the Town and Country Planning Act 1990 (as amended).
- 2 It certifies that the [use] [operations] [matter] specified in the First Schedule taking place on the land described in the Second Schedule [was] [would have been] lawful on the specified date and, thus, [was not] [would not have been] liable to enforcement action under section 172 of the 1990 Act on that date.
- 3 This certificate applies only to the extent of the [use] [operations] [matter] described in the First Schedule and to the land specified in the Second Schedule and identified on the attached plan. Any [use] [operations] [matter] which is materially different from that described or which relates to other land may render the owner or occupier liable to enforcement action.
- [4 The effect of the certificate is also qualified by the proviso in section 192(4) of the 1990 Act, as amended, which states that the lawfulness of a described use or operation is only conclusively presumed where there has been no material change, before the use is instituted or the operations begun, in any of the matters relevant to determining such lawfulness.]




D. WLWP Site Assessment Process.

Appendices Land at Arlington Works, Arlington Road, Twickenham, TW1 2BB Document Reference: WIE12815-100-R-3-4-1-WasteUseRpt Project Number: WIE12815-100

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Site Report for 335

General Information

Borough: Richmond Area: 0.23

Description: Arlington Works

This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown Copyright London Borough of Brent: 100019260 London Borough of Hairow: 100019206 London Borough of Hillingdon: 100019283 London Borough of Hounslow: 100019263 London Borough of Richmond: 100019441 Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings

Location Map



Score & Ranks

Show Stoppers SSSI SPA SAC RAMSAR NNR Int & Nat Historic Importance Greenfield & Flood Zone 3b Area Crossrail Safeguard	False False False False False False True False False	Screening Criteria Protected Views Greenbelt, Open Space & MOL Flood Zone SPZ Sustainable Transport SRN PROW Local Conservation Area Nature Conservation Locally Important NCA	1 5 6 10 5 3 5 5
All	Faise	Archaeological Site Land Stability HE and Built Heritage	5 5 5 1
		Total	57
Manual Screening Criteria			
Site Configuration	3	The site is small and rectangular	
Existing Use /Buildings On Site	1	There are two rows of small two storey brick houses/wor storey sheds, exterior oil storage tanks and a 10-12m ch	
Proximity To Residential Areas	2	The site is screened fairly well by office buildings from the properties in the area. Only the flats on the south west straight on to the site.	ne residential
Vehicle Routing	2	The routing is via a narrow access road and then on to ro roads.	esidential
Visual Intrusion	1	Any developments on site should aim to minimise the vis the flats near the south west corner of the site.	sual impacts to
Potential for co-location	1	The site is too small for co-location.	
General	0	The site is very confined by the railway and surrounding	buildings.
Total	10		
Grand Total	67		

The site is proximal to waste arising from the following borough/boroughs: $\ensuremath{\mathsf{Richmond}}$



E. Extract from LBRuT Waste Sites Monitoring report.

Appendices Land at Arlington Works, Arlington Road, Twickenham, TW1 2BB Document Reference: WIE12815-100-R-3-4-1-WasteUseRpt Project Number: WIE12815-100

List of Facilities:		From Mayor	of London V	Vaste Map						
Site Name	Site Type	Majority Waste Type	Licensed Tonnage	Tonnage Received 2016	Average Tonnage Received (2013- 16)	Difference	Address	License Number	License Holder Name	Facilities on site (if known)
Townmead Civic Amenity Site	Household Reuse and Recycling Centres	Hhold/Ind/ Com	75000	17776.19	19371	1594.81	Townmead Civic Amenity Site, Townmead Road, TW9 4EL	83209	Richmond Upon Thames London Borough Council	Only 1 waste category type managed
Arlington Oil Facility EPR/JP3332 ME	Materials recycling and sorting	Hazardous	2000000	9687.794	9512	-175.794	Arlington Oil Facility EPR/JP3332ME, TW1 2BB	JP3332M E	Sharpe's Recycle Oil Limited	Only 1 waste category type managed
Richmond Park Golf Club	Other	Inert/C+D	142500	0	24140	24140	Richmond Park Golf Club, SW15 5JR	104458	Oakland Golf And Leisure Limited	Mixed facility type - more than 1 waste category type managed
Proper Oils	Materials recycling and sorting	Hhold/Ind/ Com	999999	0	64	64	Proper Oils, TW1 1AA	VP3932C U	Proper Energy Limited	Mixed facility type - more than 1 waste category type managed
Central Depot	Waste transfer (household and commercial)	Hhold/Ind/ Com	60000	16945.58	19209	2263.42	Twickenham Central Depot, Langhorn Drive, Twickenham Middlesex, TW2 7SG	400101	London Borough of Richmond Upon Thames	Only 1 waste category type managed





F. Hazardous waste capacity data.

Appendices Land at Arlington Works, Arlington Road, Twickenham, TW1 2BB Document Reference: WIE12815-100-R-3-4-1-WasteUseRpt Project Number: WIE12815-100

ARO - /	RO - Associated Reclaimed Oils Ltd				EPR permit WP	3930UD			
.65, Tuni	nel Avenue, Greenw	ich, London SE1	10 OPW						
<u>2013</u>	Jan-March	April-June	July-Sept	Oct-Dec	15,600	TONNES	(Permitted ann	ual amount	
							60 tonnes/day=	=15,600 tonnes/year)	
							15,600.00		
Totals	1,747,635	1,788,757	1,869,829	1,731,149	7,137,370	KG	7,137.37		
						TONNES	8,462.63	Tonnes of spare capacity 2	2013
					7,137.37	TONICS	0,402.03		
2014	Jan-March	April-June	July-Sept	Oct-Dec					
2014	Jan-Iviarch	April-Julie	July-Sept	Oll-Del					
							15,600.00		+ +
Totals	1,832,685	1,848,052	2,029,265	1,905,177	7,615,179	KG	7,615.18		
						TONNES	7,984.82	Tonnes of spare capacity	2014
2015	Jan-March	Jan-March	April-June	July-Sept	Oct-Dec				
	1,560,907	1560.907	0.697	1.1	2.12	2			
	43,890	43.89	4.61	4.62	3.38	3			
	1,220	1.22	1704.12	1771.73	1765.93	3			
	110,350	110.35	3.2	0.95	. 0)			
				46.19					
	181,445		49.69		32.21	1			
	13,570	13.57	32.18	32.05	i 39.59	3			
	13,570 47,710	13.57 47.71	32.18 20.38	32.05 16.26	i 39.59 i 12.33	3			
	13,570 47,710 6,645	13.57 47.71 6.645	32.18 20.38 1.96	32.05 16.26 0.36	39.59 12.33 0.72	2			
	13,570 47,710 6,645 37,835	13.57 47.71 6.645 37.835	32.18 20.38 1.96 88.62	32.05 16.26 0.36 80.36	i 39.59 i 12.33 i 0.72 73.89	2			
	13,570 47,710 6,645	13.57 47.71 6.645 37.835 0	32.18 20.38 1.96	32.05 16.26 0.36	39.59 12.33 0.72	2			
	13,570 47,710 6,645 37,835 0	13.57 47.71 6.645 37.835 0 0	32.18 20.38 1.96 88.62 170.08	32.05 16.26 0.36 80.36 183.66	39.59 12.33 0.72 73.89 157.92	2			
	13,570 47,710 6,645 37,835 0 0	13.57 47.71 6.645 37.835 0	32.18 20.38 1.96 88.62 170.08 13.21	32.05 16.26 0.36 80.36 183.66 14.15	39.59 12.33 0.72 73.89 157.92 10.39	2			
	13,570 47,710 6,645 37,835 0 0 0 3,115	13.57 47.71 6.645 37.835 0 0 0 3.115 19.675	32.18 20.38 1.96 88.62 170.08 13.21 46.04 0.83	32.05 16.26 0.36 80.36 183.66 14.15 45.1	39.59 12.33 0.72 73.89 157.92 10.39	2			
	13,570 47,710 6,645 37,835 0 0 0 0 3,115 19.675	13.57 47.71 6.645 37.835 0 0 0 3.115 19.675 0.6	32.18 20.38 1.96 88.62 170.08 13.21 46.04 0.83	32.05 16.26 0.36 80.36 183.66 14.15 45.1	39.59 12.33 0.72 73.89 157.92 10.39				
	13,570 47,710 6,645 37,835 0 0 0 0 3,115 19,675 600	13.57 47.71 6.645 37.835 0 0 0 3.115 19.675 0.6 0 0	32.18 20.38 1.96 88.62 170.08 13.21 46.04 0.83 0.12	32.05 16.26 0.36 80.36 183.66 14.15 45.1 0.9	39.59 12.33 73.89 157.92 10.39 36.47 0 0				
	13,570 47,710 6,645 37,835 0 0 0 0 3,115 19,675 600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13.57 47.71 6.645 37.835 0 0 0 3.115 19.675 0.6 0 0 0 0 1.2	32.18 20.38 1.96 88.62 170.08 13.21 46.04 0.83 0.12 11.53 1.6 0.2	32.05 16.26 0.36 80.36 183.66 14.15 45.1 0.9	39.59 12.33 73.89 157.92 10.39 36.47 0 11.5 11.5			15,600.00	
Totals	13,570 47,710 6,645 37,835 0 0 0 3,115 19,675 600 0 0 0	13.57 47.71 6.645 37.835 0 0 0 3.115 19.675 0.6 0 0 0 0 1.2	32.18 20.38 1.96 88.62 170.08 13.21 46.04 0.83 0.12 11.53 1.6	32.05 16.26 0.36 80.36 183.66 14.15 45.1 0.9	39.59 12.33 0.72 73.89 157.92 10.39 36.47 0 0 0 11.5 0.62 0		26 TONNES	15,600.00 8,517.26	

OIL CONTRACT	ORS LTD		EPR permit YP37	32MN/V002		5,000 tonnes		(Permitted v	olume= 5,	000 tonnes	/year)
ay, Wembley, N	1iddlesex HA9 0LH	1									
Jan-March	April-June	July-Sept	Oct-Dec			5000.00					
TOTALS 708,654	761,471	743,890	735,000	2949015	KG	2949.02					
				2949.02 Tonnes		2050.98	Tonnes of spare capacity 2013				
Jan-March	April-June	July-Sept	Oct-Dec			5000.00					
745,975	787,329.27	816,281	723,896	3073481.27	KG	3073.48					
				3073.48	Tonnes	1,926.52	Tonnes	of spare capacity 2014			
Jan-March	April-June	July-Sept	Oct-Dec			5000.00					
	•		744,519	3043673.25	KG	3043.67				 	
				3043.67	Tonnes	1,956.33	Tonnes	of spare capacity 2015			
	ay, Wembley, M Jan-March 708,654 Jan-March 745,975 Jan-March	Jan-March April-June 708,654 761,471 Jan-March April-June 745,975 787,329.27 Jan-March April-June	ay, Wembley, Middlesex HA9 0LH Jan-March April-June July-Sept 708,654 761,471 743,890 Jan-March April-June July-Sept 745,975 787,329.27 816,281 Jan-March April-June July-Sept	ay, Wembley, Middlesex HA9 0LH	ay, Wembley, Middlesex HA9 0LH intervention Jan-March April-June July-Sept Oct-Dec 708,654 761,471 743,890 735,000 2949015 708,654 761,471 743,890 735,000 2949015 708,654 761,471 743,890 735,000 2949015 708,654 761,471 743,890 735,000 2949015 708,654 761,471 743,890 735,000 2949015 1 1 1 2949.02 1 1 1 1 1 1 1 1 1 1<	ay, Wembley, Middlesex HA9 0LHinterfaceay, Wembley, Middlesex HA9 0LHinterfaceJan-MarchApril-JuneJuly-SeptOct-DecJan-MarchApril-JuneJuly-SeptOct-Dec708,654761,471743,890735,0002949015KG2949.02TonnesJan-MarchApril-JuneJuly-SeptOct-DecJan-MarchApril-JuneJuly-SeptOct-Dec745,975787,329.27816,281723,8963073481.27Jan-MarchApril-JuneJuly-SeptOct-DecJan-MarchApril-JuneJuly-SeptOct-DecJan-MarchApril-JuneJuly-SeptOct-DecJan-MarchApril-JuneJuly-SeptOct-DecJan-MarchApril-JuneJuly-SeptOct-DecJan-MarchApril-JuneJuly-SeptOct-Dec	ay, Wembley, Middlesex HA9 0LH	ay, Wembley, Middlesex HA9 0LH indication indication	ay, Wembley, Middlesex HA9 0LH Image: Constraint of the second secon	ay, Wembley, Middlesex HA9 OLH A Paril-June July-Sept Oct-Dec Oct-Dec Source Spare capacity 2013 Jan-March April-June July-Sept Oct-Dec Sucres Spare capacity 2013 Jan-March April-June July-Sept Oct-Dec Sucres Spare capacity 2013 Jan-March April-June July-Sept Oct-Dec Sucres Spare capacity 2014 Jan-March April-June July-Sept Oct-Dec Sucres Kg Sucres Kg Sucres Spare capacity 2014 Jan-March April-June July-Sept Oct-Dec Sucres Kg Sucres Kg Sucres Spare capacity 2014 Jan-March April-June July-Sept Oct-Dec Sucres Kg Sucres Kg Sucres Spare capacity 2014 Jan-March April-June July-Sept Oct-Dec Sucres Kg Sucres Kg Sucres Spare capacity 2014 Jan-March April-June July-Sept Oct-Dec Sucres Kg Sucre	ay, Wembley, Middlesex HA9 OLH

HEATHRO\	HEATHROW AIRPORT LTD		WML80042, EPR permit			20,020 tonne	(Permitted volume	e 55 tonnes/day/7 days a wk = 20,02 tonnes/Year)
			VP3096NC/V002					
Cranford Lar	ne Transfer Station,	Hillingdon Have	s TW6 1IH					
2013	Jan-March	April-June	July-Sept	Oct-Dec				
	121.15	-						
	17.24	17.84	14.88	3				
	2.38	2.34	2.02	2				
	217.18	157.1	218.26	6				
	0	0	1.6	5			20020.00	
TOTALS	357.95	297.74	371.34	596.6	1623.63	TONNES	1,623.63	
							18,396.37	Tonnes of spare capacity in 2013
2014	Jan-March	April-June	July-Sept	Oct-Dec				
	123.9	120.26						
	14.84	17.98 0.44						
	3.06	170.24						
	0.76		30.1	103.40			20020.00	
TOTALS	495.71	308.92	247.38	232.8	1284.81	TONNES	1,284.81	
							18,735.19	Tonnes of spare capacity 2014
			-					
	Jan-March	April-June	July-Sept	Oct-Dec				
2015			111.94	110.12				
2015	95.18	97.17	Î.					
2015	95.18 14.34	14.06	16.14	15.86				
2015	95.18 14.34 2.4	14.06 7.76	16.14				20020.00	
2015 TOTAL	95.18 14.34	14.06 7.76 112.32	16.14 4 0	Image: 15.86 Image: 15.86	768.51	TONNES	20020.00 768.51	

WILLIAMS ENVIRONMENTAL LTD		EPR permit WP333	36SA	25,000 Tonnes (Permitted 25,00	0 tonnes /year)			
3, Charles St	reet, Silvertown, London	E16 2BY						
<u>2013</u>	Jan-March	April-June	July-Sept	Oct-Dec				
						25,000.00		
TOTAL 2,181,739.4	2,181,739.46	2,128,728.96	1,472,344.91	1,171,707.16	6954520.49 КG	6,954.52		
					6,954.52 TONNES	18,045.48	Tonnes of spare capa	acity 2013
2014	lan March	A muit to ma	luk Cant	Oct Dec				
<u>2014</u>	Jan-March	April-June	July-Sept	Oct-Dec		25 000 00		
TOTALS	1,353,381.69	1,369,811.01	992,778.22	930,697.64	4646668.56 KG	25,000.00 4646.67		
TOTALS	1,555,501.05	1,505,011.01	552,770.22	550,057.04	4,646.67 TONNES		Tonnes of spare capa	acity 2014
<u>2015</u>	Jan-March	April-June	July-Sept	Oct-Dec				
						25,000.00		
TOTALS	780,230.54	786,738.06	528,000.00	738,498.07	2,833,466.67 KG	2,833.47		
					2,833.47 TONNES	27,833.47	Tonnes of spare capacity 201	



UK and Ireland Office Locations

