North London Waste Authority

# Planning Appraisal

Edmonton Site

# ARUP

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# **Planning Appraisal**

Edmonton Site

September 2009

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# Contents

			Page
1	Introdu	Introduction	
2	Site Co	Site Context	
3	Plannii	Planning Policy Context	
	3.1	National Planning Policy	4
	3.2	The London Plan (2008)	6
	3.3	Local Planning Policy	9
4	Plannii	Planning Issues	
	4.1	Compatibility with the Emerging Planning Policy Framework	15
	4.2	Site Capacity	16
	4.3	Compatibility with Existing Uses and Phased Implementation	16
	4.4	Hydrology and Floodrisk	17
	4.5	Access and Traffic	18
	4.6	Energy and Sustainable Design	21
	4.7	Visual Impact and Design Quality	21
	4.8	S106 Obligations	22
	4.9	Consultation	22
	4.10	Appropriate Assessment	22
5	Risk A	nalysis	23

### **Appendices**

Appendix A Options under Consideration (produced by Entec)

## **1** Introduction

This report has been prepared for the North London Waste Authority (NLWA) to assess the planning issues associated with the possible development proposals at the North London Eco Park site.

Three different options for the redevelopment of the North London Eco-Park are proposed, differing in regards to site size, design and waste technology. These options include the following technological itineraries, and are additional to the existing 550 ktpa Incinerator and 30 ktpa In-Vessel Aerobic Composting (IVC) facility located on the site:

Option A. 350 ktpa MBT/AD, 70 ktpa MRF, 115 ktpa AD;
Option B. 350 ktpa EfW, 70 ktpa MRF, 115 ktpa AD; and
Option C. 600 ktpa EfW, 70 ktpa MRF, 115 ktpa AD.

Relevant drawings are included in Appendix 1.

Elements of text within this Site Appraisal is reproduced from Arup's September 2008 Central Leeside Development Study. This study included sections on the re-use of the Edmonton Eco-Park site, which considered the implications of replacing the existing EfW plant with a new MBT-AD facility. In particular this relates to Hydrology and Flood Risk elements and therefore provides a helpful level of details for these issues.

# 2 Site Context

The North London Eco Park is a 17 hectare site owned by LondonWaste Ltd (see area outlined in red in Figure 1). It offers a range of waste services including recycling, composting, clinical treatment, recovery and disposal - primarily to the North London Waste Authority, but also to Hertfordshire as well as businesses in and around London and the south east.



Figure 1: Aerial Photo of Edmonton Eco Park Site © Google Maps 2009

The site is located at the eastern edge of the Central Leeside industrial area and is accessed from Angel Way. The River Lea and River Lea Navigation Canal runs parallel close to the site's eastern boundary and the A1055 Meridian Way is located to the west.

In terms of land use, the surrounding area is dominated by industrial activity, including general industrial (B2) and storage and distribution (B8) uses. Beyond the sewerage treatment works to the north of the site is the Lea Valley Golf Course which provides a buffer to the southern edge of the Brimsdown industrial area.

To the east of the site, and immediately beyond the Lea Valley Navigation Canal is an open air concrete crushing and recycling facility, beyond which is a residential area interspersed with public open space and small wooded areas. To the south of the site and beyond the A406 is the area known as Meridian Way with mixed land uses, including Ikea and a superstore. The Lee Valley Regional Park dominates the landscape further to the south, with a number of large water bodies. To the west of the site, and within the boundary of Montagu Road, landuse is dominated by industrial activity, while beyond Montagu Road landuse is dominated by residential dwellings and a large cemetery to the northwest Edmonton town centre is located to the northwest of the Eco Park, with the A1055 Meridian Way to the west of the site. The Lea Valley Golf Course and William Girling and King George's Reservoir are located to the north east of the site, while to the south the site is closely bordered by the A406 North Circular.



North London Eco-Park

Figure 2: Site Context © Google Maps 2009

In terms of access to the site, both the A406 and the A1055 are classified as principal roads and provide good links to the trunk road network, including the A10, M11 and M25. The River Lea functions as a Navigation channel and forms part of London's Blue Ribbon Network. Angel Road rail station is located to the south west of the site..

# 3 Planning Policy Context

This section of the report summarises relevant national, regional and local planning policy relevant to consideration of waste development proposals.

#### 3.1 National Planning Policy

Government guidance on waste is found primarily in *PPS10: Planning and Waste* and the *Waste Strategy 2007* Other relevant supporting policy is reviewed below.

#### 3.1.1 Planning and Climate Change – Supplement to PPS1 (2007)

The supplement to PPS 1 identifies how planning, in providing for the new homes, jobs and infrastructure needed by communities, should help shape places with lower carbon emissions and more resilient to the climate change. The document requires planning to contribute towards "*reducing emissions and stabilising climate change (mitigation) and takes into account the unavoidable consequences (adaptation).*"

Paragraph 10 and 11 of the statement respectively outline the key principles that will be considered when deciding upon spatial strategies and in determining planning applications. The following bullet points are of relevance to this proposal:

- "The proposed provision for new development, its spatial distribution, location and design should be planned to limit carbon dioxide emissions;
- New development should be planned to make good use of opportunities for decentralised and renewable or low carbon energy;
- New development should be planned to minimise future vulnerability in a changing climate...;
- Mitigation and adaptation should be considered independently of each other, and new development should be planned with both in mind."(para 10);
- information sought from applicants should be proportionate to the scale of the proposed development, its likely impact on and vulnerability to climate change, and be consistent with that needed to demonstrate conformity with the development plan and this PPS;
- specific and standalone assessments of new development should not be required where the requisite information can be made available to the planning authority through the submitted Design and Access Statement, or forms part of any environmental impact assessment or other regulatory requirement; and
- In considering planning applications before Regional Spatial Strategies (RSSs) and Development Plan Documents (DPDs) can be updated to reflect this PPS, planning authorities should have regard to this PPS as a material consideration which may supersede the policies in the development plan. Any refusal of planning permission on Grounds of prematurely because a DPD is being prepared or is under review but has not yet been adopted should be consistent with Government policy." (para 11).

#### 3.1.2 PPS10: Planning for Sustainable Waste Management (2005)

Government guidance states that when 'searching' for suitable sites for new or enhanced waste management facilities, waste planning authorities should consider a broad range of locations and look for opportunities to co-locate facilities together and with complementary activities. The guidance also notes that consideration should be given to opportunities for on-site management of waste.

It provides the criteria for consideration when 'identifying' waste management sites; this includes:

 "The Physical and environmental constraints on development, including existing and proposed neighbouring land uses

- The cumulative effect of previous 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
- 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." (para 21)

PPS10 establishes that the control of pollution is the responsibility of the pollution control authorities and not the local planning authority. Applicants can prepare and submit planning and pollution control applications in parallel to ensure integrated and timely decisions from each the complementary regimes.

The policy statement identifies that waste management facilities should be well-designed, so that they "contribute positively to the character and quality of the area in which they are *located*." (p15) Whereas poor design can undermine community acceptance and should be rejected.

The Policy statement identifies that "planning applications for sites that have not been identified, or are not located in an area identified, in a development plan document as suitable for new or enhanced waste management facilities should be considered favourably when consistent with the policies and criteria as set out in this PPS and the waste planning authority's core strategy." (para. 24).

The policy statement identifies that in their determination of planning applications for waste development, local authorities should have regard to the policies of PPS10 as material considerations when development plan documents are in their early stages of preparation. It also places a requirement on planning authorities to prepare local development documents that reflect their contribution to delivering the Regional Spatial Strategy (London Plan). Paragraph 5 identifies that "*Any refusal of planning permission on grounds of prematurity will not be justified unless it accords with the policy in The Planning System: General Principles.*"

# **3.1.3** Planning for Sustainable Waste Management: A Companion Guide to Planning Policy Statement 10 (2006)

The companion guide identifies that planning applications that "come forward for sites that have not been identified, or are not located in an area identified, in a DPD as suitable for new or enhanced waste management facilities, may help implement the planning for waste strategy and should not be lost simply because they had not previously been identified." (para 8.14).

The key test is to ensure that proposals are consistent with PPS10 and the waste planning authority's core strategy. The guidance identifies that "where they are consistent they should be considered favourably." (para 8.14).

For waste disposal facilities, applications should be able to demonstrate that "the envisaged facility will not undermine the waste planning strategy through prejudicing movement up the waste hierarchy." (para 8.16) The guidance notes that "if the proposal is consistent with PPS10 and the core strategy there is no need to demonstrate 'need'." (para 8.17).

#### 3.1.4 PPS9: Biodiversity and Geological Conservation (2005)

PPS9 seeks to promote sustainable development by:

- Ensuring that biological and geological diversity are conserved and enhanced
- Conserving, enhancing and restoring England's wildlife and geology
- Enhancing biodiversity (predominantly within green spaces)
- Ensuring that development takes account of the role and value of biodiversity.

The policy statement identifies that "the aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where granting planning permission would result in significant harm to those interests, local planning authorities will need to be satisfied that the development cannot reasonably be located on any alternative sites that would result in less or no harm. In the absence of any such alternatives, local planning authorities should ensure that, before planning permission is granted, adequate mitigation measures are put in place." (para 1)

The guidance refers to the protection of nature at all levels from local to national, although affords a high degree of protection to national and regionally important sites of nature conservation value. Para 12 seeks to protect and enhance networks of natural habitats and states that "*such networks should be protected from development and where possible strengthened by or integrated within it.*"

Para 14 of PPS 9 states that "development proposals provide many opportunities for building-in beneficial biodiversity or geological features as part of good design. When considering proposals, local planning authorities should maximise such opportunities in and around developments, using obligations where appropriate."

#### 3.1.5 ODPM Circular 06/2005: Biodiversity-related Statutory Obligations

To the south of the site approximately 450 hectares of the Lee Valley that includes Lockwood and Warwick Reservoir is registered as a Special Protection Area, which is a European-level designation under the Habitats Regulations.

The SPA is located approximately two kilometres to the south of the site, beyond the A406 and other developed areas. In line with the Habitats Regulations it is necessary to determine whether Appropriate Assessment should be undertaken to ascertain whether the proposed development would have a significant impact on the designation.

#### 3.1.6 Waste Strategy, Defra (2007)

The Waste Strategy 2007 highlights the increasing the value obtained from the use of different kinds of material recycling facilities (MRFs) and encourages a variety of energy recovery technologies (including anaerobic digestion) to ensure that unavoidable residual waste is treated in the way which provides the greatest benefits to energy policy.

#### 3.2 The London Plan (2008)

The London Plan (Consolidated with Alterations Since 2004) was published in February 2008 and provides the Mayor's policy requirements for planning for waste developments and management.

**Sustainable development** underpins the London Plan and should be given a great deal of consideration from the outset. Policy 2A.1 – Sustainability Criteria – states that the borough should promote, support and encourage the development of London in ways that secure the plan's social, environmental and economic objectives. This includes optimising the use of previously developed land and vacant or underused buildings, and ensuring that development takes account of the capacity of existing or planned infrastructure. It notes that consideration should be given to the physical constraints of development (for example flood risk), and ensure that any such impacts are acceptably mitigated.

A key policy tenet throughout the Plan's waste policies is to **safeguard and utilise existing waste management sites**. Specifically, Policy 4A.22 supports safeguarding all existing waste management sites and re-using surplus waste sites for other waste uses to achieve the Mayor's objectives of self sufficiency and proximity. Policy 4A.24- Existing Provisioncapacity, intensification, re-use and protection- recognises existing waste management sites as a strategic resource that will contribute to London's self sufficiency, and seeks to safeguard all existing waste management sites unless compensatory provision is made. Compensatory site provision is defined in this policy as provision that will meet the "maximum throughput that the site could have achieved." The supporting text highlights the need for additional waste sites totalling some 215ha (in addition to the re-use of surplus waste sites, totalling some 113ha).

Policy 4A.22- **Spatial Policies for Waste Management**- supports "*driving waste* management up the waste hierarchy, the objectives of communities taking more responsibility for their own waste and disposing waste in one of the nearest appropriate locations" (p221) The policy identifies, wherever feasible, the re-use of surplus waste transfer sites for other waste uses, and encourages the "*development of resource recovery parks*/ *consolidation centres, where manufacturing industries and recycling and recovery industries can co-locate*." (p223) The London Plan notes that the Mayor will "work with the South East and East of England regional authorities to co-ordinate strategic waste management across the three regions." (p223).

Policy 4A.21- Waste strategic policy and targets- identifies that communities should take more responsibility for their own waste and enable sufficient and timely provision of waste management facilities to meet the needs of their communities. In particular, the policy notes that where waste cannot be recycled, the Mayor will encourage the production of energy from waste using new and emerging technologies, especially where the products of waste treatment could be used as fuels (e.g. bio fuels and hydrogen). The policy identifies that *"Having regard to the existing incineration capacity in London and with a view to encouraging an increase in waste minimisation, recycling, composting and the development of new and emerging advanced conversion technologies for waste, the Mayor will consider these waste management methods in preference to any increase in conventional incineration capacity will, over the lifetime of this plan, become orientated towards non-recyclable residual waste. The Mayor will also consider, in preference to incineration, technologies that have the potential to produce renewable hydrogen from waste".* 

Particularly relevant to the scoping viability of potential sites is Policy 4A.23 -**Criteria for the selection of sites for waste management and disposal.** This requires Development Plan Documents such as the North London Waste Plan to identify sites and allocate sufficient land for waste management and disposal, employing the following criteria:

- Proximity to source of waste
- The nature of activity proposed and its scale
- The environmental impact on surrounding areas, particularly noise, emissions, odour and visual impact
- The full transport impact of all collection, transfer and disposal movements, particularly maximizing the potential use of rail and water transport
- Primarily using sites that are located on Preferred Industrial Locations or existing waste management locations

The policy identifies that "wherever possible, opportunities should be taken to include provision for Combined Heat and Power (CHP) or Combined Cooling Heat and Power (CCHP) to accommodate various related facilities on a single site (resource recovery parks / consolidation centres)."

Throughout the policies of the London Plan, emphasis is placed on **proximity** of sites to the source of waste, in accordance with the proximity principle. The proximity principle is one of four elements that make up the Mayor's strategic waste management framework based on the Best Practicable Environmental Option (BPEO). The three other aspects of the framework are the waste hierarchy, regional self-sufficiency and social, environmental and economic factors.

Commentary within the Mayor's Municipal Waste Management Strategy (2003) states that the aim of the proximity principle is to "avoid passing the environmental costs of waste

management on to communities that are not responsible for its generation" and to reduce the environmental costs of transporting waste. The Strategy goes on to state that "waste management facilities should be located locally to avoid unnecessary transportation and improve local self-sufficiency for waste management, thus ensuring that local communities take responsibility for the management of the waste that they produce."

However, there is some flexibility to the proximity principle and the Strategy states that it should not be regarded as an absolute. Other issues such as transportation and land availability will also have to be considered. Should it not be possible to deal with waste within the waste authority area, "an alternative site should be sought as close as reasonably possible." Furthermore it may be more suitable to seek a site which can utilise sustainable transport such as water or rail but which is not located within close proximity. Policy 4A.2 of the London Plan identifies that where waste cannot be dealt with locally, local planning authorities should promote waste facilities that have good access to rail transport or the Blue Ribbon Network.

Policy 4A.26 requires that a range of waste management facilities are identified to manage the 13mtpa produced in London over the period 2005-2020. The supporting text identifies that the proximity principle "*supports the provision of smaller, more local site provision*" (p234), but this should be balanced against the efficiencies of scale for larger facilities, as well as local siting, design and environmental impact issues.

Given that there appears to be some application of flexibility to the proximity principle, and that regard must always be had to other material considerations, a strong case could be made by the North London Waste Authority that it must establish its facilities in the best value location within the 7 boroughs within its jurisdiction, taking into consideration land supply issues and site constraints. Furthermore a location can ensure sustainable transport modes such as river or rail links, or even the use of less polluting vehicles, highly efficient routing and operating practices; all of these deliverables would counter balance the need to apply the proximity principle to an additional site within the Waste Authority's remit.

Policy 6A.4 **Priorities in planning obligations** requires that affordable housing, supporting the funding of Crossrail and other public transport improvements should, where appropriate, be given the highest importance. Importance should also be given to tackling climate change, learning and skills, health facilities and services and childcare provisions.

Policy 6A.5 **Planning obligations** identifies that the Boroughs should, in DPD set out a clear framework for negotiations on planning obligations, having regard to central government policy and guidance and local and strategic considerations

Policy 6A.5A **Community Infrastructure Levy** seeks to ensure the effective development and implementation of the proposed Community Infrastructure Levy.

#### 3.2.1 Review of the London Plan

On 29 April 2009, the Mayor launched his formal review of the London Plan. The London Plan Initial Proposals were published in April 2009 and set out the Mayor's vision for the capital, his planning objectives and a series of policy directions for London's development through to 2031. It is anticipated that a draft London Plan will be available for consultation in Autumn 2009, followed by an examination in public in Summer 2010.

Relevant issues set out in the Initial Proposals include:

- Stronger promotion of new environmental industries
- Update approach to carbon dioxide reduction targets and trajectories
- Manage as much of London's waste within London as practicable / zero waste to landfill outside London
- Create positive environmental impacts from waste processing
- Consider carbon outcomes of waste processing

#### 3.2.2 Planning for a Better London

The report was published in July 2008 and sets out the Mayor's approach to planning issues within the London. It explains the key areas that he wanted to address through the future revision the London Plan and other related strategies and guidance. The report identifies that The Mayor will use his planning powers to improve the quality of local environments in London and address environmental problems such as poor air quality, noise pollution and lack of accessible open spaces. In terms of waste management, the report identifies that *"The Mayor will also use the planning system to improve the way London deals with waste, encouraging minimisation, recycling and more environmentally-friendly methods for disposal."* (p27).

#### 3.2.3 North London Sub-Regional Development Framework (SRDF)

The North London SRDF (2008) provides guidance on the implementation of policies in the London Plan in order to help deliver a sustainable and prosperous future for the sub-region.

The framework notes that boroughs should, through their LDDs, identify a range of facilities sufficient to meet the sub-region's required waste processing capacity. Moreover, it identifies that recycling and waste treatments are important growth industries and it is important to consider suitable sites and environmental separation buffers. The document also notes that the implications for freight will also need to be taken into account.

#### 3.3 Local Planning Policy

The Development Plan Documents for Enfield are in their early stages of review, together with the Joint Waste Development Plan Document: *The North London Plan.* On this basis, regard must be had to the London Plan and PPS10 in considering specific waste policies relating to new waste development in Enfield.

Following a series of interrelated consultation exercises, Enfield published the Growth Areas Report in March 2009 which pulls together and summarises the work undertaken thus far (Further Consultation on Preferred Options for the Core Strategy).

The Core Strategy Submission Document is expected to be out for public consultation in Autumn 2009. The finalised Core Strategy will be examined by an Independent Planning Inspector with a public hearing session before adoption in 2010.

#### 3.3.1 The North London Waste Plan

The constituent boroughs of the North London Waste Authority are in the process of developing a North London Joint Waste Development Plan Document, the North London Waste Plan (NLWP). The NLWP will identify sufficient sites to deal with this waste, potentially using a mix of facilities including recycling, composting and using waste to produce energy.

The first stage of the production of the NLWP, the Issues and Options Report was published in January 2008 and subject to public consultation in January and February 2008. Currently the boroughs are reporting the Preferred Options to their Cabinets to ratify public consultation on October/November 2009. The draft of the Preferred Options identifies the Eco Park site as an existing waste management site. Policy NLWP1 supports the ongoing use of existing waste sites, including "where appropriate, intensification of waste use on existing waste management sites". Policy NLWP2 reiterates that the existing use of identified waste sites will be safeguarded and that proposals for adjoining sites "should have regard to potential waste uses or intensification of existing uses on these sites". As such the Waste Plan supports the ongoing use and intensification of the Eco Park site.

Policy NLWP3 sets out criteria for high quality development, including measures to mitigate environmental impacts, to promote high quality design, to incorporate transport by modes other that road. The policy specifically requires the preparation of a Health Impact Assessment.

It is also relevant to note that three small sites, adjacent to the Eco Park have been identified as potential waste management sites. It is anticipated that these sites will be used for HWRC and other small scale waste operations.

#### 3.3.2 Enfield Unitary Development Plan Saved Policies 2006

Under the Planning and Compulsory Purchase Act 2004, Enfield's Unitary Development Plan (UDP) was required to undergo an assessment to 'save' its policies. These saved policies will remain in place until they are replaced by Enfield's new Local Development Framework (LDF). According to the UDP the site is designated a Primary Industrial Location. The following policies are particularly relevant based on an assessment of the associated UDP Proposals Map for the Borough, with these policies affecting land in close proximity to the site:

#### 3.3.2.1 Primary Industrial Area

Policy E2 is relevant as the site is designated a Primary Industrial Areas. This identifies that activities falling within the B1- B8 Use Class Order should be concentrated in PIA, subject to the following:

"To have particular regard in the case of Special Industrial Uses (Use Classes B3 -B7) to their effect on residential areas in the vicinity and to their general environmental impact;

To have particular regard to the provisions of Policy E1 in the case of proposals for single warehouse developments which would result in a net increase in floor space intended for Class B8 use of more than 5000 sq. metres;

To resist the development of main use offices of 1000 sq. metres or more in size, except within the Great Cambridge Road Primary Industrial Area as defined on the Proposals Map, where the proposal would:

Be likely to cause traffic congestion or aggravate that condition;

Not have ready access to primary or secondary roads;

Not be served by more energy efficient modes such as public transport."

#### 3.3.2.2 Metropolitan Open Land / Green Belt

A number of saved local policies have been specifically drawn up for the protection, improvement and management of the green belt, including:

- Policy G1, which sets out to "support strongly the principle of the green belt by maintaining inappropriate developments";
- Policy G2, which seeks "the improvement and enhancement of the environment within the Green Belt"; and
- Policy G3, which "promotes active management and use of the green belt whether for agricultural, leisure or for other acceptable purposes."

#### 3.3.2.3 Lee Valley Regional Park

The Eco Park is close to Lee Valley Regional Park. Policy G30 requires development in or adjacent to the park to have regard to its importance for recreation and nature conservation, and, where appropriate, to make provision for improved public access and landscaping planting.

#### 3.3.2.4 Open space

Open space policy is relevant for those areas of green field land which is not designated as green belt.

• Policy O1 seeks "in regard to open land outside the green belt, to balance the needs of the community for open space with uses involving some form of built development."

- Policy O2 sets out to "protect areas of green land of strategic significance outside the green belt from inappropriate development by designating such areas as metropolitan open land."
- Policy O3, which seeks to "promote the green chains within appropriate areas of the borough so as to afford additional protection to the open space, recreation and nature conservation elements within those areas and to resist development which could detract from or sever an existing or proposed green chain."
- Policy O4, sets out to safeguard and to take opportunities to add to areas of open space, appropriate to the strategic needs of the region as well as those of the borough.

#### 3.3.2.5 Areas of Special Character

Policy G6 is relevant as a number of sites are located within or adjacent to the Lee Valley "Area of Special Character". The policy notes that proposed developments which could damage the character and appearance of the area would be vigorously resisted. There is also a requirement to conserve and enhance the quality of the landscape, and in the case of the Lee Valley Park, enhance areas of degraded landscapes.

#### 3.3.2.6 Nature Conservation

Wildlife corridors run adjacent to/ and within a number of the identified sites and are covered by Policy EN11. This sets out to "encourage within the wildlife corridors, as designated on the proposals map, the maintenance and enhancement of features of ecological value."

#### 3.3.2.7 Transport

In terms of planning, saved policy T8 of the UDP is relevant as it sets out "to encourage the movement of freight by the most appropriate mode, in terms of both environmental and efficiency considerations, in order to reduce the reliance upon road freight."

Also relevant is policy T9 which seeks "to ensure a level of access for freight to sites within the borough which is both adequate for the needs of business and industry, and not detrimental to the environment of adjacent residential areas"

Several of the sites include public footpaths which for the purposes of this review are identified as public rights of way. Saved Policy T15 sets a requirement to improve, maintain and enhance all footways and public footpaths within the network.

#### 3.3.2.8 Waste

Policy E29 was the only relevant waste policy to be saved and seeks to ensure the recycling of as much waste as possible.

#### 3.3.3 Enfield Core Strategy

#### 3.3.3.1 Preferred Options Report (2008)

Section 4.7 of the Core Strategy addresses waste in the Borough, and refers to the North London Waste Plan for the policies and proposals for waste development in North London.

Within the Core Strategy it is recognised that possible sites for new waste facilities will need to be considered; and that these sites will compete with other potential uses of land. However, it states that these issues are to be considered as part of the preparation and consultation of the North London Waste Plan.

The Core Strategy Preferred Options Report sets out the preferred options for the borough's spatial planning policies; and although the council is not committed to them at this stage, they do give an indication towards the direction of policy in the borough.

In chapter 10, the document sets out a number of strategic objectives which set out to achieve the following:

 "To improve the environment, infrastructure and economic and social well-being in North East Enfield and Central Leeside;

- To connect with the waterfront and draw the high quality natural environment of the Lee Valley into the heart of nearby communities;
- To improve the quality of life of residents living in proximity to the North Circular Road;
- To maximise the economic potential of the Borough, including the employment locations in the Upper Lee Valley and Enfield's town centres, and to capitalise on the benefits arising from 2012 Olympics." (p.98).

#### **Central Leeside Policy**

The supporting text to the strategic objectives identifies Central Leeside as having the greatest potential for planned intensification and change, noting that much of the land is currently underexploited with sections of the industrial stock no longer serving the business needs of today's London. The document recognises that the area will continue to be important for "*businesses with less environmentally demanding requirements*" (p.100), adding that residential communities could be developed to meet housing needs, potentially through mixed-use developments. The document also identifies the opportunity to promote exemplary sustainable, eco-friendly new development, and notes that Central Leeside could accommodate much-needed waste facilities and technologies for north London.

The Core Strategy preferred option for Central Leeside notes the following:

"The Council's preferred area strategy for Central Leeside is to work with our partners to transform the area into a series of vibrant and sustainable communities in the heart of the Upper Lee Valley, maximizing the benefits of the regional park on the doorstep, consolidating its commercial role, developing new employment opportunities and embracing new technologies. We want to create a high quality environment that will attract investment and new residents and improve the life of existing residents. Development will be coordinated to ensure a successful relationship between different land uses. Significant development in parts of Central Leeside will provide the opportunity to secure major community infrastructure and sustainable travel. We want Central Leeside to be an exemplar eco community respecting its environmental constraints and maximizing opportunities for new communities and waterside living.

In light of the national, regional and local recognition of the need and potential for change in the Upper Lee Valley a "do nothing approach" is not a realistic strategy for Central Leeside. Evidence from background studies and feedback from consultation supports the view that a step change is needed to revitalise the area. Only significant mixed use development in parts of the area will provide the necessary support and justification for major new infrastructure. This strategy is in accordance with national and London Plan policy and will help to deliver the objective of the Community Strategy to maximize the economic potential of the Upper Lee Valley.

Within the context of this area strategy, alternative options for the appropriate scale and nature of change given the local circumstances, the type of intervention and where to focus it will need to be considered as part of the Area Action Plan's preparation" (p.101).

# **3.3.4** Strategic Growth Areas- Further Consultation on Preferred Options for the Core Strategy (2009)

The Core Strategy further consultation document was published following a series of interrelated consultation exercises and publications that have explored Enfield's spatial development priorities. The document identifies that the preferred approach for the Central Leeside area is to retain its *"industrial and employment character, continuing to provide sufficient industrial land for continuing industrial purposes and a vital source of jobs for North London. ... Emphasis will be on high quality renewal and modernising of estates and <i>improving transport.*" In relation to waste planning the document goes on to state at page 8: *"The area will continue to play a key role in the management of North London's waste, and the Edmonton Incinerator site will be promoted as a location for new eco waste management facilities. As the way in which London deals with its own waste changes, new* 

forms of waste management facilities utilising modern technologies, carefully designed and integrated with adjoining uses, will be suitable new uses for existing waste management sites."

In the area to the south of the A406, known as Meridian Water, mixed use development including high density housing is proposed, with the potential for up to 5,000 new homes by 2026. Opportunities for new development close to Angel Road station will also be explored to take advantage of the proposed improvements to rail services.

It is anticipated that the submission Core Strategy will be published in autumn 2009.

#### 3.3.5 Central Leeside Area Action Plan Issues and Options Report (2008)

The Central Leeside Area Action Plan is being jointly prepared by the London Boroughs of Enfield and Haringey.

The Issues and Options Report identifies that "much of the industrial base of Central Leeside is geared towards storage and distribution, large and small, together with service industries, automotive supply and repair and some manufacturing. Typically, these operate out of large sheds or other industrial estate premises." It also notes that "the London Plan regards Central Leeside as a location for industry that is not environmentally sensitive."

The document makes reference to the existing Eco Park, which has a current contract to incinerate waste until 2014, noting that if additional waste facilities are to be provided, "*it might be more appropriate to locate them in close proximity to existing facilities, making best use of existing infrastructure and minimising impacts on other opportunities*" (p.13).

The document also draws attention to the North London Waste Plan, which is planned to be adopted in December 2010 and will identify a number of locations for new waste facilities. It identifies the area around Angel Road as a key area of search for new facilities, "given existing waste facilities in the area, the nature of the uses and transport infrastructure" (p.13).

The Issues and Options report notes that locating a waste facility in Central Leeside area could provide a number of benefits, including "economic prosperity through job creation, potential energy generation and re-use of by-products (particularly for manufacturing)" (p.15). In addition, it notes "that with the current shift from traditional method of disposing waste i.e. landfills, new waste management technologies mean that facilities do not necessarily constitute bad neighbour uses" (p.15).

Under the draft AAP, the site is identified as an area for retained and improved employment land. Under scenario planning exercises set out in the draft AAP, a number of broad uses are proposed for the site and surrounding areas, including residential, mixed use and employment land.

Figures 3 and 4 below identify the scenarios considered, and are discussed in more detail in Section 4.1 (Compatibility with Emerging Policy Framework) of this report.

SCENARIO B: Major Transformation as a

new Living and Working Quarter



Figure 3: Scenario Planning for Angel Road

SCENARIO A: Moderate Transformation of

Selected Areas



Figure 4: Scenario Planning for Pickett's Lock

It is expected that the Preferred Options will be published in Autumn 2009.

## 4 Planning Issues

Three different options for development at the Eco-Park have been identified, differing in regards to site layout and waste technology. These options include the following technological itineraries, and are additional to the existing 550 ktpa Incinerator and 30 ktpa In-Vessel Aerobic Composting (IVC) facility located on the site:

 Option A.
 350 ktpa MBT/AD, 70 ktpa MRF, 115 ktpa AD;

 Option B.
 350 ktpa EfW, 70 ktpa MRF, 115 ktpa AD; and

 Option C.
 600 ktpa EfW, 70 ktpa MRF, 115 ktpa AD.

Relevant drawings are included in Appendix 1. In addition to the options pursued herein, a range of waste technology options and associated conceptual layouts were also investigated by Entec. In this instance only the above technology combinations have been included in this site appraisal.

An assessment of planning issues associated with each of the three options is undertaken below, relating to issues such as transport and access, landscape and visual impact, design and sustainability, energy use, community consultation, flood risk and site capacity. Many of the impacts in relation to issues such as flood risk and community consultation will be very similar for each option. The technology solution adopted however will have a significant impact on the planning policy and decision making context; and policy support for various waste technologies at the national and regional level will have a significant outcome on the success of a planning application.

There is a clear emphasis in the London Plan that residual waste treatment in London should move away from conventional incineration methods and towards advanced treatment technologies; coupled with the prospect of vociferous and well-organised public opposition to a new incinerator, this places the risk of ultimate refusal of conventional incineration in a quantum level above other treatment options. Promoting those technologies the London Plan supports will significantly reduce the risk of refusal on policy grounds.

The following sections address both generic and option specific planning issues.

#### 4.1 Compatibility with the Emerging Planning Policy Framework

In terms of the emerging planning policy framework, there is local support for the continued use of the North London Eco-Park site for the purposes of waste management, known as the 'Central Leeside Area'. The Preferred Options for Core Strategy Report published in March 2009 states that the majority of the wider Central Leeside Area will retain its industrial and employment character, continuing to provide sufficient industrial land for continuing industrial purposes. The Report states that the area will continue to play a key role in the management of North London's waste, and the Edmonton Incinerator site will be promoted as a location for new eco waste management facilities. Moreover it recognises that the existing waste sites will be suitable for new forms of waste management facilities utilising modern technologies that are carefully designed and integrated with adjoining uses. The emerging Core Strategy therefore provides a supportive planning context for waste development. Furthermore the site has regional planning policy support in the form of the emerging North London Waste Plan, and is allocated as a site for Waste Development.

In addition to the draft Core Strategy, the wider site area is also included within the draft Central Leeside Area Action Plan. Under the draft AAP, the site, in the context of Angel Road, is identified as an area for retained and improved employment land. Under scenario planning exercises set out in the draft AAP, a number of broad uses are proposed for the site and surrounding areas (See Figure 3 and Figure 4). Based on the scenario planning exercises it is evident that residential development is proposed to the north of the site under Scenario A and B for Pickett's Lock. Residential development is also proposed to the West of the North London Eco-Park site under Scenario B for Angel Road.

While residential uses are not incompatible with large, modern waste facilities, the promotion of residential sites in such close proximity could complicate the planning process in the future, should a planning application be submitted at the North London Eco-Park site. It should be noted however that the emerging North London Waste Plan requires surrounding uses to be cognisant of existing waste uses. This emerging policy may therefore affect future versions of the draft AAP.

#### 4.2 Site Capacity

A space planning exercise has been undertaken by Entec for Option A (drawing no. 20125/CVD/7008/B) and Option C (20125/CVD/7009/A). Option C includes capacity for a 600 ktpa EfW plant, it is therefore assumed that a smaller EfW plant could also be accommodated by the site, and spaced within the footprint of the 600 ktpa EfW plant. The drawing for Option C is therefore also relevant to Option B, which proposes a smaller, 350 ktpa EfW plant.

Entec have successfully indicated that there is sufficient space to accommodate the physical requirements of Option A, Option B and Option C. It should be noted however that the Entec study only takes account of the waste technology space requirements and do not take into consideration space requirements relating to wider environmental and planning considerations. For instance no consideration has been given to the requirements for onsite flood storage capacity or the potential impact of the increased site capacity on highways, which could both represent significant planning challenges. Entec also state that revised junction design at Angel Way has not been undertaken and that the inclusion of a buffer area between boundary fence and perimeter road has not been included under either Option.

Optimisation of the site layout would take place through the design and assessment process for the site and should be carried out in consultation with the local planning authority. Once confirmed, the capacity of the site and the assumptions for throughput will form part of the parameters of the EIA and planning permission.

#### 4.3 Compatibility with Existing Uses and Phased Implementation

The existing site undertakes a range of services including recycling, composting, clinical treatment, recovery and disposal - primarily to the North London Waste Authority, but also to businesses in and around London and the south east. The principal facilities include In-Vessel Aerobic Composting and Incineration. The planning review has assumed that existing site operations would remain in use and in-situ alongside any additional development. With regards to land take, and relative to the scale of the whole site, the operational area required is limited, with a significant area of the site used for car parking, open storage, materials sorting, ancillary buildings such as office and welfare and landscaped open space.

Based on a review of each Option it is adjudged that the refuse incineration plant and IVC will be unaffected in terms of operation during site development. Significant development of the remaining site however is proposed and this will affect the additional functions currently undertaken, such as clinical treatment and recycling for example.

Access to the existing incinerator is via a separate access, however access to the IVC is currently via an area proposed for the storage of tanks (Option A) and EfW car parking / storage (Option B and C); a construction management plan and phasing plan will have to be developed that reflects a co-ordinated approach to ensure construction activity is kept a safe distance from ongoing functions and that construction traffic and incinerator / IVC bound

HGVs do not have an incongruous impact on traffic flow, site operations and air and noise quality.

Based on current conceptual layout plans for each Option there is a significant bottle neck on the eastern side of the Incinerator (in the proposed development zone); a consideration as to how the site will be phased in terms of timing of construction and commencement of operations for each area of the site / zone of waste technology (such as 350MBT/AD in the northern area of the site) must therefore be considered to ensure internal construction traffic and waste HGVs can operate harmoniously.

Based on Arup's experience of working on large, complex infrastructure projects, where existing site activities (such as rail) continue to operate alongside construction activity, coordinating such activities can become very complicated and requires skills in site management and construction phasing.

#### 4.4 Hydrology and Floodrisk

Referring to the EA indicative flood map in Figure 5, the proposed development area is located within a flood risk area. Different areas of the site are located within Flood Zones 1 and 2. Therefore, flood risk will be a consideration within the planning of the new development.

The Environment Agency flood zone maps identify the site as undefended floodplain; the horizontal extent of low (Zone 1: <0.1%AEP) and medium flood risk (Zone 2: 1% to 0.1%AEP) is identified as lighter blue, with high risk flood zones (Zones 3: >1%AEP) identified as darker blue.

PPS25 recommends that a risk-based approach be adopted when assessing flood risk.

It is suggested that the proposed replacement waste facility and associated buildings are classified as a less vulnerable land use (assuming it treats non-hazardous waste). Less vulnerable land uses are appropriate for both Flood Zones 1 and 2 and as such, it is recommended that the proposed development is appropriate for the site.

In order to minimise the impacts on floodplain storage and conveyance, and to ensure access and egress can be maintained from the site at all times, it is suggested that where possible the proposed development is sited within Flood Zone 1 to the north of the site.

It is likely that attenuation of surface water discharging from the site will be required to ensure that flood risk is not increased offsite. As noted in Section 4.2, assumptions regarding site capacity do not consider the need for onsite flood storage; due to the increased density of the site and development of green spaces, it is probable that the local planning authority could require flood mitigation measures such as underground storage tanks. This will therefore have programme and cost implications.

In summary, as the site falls within Flood Zone 2 (based on EA website) and runs parallel to the River Lea, drainage and flood mitigation will be relevant to the design and determination of the application. However, the proposed use is identified in guidance (PPS25) as appropriate for such a location. Mitigation measures to be undertaken may therefore include:

- carrying out a flood risk assessment as part of the planning application preparation, which is able to demonstrate that the development of the site will not adversely affect (or will materially reduce) flood risk on other sites in the vicinity.
- provision of flood storage measures within the scheme, ideally as part of an ecologically valuable integrated site landscaping scheme, but where necessary this may be able to provided through above- or below-ground storage tanks.



Figure 5: Edmonton Site Indicative Flood Risk Map (www.environment-agency.gov.uk)

#### 4.5 Access and Traffic

The conceptual site layouts propose using the existing vehicular access to the Eco Park to service additional areas of development. Existing access to Advent Way is via a complex of roads running through industrial estates to the west of the site, leading to the roundabout of the A1055 Meridian Way, which forms a major branch of the Enfield Highway Network. Access is also available from the roundabout beneath the North Circular to the east of the site.



Existing and proposed access

#### Figure 6: Site Access

The North Circular provides the main highway access to other parts of London and the national trunk road network via the M11 and M25. Transport for London (TfL) are the

highway authority for the North Circular. Where it passes the site, the A406 has a dual 3 lane carriageway with grade-separated junctions.

The A1055 Meridian Way, which is part of the Lea Valley route linking Tottenham Hale with the M25, is linked to the NCR at the Kenninghall Junction to the west of the site, via Montague Road.

The most convenient access to and from the North Circular is via the Hall Lane gradeseparated junction to the south east of the site. The main carriageway passes this junction on the dual 2 lane Lea Valley viaduct, with dual 3 lanes either side of the viaduct. The exit and entry slip roads, which form a lane drop and lane gain from the main carriageway of the North Circular, lead to a grade-separated roundabout underneath the North Circular viaduct.

Based on previous Arup experience of the North Circular, it is considered that the slip roads to and from the North Circular (except the eastbound slip road onto the highway) generally operate without significant congestion. The eastbound slip road onto the North Circular passes through a signal-controlled junction with Hall Lane before entering back onto the North Circular. This signal-controlled junction does cause congestion at busy times and traffic queues back to the main roundabout underneath the North Circular have been observed during the PM peak period, blocking traffic entering the roundabout. The roundabout itself is considered to have sufficient capacity for existing traffic levels.

The volume of waste treated at the site will largely determine traffic flow and peak flows; an increased volume of HGV traffic would adversely affect congestion and local noise and air quality; however it is assumed that the majority of flows would occur during off-peak periods.

Based on current proposals, waste volume input to the site is to increase in the range of 535 ktpa (Option A and B) and 785 ktpa (Option C). This will generate additional traffic movements and impact junction and roundabout capacity in the local highway network; details of estimated traffic flows will therefore need to be examined to assess impact early in the design stage.

In June 2008 Ramboll provided Arup with traffic flow statistics for a 300 ktpa EfW facility and 300 ktpa MBT-AD facility, setting out estimated vehicle movements. Arup has adjusted these figures to provide indicative traffic flows for different capacity waste facilities.

MBT-AD Movements Out Movements In Capacity Movements In RCVs **Totals flows** Artic HGVs (per Artic HGVs (per (ktpa) (per week) per week week) week) 

Indicative figures for MBT/AD and EfW facilities are set out below:

Figure 7: Indicative Traffic Flows – MBT-AD

EfW				
Capacity (ktpa)	Movements In RCVs (per week)	Movements In Artic HGVs (per week)	Movements Out Artic HGVs (per week)	Totals flows per week
100	160	15	32	207
150	240	23	49	311
250	399	38	81	518
300	479	45	97	621
350	559	53	113	725
400	639	60	129	828
450	719	68	146	932
500	798	75	162	1035
550	878	83	178	1139
600	958	90	194	1242
650	1038	98	210	1346

#### Figure 8: Indicative Traffic Flows - EfW

Key mitigation for addressing traffic capacity constraints will include:

- assessing traffic impacts at key junctions in the area and where necessary identifying infrastructure improvements and active traffic management measures to increase capacity at bottlenecks and reduce the risk of clumping of HGV traffic.
- agreeing the scope of the traffic assessment with the local authority, with particular reference to the junctions and highways to be assessed and the additional developments assumed to be completed by the assessment year (i.e. the year when the waste facility would be brought into use).
- maximising the potential for river transport, including demonstration of its operational viability (i.e. it is our understanding that Ash Wharf is currently used by London Waste; it will need to be demonstrated that Ash Wharf, and indeed Pickett's Lock has the capacity to manage increased waste volume, and that an adequate inland network exists to transfer waste).

The promotion of the waterborne transport of waste is a priority of national government, as set out in Planning Policy Statement 10: Planning for Sustainable Waste Management, which seeks the sustainable transportation of waste, and where practicable the use of modes other than road transport. At the regional level the London Plan actively encourages recycling industries located along the Thames to consider sustainable modes of transport for the transportation of recycled materials and waste. In addition the Mayor's Transport Strategy seeks to promote where possible the use of rail and water in the transportation of waste, and is reinforced by the Mayor's Waste Strategy which states the need to meaningfully consider the use of river transport and how best to reduce the environmental impact of waste transportation.

According to the Port of London Authority (PLA), the River Thames and the watercourses that run into it represent a very efficient and flexible means of transporting materials to a large number of destinations at a low cost to customers. The surplus capacity and extent of London's inland waterways represent a significant opportunity for companies to reduce their reliance on road vehicles, making them less susceptible to the fluctuating cost of oil and increasing road charges. There is also the potential for the costly impact of congestion on businesses to be minimised where river transport is adopted.

#### 4.6 Energy and Sustainable Design

Given growing importance of climate change and resource reduction in the regulation of the built environment (the London Plan requires 20% on-site renewable energy generation, based on an assessment of baseline carbon generation); low-carbon energy and sustainable design are becoming key drivers for the planning system.

The emerging NLWP promotes high quality development, including: high quality design, a contribution to climate change adaptation and mitigation. The Plan also promotes decentralised energy (Policy NLWP4), where "All waste facilities that are capable of directly producing energy or a fuel must secure: 1. the local use of an excess heat in either an existing heat network or through the creation of a new network; 2. the utilisation of biogas/syngas in CHP facilities ... 3. the utilisation of any solid recovered fuel in CHP facilities or as a direct replacement for fossil fuels in London". Exceptions are permitted where it can be demonstrated that it is not economically feasible or technically practical.

The site has the potential to deliver a significant contribution to the reduction of the carbon impact of north London's waste, compared with the current practice of low recycling rates and a significant amount of disposal by landfill. This overall "good news" story can be enhanced in terms of the local design issues (see below Section) through a range of mitigation and enhancement measures for the development:

- incorporation of a combined heat and power facility within the site, with the potential to
  export heat not required to assist the waste treatment processes. Significant
  engagement with local potential heat users and the development of a scheme for district
  heating would greatly strengthen the case for allowing the waste development to
  proceed. Even if the district heating system could not be shown to be viable from the
  start of the operation of the site, a planning obligation could be offered to fund or
  contribute in kind to the future development of such a network;
- advanced methods and technologies for water conservation, including sustainable urban drainage systems (SUDS), rainwater harvesting and the development of green roofs;
- use of local materials and low carbon materials in the design of the facility; and
- incorporation of landscaping and ecologically valuable areas, particularly along the River Lea. The use of tree planting and permeable paving within the lesser used paved areas could also be considered (e.g. in staff and visitor car park areas and along walkways).

#### 4.7 Visual Impact and Design Quality

The design of a visually pleasing development will greatly assist the case for the planning application. As stated in the draft NLWP Preferred Options (para 5.4.4) "Good design is fundamental to the development of high quality waste infrastructure and the North London Boroughs seek innovative approaches, where appropriate, to deliver high quality designs and safe and inclusive environments". A high quality architectural design can engage decision-makers in a positive way and acts, for those decision-makers, as a strong indicator that care has been taken over all aspects of the development. Particular aspects which will reduce the risk of refusal are:

- a clear architectural concept which is visually pleasing and fits well with the surrounding area in terms of layout, height, massing, form, colour, texture and materials.
- sensitive treatment of boundary relationships, in particular with the River Lee and Lee Valley Park environment.

The three options include the development of stacks associated with MBT/AD facilities and numerous additional storage tanks, as such particular attention should be focused on the

impact of height on surrounding viewpoints, open space to the east of the site and the Lower Lea Valley Regional Park to the south.

#### 4.8 S106 Obligations

The site currently contains significant areas of open space, which would be lost to accommodate any additional development. Given limited on-site opportunities for further landscaping it may be necessary to provide enhancement to retained open space. In addition a number of other obligations may be imposed, covering the following areas:

- **Highways** Monetary contribution to local highway authority for highway improvements, commitment to building actual highways improvement scheme to improve site access; construction and operation phase travel plans.
- Education On-site education / visitor centre to learn about waste technology and recycling.
- River Access Monetary contribution to for improvements to river frontage and landscaping, improve public access along river path (extent of NLWA involvement is dependent on ownership of Wharf). E.g. cycle routes.
- **River Quality Measures** Improvements to water quality, river management programme, monetary contribution to specific programmes of work.
- Site landscaping as above.

#### 4.9 Consultation

A very important feature of the new planning system is the "front loaded" nature of the process and the enhancement emphasis on meaningful pre-application engagement with key stakeholders and the community as a whole. This message has been reinforced through the Government's current work to develop procedures for applications for Development Consent submitted to the Infrastructure Planning Commission. Although these waste developments will not be determined by the IPC, the effectiveness of consultation will be of critical importance to supporting the case for the planning application.

#### 4.10 Appropriate Assessment

The proximity of the site to European designations triggers the requirement for Appropriate Assessment screening. A report would be prepared for submission to Natural England who would determine whether it is necessary to carry out a full Appropriate Assessment. At this stage whilst it is noted that the site is close to an SPA it is expected that the screening report would recommend that there would be no effects on the particular designated features. As such the requirement for Appropriate Assessment is expected to be limited to screening. However, it is recommended that the previous applications for the Eco Park site be reviewed to determine any relevant information.

# 5 Risk Analysis

The following factors are considered to be key risk issues which would have a significant effect on the overall timescale for a planning decision, and on the decision itself. Given the site is allocated as a waste site and the emerging NLWP seeks to protect existing waste uses as well as promoting intensification the planning policy framework is positive and would support development proposals.

• **Thermal treatment**: this might include, on a downward sliding scale of difficulty, conventional "black bag" incineration (EfW), SRF incineration or AD-derived biogas incineration. Gasification and pyrolysis processes also comprise thermal treatment, although it is recognised that the London Plan support for these "advanced thermal treatment" technologies will significantly reduce their risk relative to conventional incineration methods.

There is a clear emphasis in the London Plan that residual waste treatment in London should move away from conventional incineration methods and towards advanced treatment technologies; coupled with the prospect of vociferous and well-organised public opposition to a new incinerator, this places the risk of ultimate refusal of conventional incineration in a quantum level above other treatment options. Promoting those technologies the London Plan supports will significantly reduce the risk of refusal on policy grounds.

- Lack of extensive stakeholder engagement: if objections are not identified and addressed in the pre-application period, they will come out during the post-application period. Once in the public forum of a planning application process, the rules are less flexible and the timescales for discussion and modification of the scheme will be longer.
- A rushed application: applications which are not prepared with care or which are rushed to meet a fixed deadline are at a high risk of having gaps and inconsistencies identified which, even if inconsequential, will impose delays as clarifications are sought and provided.

Most mitigation measures to the above risk factors are self-evident: careful preparation and stakeholder engagement are essential to avoid unnecessary delays or refusal. The question of thermal treatment, as it is a fundamental technical decision on the type of treatment proposed, is not so easily mitigated. However, the key mitigation measures for a thermal treatment application might be:

- Ensure the site is allocated in the (adopted or emerging) Waste DPD for thermal treatment.
- Undertake best practice environmental baseline monitoring, especially in relation to air quality.
- Undertake an extensive public and stakeholder information campaign to ensure that objections are informed and based on an accurate understanding of the nature and risks of the proposed facility.
- Ensure the proposed development maximises the benefits of the thermal treatment, i.e. put in place a robust strategy for securing a market for both the heat and power from the facility.

Finally, decision delay could be mitigated by an aggressive planning application strategy, in which the applicant would appeal to the Secretary of State as soon as the sixteen-week time period expired. This could provide a substantial savings of time compared with a more conventional refuse-then-appeal scenario, but its success would rely all the more on a well-prepared and fully complete application being lodged, as well as the NLWA as applicant ensuring that no element of the delay to the decision could be attributed to it. However, the political implications of such an approach being undertaken by a public body should be considered carefully.

A high quality submission of a thermal treatment facility which was allocated for that purpose in the adopted development plan might well be approved within 2-3 years. The recent experience of Hampshire County Council appears to support the case that these applications need not always be subject to extensive and punitive delays.

#### **Summary Risk Analysis**

#### Option A - 350 ktpa MBT/AD, 70 ktpa MRF, 115 ktpa AD;

Issue	Risk Level	Availability of successful mitigation strategies
Compatibility with Adopted and Emerging Planning Framework	Medium	Limited / Moderate. NLWA cannot control the outcome of planning policy decisions by the LPA. Written Representation for the Central Leeside Area Action Plan preparation may generate more supportive context.
Site Capacity	Medium	Good, as long at the proposals set an appropriate limit on the site of the facility proposed.
Access and Traffic	Medium to High	Good – increased river transport, highway improvements
Flood Risk	Medium	Good – Design resilience
Energy and Sustainable Design	Medium	Limited. Success will depend on the practicability and viability of CHP / local district heating.
Visual Impact and Design Quality	Low / Medium	Good – increased screening along Navigation Canal frontage.
Community Benefits	Low	Good – potential for education.
Mitigation of Local Impacts	Low	Good – air quality monitoring.
Site Alternatives	Medium	Good – large portfolio of sites considered.
Community and Stakeholder Engagement	Low	Good – may be necessary to consult on borough wide community scale.

## Option B - 350 ktpa EfW, 70 ktpa MRF, 115 ktpa AD Option C - 600 ktpa EfW, 70 ktpa MRF, 115 ktpa AD

Issue	Risk Level	Availability of successful mitigation strategies
Compatibility with Adopted and Emerging Planning Framework	Medium / High	Limited / Moderate. Fundamental policy objections to EfW may mean that such a facility will simply not be permitted. Demonstration of need and the efficiency of technology will therefore be crucial.
Site Capacity	Medium	Good, as long at the proposals set an appropriate limit on the site of the facility proposed.
Access and Traffic	Medium to High	Good – However increased traffic flows associated with additional 600 kpta EfW will need considered attention.
Flood Risk	Medium	Good – Design resilience
Energy and Sustainable Design	Medium	Moderate. EfW offers renewable energy source.
Visual Impact and Design Quality	Low / Medium	Good – increased screening along Navigation Canal frontage.
Community Benefits	Low	Good – potential for education.
Mitigation of Local Impacts	Low	Good – air quality monitoring.
Site Alternatives	Medium	Good – large portfolio of sites considered.
Community and Stakeholder Engagement	Low	Good – may be necessary to consult on borough wide community scale.

Appendix A

Options under Consideration (produced by Entec)

# A1 Option A

- 550 ktpa Incinerator
- 30 ktpa In-Vessel Aerobic Composting (IVC)
- 350 ktpa MBT/AD
- 70 ktpa MRF
- 115 ktpa AD



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# A2 Option B and option C

#### **Option B**

- 550 ktpa Incinerator
- 30 ktpa In-Vessel Aerobic Composting (IVC)
- 350 ktpa EfW
- 70 ktpa MRF
- 115 ktpa AD

#### **Option C**

- 550 ktpa Incinerator
- 30 ktpa In-Vessel Aerobic Composting (IVC)
- 600 ktpa EfW
- 70 ktpa MRF
- 115 ktpa AD

