

**Frog Island Depot**

in the London Borough of Havering

planning application no.P0530.11

**Strategic planning application stage 1 referral (new powers)**

Town & Country Planning Act 1990 (as amended); Greater London Authority Acts 1999 and 2007; Town & Country Planning (Mayor of London) Order 2008

**The proposal**

The construction of a biogas generation plant, using anaerobic digestion, capable of handling up to 100,000 tonnes of organic materials including supermarket waste, food waste and food manufacturing waste, per annum.

The applicant is **Shanks Waste Management Limited** and the agent is **Capita Symonds**

**Strategic issues**

The principle of the proposed use is acceptable in this location and supports the **waste** policies in the London Plan. Further work is needed in respect of **design, energy, urban greening,** and **transport** initiatives proposed for this area in the proposed London Riverside OAPF and East London Green Grid Area Framework 4. The **air quality** comments are outstanding and will be provided on receipt of these from the external specialist.

**Recommendation**

That Havering Council be advised that the application does not comply with the London Plan, for the reasons set out in paragraph 49 of this report; but that the possible remedies set out in paragraph 51 of this report could address these deficiencies.

**Context**

1 On 26 April 2011 the Mayor of London received documents from Havering Council notifying him of a planning application of potential strategic importance to develop the above site for the above uses. Under the provisions of The Town & Country Planning (Mayor of London) Order 2008 the Mayor has until 6 June 2011 to provide the Council with a statement setting out whether he considers that the application complies with the London Plan, and his reasons for taking that view. The Mayor may also provide other comments. This report sets out information for the Mayor's use in deciding what decision to make.

2 The application is referable under Categories 2B and 1C of the Schedule to the Order 2008:

### Category 2B

1. Waste development to provide an installation with capacity for a throughput of more than—  
(b) 50,000 tonnes per annum of waste;  
produced outside the land in respect of which planning permission is sought.

2. Waste development where the development occupies more than one hectare.

### Category 1C

1. Development which comprises or includes the erection of a building of one or more of the following descriptions—

(a) the building is more than 25 metres high and is adjacent to the River Thames;

3 Once Havering Council has resolved to determine the application, it is required to refer it back to the Mayor for his decision as to whether to direct refusal; take it over for his own determination; or allow the Council to determine it itself.

4 The environmental information for the purposes of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 has been taken into account in the consideration of this case.

5 The Mayor of London's statement on this case will be made available on the GLA website [www.london.gov.uk](http://www.london.gov.uk).

## **Site description**

6 The site is located approximately 1.5km south west of Rainham, at the end of Creek Way, Frog Island, in the London Borough of Havering. The site is on land at the confluence of Rainham Creek and the River Thames. The site is located within the Ferry Lane Industrial Area. The site is comprised almost entirely of hard-standing.

7 The site is approximately 1.25 hectares and is currently vacant, although it was previously used for the storage of portacabins and containers. These have been removed since summer 2010.

8 The site is contained by fencing and a river wall, which forms part of the Thames flood defence scheme, which consists of a sheet piled wall and sluice gate at the end of the culverted Rainham Creek. The site lies within Flood Zone 3a. The site is protected from tidal flooding by the River Thames flood defences and thus this proposal does not raise any significant issues in terms of flooding and has no impact on the Phoenix/Frog Island Safeguarded Wharves.

9 The site and surrounding uses are generally industrial in nature. To the north-west is the Shanks East London Waste Management Facility, which incorporates a mechanical biological treatment facility and a reuse and recycling centre. The north east and south east of the site is bound by a storage facility and to the west by the River Thames.

10 Creek Way is approximately 1.5km south of the A13 Thames Gateway, which forms part of the Transport for London Road Network (TLRN). The nearest bus stop is located in the grounds of the Centre for Engineering and Manufacturing Excellence served by route 174, approximately 1.3km from the site. The nearest railway stations at Rainham and Dagenham Dock are approximately 3km from the site. Given that the site is not considered to be within an acceptable walking distance of any public transport services, it has been determined that it records a public transport accessibility level (PTAL) of 0.

11 Frog Island is located within the London Riverside Opportunity Area, a key location for the intensification of employment uses within the mayor's Green enterprise District. Located at the southern end of Rainham Creek and on the banks of the River Thames the site is strategically important within the East London Green Grid.

## Details of the proposal

12 The proposal would process 100,000 tonnes per annum of organic materials including supermarket waste, food waste and food manufacturing waste using anaerobic digestion. The plant will generate biogas for conversion into renewable energy through an on site combined heat and power plant. The electricity will be exported to the National grid and the heat will be re-used within the plant and by the adjacent waste facility. It will also generate approximately 30,000 tonnes per annum of dewatered digestate.

## Case history

13 There is no strategic planning history for this site. The adjacent waste management facility was considered by the former Mayor in 2003 (PDU/0512a/01 and 02).

## Strategic planning issues and relevant policies and guidance

14 The relevant issues and corresponding policies are as follows:

- Waste/minerals *London Plan; the Municipal Waste Management Strategy; PPS10*
- Employment *London Plan; PPS4; Industrial Capacity SPG*
- Urban design *London Plan; PPS1*
- River Thames/flooding *London Plan; Mayor's draft Water Strategy; PPS25, RPG3B*
- Biodiversity *London Plan; the Mayor's Biodiversity Strategy; PPS9; draft PPS Planning for a Natural and Healthy Environment*
- Air quality *London Plan; the Mayor's Air Quality Strategy; draft replacement air quality strategy; PPS23*
- Sustainable development *London Plan; PPS1, PPS1 supplement; PPS3; PPG13; PPS22; draft PPS Planning for a Low Carbon Future in a Changing Climate; the Mayor's Energy Strategy; Mayor's draft Climate Change Mitigation and Adaptation Strategies; Mayor's draft Water Strategy; Sustainable Design and Construction SPG*
- Transport *London Plan; the Mayor's Transport Strategy; PPG13; Land for Transport Functions SPG*
- Parking *London Plan; the Mayor's Transport Strategy; PPG13*

15 For the purposes of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the development plan in force for the area is the 2008 Havering Core Strategy, Site Specific Allocations Document and Development Control Policies Development Plan Documents and the London Plan (Consolidated with Alterations since 2004).

16 The following are also relevant material considerations:

- The draft replacement London Plan, which underwent Examination in Public in 2010 and upon which the Panel has now reported is a relevant material consideration of significant weight.
- The East London Joint Waste Development Plan Document, which has been through an Examination in Public (5-7 April 2011)

- East London Green Grid Area Framework 4, London Riverside

## **Land use/ waste planning**

17 The London Plan's strategic framework for waste management is set out in policies 4A.21-29 of the London Plan, and aims to ensure that by 2020, London will be able to handle 85% of its waste, equivalent to 20.6 million tonnes. The draft replacement London Plan aims to ensure London is 100 per cent waste self sufficient by 2031. London Plan waste policy focuses on minimising the level of waste generated, increasing re-use, recycling and composting of waste and generating energy from non-recycled waste in the most environmentally friendly way possible in order to reduce the amount of waste going to landfill and to support the development of low carbon waste infrastructure in London. Policy 4A.24 recognises the potential for existing waste management sites to improve their efficiency and seeks the maximum use of existing waste sites.

18 Whilst the site itself is not identified in the draft waste DPD as a site suitable for waste use it is within Strategic Industrial land and is one of the broad locations suitable for waste treatment facilities identified in the London Plan policy 4A.27. Co-location with adjacent Shanks waste management site (which is identified in the waste DPD) is also supported by policy 4A.23.

19 The waste facility would contribute to making better use of waste, by generating electricity which will be used onsite and by the adjacent waste facilities owned by Shanks and East London Waste Authority. The excess energy will be injected into the grid. The proposal's generation of energy from waste, facilitated by an advanced conversion technology (anaerobic digestion) supports policies 4A.1 and 4A.21 of the London Plan. The proposal will therefore contribute towards meeting London Plan waste policies in relation to self- sufficiency, proximity and apportionment.

20 The digestate produced from the anaerobic digestion process will generate compost. Preference for its application should be given to agricultural and horticultural uses rather than landfill.

## **Employment**

21 The site lies within the Ferry lane Industrial Area, which is a subset of Strategic Industrial land as identified in Annex 2 of the London Plan (Havering Riverside Preferred Industrial Location).

22 The London Plan has a specific policy to protect, promote and manage the varied industrial offer contained within Strategic Industrial Locations. The Plan also supports the establishment of green industries (policy 3B.10). The proposal is an appropriate use for and supports the continued operation of the identified Strategic Industrial Location and will generate employment in the local area.

## **Urban design**

23 Good design is central to all objectives of the London Plan and is specifically promoted by the policies contained within Chapter 4B which address both general design principles and specific design issues. London Plan Policy 4B.1 sets out a series of overarching design principles for development in London. Other design polices in this chapter and elsewhere in the London Plan include specific design requirements relating to maximising the potential of sites, the quality of new housing provision, tall and large-scale buildings, built heritage, views, and the Blue Ribbon Network. The draft replacement London Plan reinforces these principles, with new development

required to have regard to its context, and reinforce or enhance the character, legibility and permeability of the neighbourhood (policy 7.1).

### Permeability

24 The site plays an important role in contributing to the creation of a strategic route for cyclists and pedestrians along the north bank of the River Thames. The East London Grid Framework identifies the river edge of the site as part of the Havering Thameside Path and an important element is the delivery of a continuous riverside walk as part of the Thames Path which is under development in London Riverside. This aspiration has been developed in partnership with local councils and draws on the approved East London Green Grid SPG. This links to the Rainham Riverside Walkway, the Three Crowns Café and the Rainham Creek Way Green Grid projects.

25 Insufficient information is provided to understand the levels between the site and the flood defence wall; however a minimum width of 5metres to be safeguarded for this riverside path is required. This allows for a 2 metre landscaped slope to raise the path from the level of vehicular activity on the site and to allow people to see over the flood wall and a 3 metre wide, Sustrans recommended foot and cycle way. The current proposal does not indicate the provision for this route which must be reconsidered.

26 The Pre-Consultation Draft London Riverside OAPF (currently under consultation with key stakeholders and due for publication in September 2011), identifies the delivery of a continuous riverside Thames path as a key strategic intervention for improving walking and cycling in the opportunity area.

27 The site plays a strategic role in the potential to connect Ferry Lane to Creek Way. This would increase east-west permeability in the area and would provide a route serving the industrial estates along Ferry Lane, Fairview and CEME, which would not rely on the proposed Rainham Creek Bridge. This would also provide a more direct access between the site and the A13 without relying on the privately owned Creek Way. The purpose of this key infrastructure proposal is to facilitate delivery of a southern route from Rainham station to Dagenham Dock Station to provide improved public transport accessibility in the Havering employment area. It is a key proposal within the overall planning strategy to deliver a sustainable industries district in this part of London Riverside. Further consideration of the feasibility for this should to be illustrated.

### Building height and massing

28 The massing of the proposal consists of a number of cylindrical tanks of up to 28metres in height and number of smaller sheds housing machinery of up to 14metres in height. Three of these tanks are over 20metres in height with diameters of between 12 to 16metres in diameter.

29 The height and size of these tanks will punctuate the existing horizontal planes of the marshes and be visible from long range views that need to be identified by the applicant. Long range views are important in providing a point of reference for people to orientate themselves. The Havering LDF identify a number of designated views such as; Panorama: from Rainham Station, River Prospect: from Coldharbour Point, Key View: from Bridge Road, Key View: from Tesco car park, that amongst others are likely to be impacted by the proposed development. As well as these local designated views, it is important that the impact on views from locations that are highly populated such as the A13, the railway line, the London Loop and Rainham Marshes are also demonstrated before the acceptability of the structures can be accepted.

## Energy

30 Given that the proposal is for materials recycling and the generation of energy, the scheme's key principles are the generation of renewable energy and thus an energy statement was not submitted separately to the application (as energy forms the basis of this application). The planning statement demonstrates the proposal's aims in terms of the use of, and generation of, renewable energy.

31 The proposals are for the generation of biogas via the anaerobic digestion of organic waste. The biogas would be used to run the combined heat and power plant generating the electricity and heat for on-site use. Spare electricity would be exported to the national grid.

32 The proposal does not raise any major concerns, however further information and clarification is required from the applicant with regards to the following information:

- Describe the principles of the waste to energy facility from an energy point of view - from the reception of the waste to the generation of heat and electricity including estimations of the amount/composition of the processed waste and the amount of energy that could be produced by the waste to energy facility. The applicant should take into account the flow of biogas that would be obtained as a result of the anaerobic digestion process, the calorific power of the biogas, the size and type of the proposed heat and power plant proposed, plant efficiencies, the parasitic loads (heat and electricity required by the gasification process), etc.
- Investigations regarding the potential for the exportation of spare heat to nearby heat loads - bearing in mind the location of the proposed development the GLA understand there may be few opportunities for this.
- The applicant should also describe and quantify the carbon emissions arising from the energy requirements of the buildings on-site, e.g. heating, lighting, etc and to describe how this energy requirements would be minimised and how they would be provided.

## Air quality

33 There are potentially significant air quality issues, which require external advice. A detailed response will be provided in due course.

## Urban greening

34 Although the site is adjacent to the River Thames Site of Metropolitan Importance for Nature Conservation, the development is unlikely to have any adverse impacts on biodiversity or the nature conservation interest of the surrounding area of the site.

35 There would appear to be few opportunities for enhancing the nature conservation interest of the application site. However, the site is sited within an industrial area that sits within an ecologically rich area of the Thames (comprising Rainham Marshes, extensive areas of mudflat and the remnant ditches and creeks of former grazing marsh). Consideration should be given to securing S106 funds (or similar) from this development to contribute to the ecological improvement of adjacent areas.

## Transport for London

36 This application was the subject of detailed comments provided by TfL to London Borough Havering on 1 May 2011.

37 Given the scale and location of the proposals, it is accepted that the anticipated associated number of waste and staff movements will not have any material impact on either the TLRN or public transport networks.

38 Although the submission of a travel plan in this case is not required, it is nevertheless recommended that the applicant should explore green travel initiatives to reduce car reliance by staff. It is also advised that some cycle parking and a changing facility should be provided on site for staff, in line with London Plan Policy 3C.22 Improving conditions for Cycling and Draft Replacement London Plan Policy 6.9 Cycling.

39 In addition, further investigation is required in relation to the use of the River Thames and nearby wharves for the transportation of waste, and during the construction phase. In line with London Plan policy 3C.25 and Draft Replacement London Plan policy 6.4, a construction logistics Plan (CLP) will need to be prepared. This plan should look at the cumulative impacts of construction traffic for the area in terms of likely additional trips and mitigation required. This plan should be secured by condition.

40 Although a delivery and servicing plan is also not required in this case, given that this forms the main function of the proposals, the applicant should still demonstrate how traffic movements to and from the site are intended to be managed. Heavy good vehicle movements should be optimised to avoid the AM and PM peak hours where possible in order to reduce highway impact on the TLRN and in the vicinity of the site.

41 The emerging London Riverside Opportunity Area Planning Framework (OAPF) is promoting improved connectivity to this area, which would have benefits in improving access by public transport foot and cycle, to the site and the neighbouring district. This site falls within the boundaries of this study.

42 The study identifies the potential for providing a pedestrian and cycle connection alongside the River Thames to link to the Rainham Riverside Walkway. This is supported by TfL and is consistent with the mitigations already secured as part of the Section 106 agreements for neighbouring development sites. However, as referenced in the Permeability section above, the application does not appear to provide for such a link, and therefore the layout of the site (demonstrating swept path movements for vehicles within the site) should be investigated further in line with London Plan policy 3C.21 Improving conditions for walking and Draft Replacement London Plan policy 6.10 Walking and London Plan Policy 3C.22 Improving conditions for Cycling and Draft Replacement London Plan Policy 6.9 Cycling.

43 Still with the aim of improving connectivity and accessibility, the OAPF and the East London Green Grid Area Framework 4 propose a bus bridge in the area between Ferry Lane and Creek Way. This is supported by TfL in line with London Plan policy 3C.20 and Draft Replacement London Plan policy 6.7 Buses, bus transits, trams.

44 Given that the provision of these above walking, cycling and bus links are important for improving the area's accessibility and will directly benefit the site, TfL would expect the applicant to contribute towards s106 obligations and contributions towards their implementation. TfL would therefore welcome the opportunity to discuss this further with LB Havering and the applicant.

45 Further investigation and acceptable section 106 obligations are required towards securing suitable transport provisions to ensure that the application complies with London Plan policies 3C.20, 3C.21, 3C.22 and 3C.25, and draft replacement London Plan policies 6.4, 6.7, 6.9 and 6.10.

## Local planning authority's position

46 Havering Council Planning officers are concerned at the lack of a riverside walkway, the visual impact and design quality. They have also informed the GLA that the Environment Agency is raising concerns over the adequacy of the access road because they feel that it is unstable and causing damage to banks of Rainham Creek.

## Legal considerations

47 Under the arrangements set out in Article 4 of the Town and Country Planning (Mayor of London) Order 2008 the Mayor is required to provide the local planning authority with a statement setting out whether he considers that the application complies with the London Plan, and his reasons for taking that view. Unless notified otherwise by the Mayor, the Council must consult the Mayor again under Article 5 of the Order if it subsequently resolves to make a draft decision on the application, in order that the Mayor may decide whether to allow the draft decision to proceed unchanged, or direct the Council under Article 6 of the Order to refuse the application, or issue a direction under Article 7 of the Order that he is to act as the local planning authority for the purpose of determining the application and any connected application. There is no obligation at this present stage for the Mayor to indicate his intentions regarding a possible direction, and no such decision should be inferred from the Mayor's statement and comments.

## Financial considerations

48 There are no financial considerations at this stage.

## Conclusion

49 London Plan policies on waste, employment, design, energy, urban greening, air quality and transport are relevant to this application. The application complies with some of these policies but not with others, for the following reasons:

- **Waste:** The proposal supports the London Plan policies for waste management.
- **Employment:** The proposed use is consistent with the site designation as part of a Strategic Industrial Location and supports the relevant London Plan policies, but further commitment to local employment benefits is required.
- **Design:** Absence of river path and visual impact.
- **Energy:** The scheme is likely to be consistent with London Plan policies on minimising carbon dioxide emissions, prioritising on-site renewable energy generation and use with some being sent back to the national grid. There are some calculations which are outstanding that need to be specified.
- **Urban greening:** Ecological improvement of adjacent areas such as the Rainham Marshes should be considered by the applicant and secured by the Council.
- **Air quality:** comments to follow post stage 1. Currently being reviewed by external specialists

- **Transport:** The scheme is not yet consistent with the London Plan transport policies. Contribution to the enhancement of projects currently outlined in the OAPF and ELGGF i.e. the riverside walkway and the bus bridge is necessary. Cycle parking and commitment to travel planning and construction and logistics/delivery and servicing planning is needed.

50 On balance, the application does not comply with the London Plan.

51 The following changes might, however, remedy the above-mentioned deficiencies, and could possibly lead to the application becoming compliant with the London Plan:

- **Employment:** Ensure that initiatives for recruiting unemployed people from the local area are developed.
- **Design:** The issues raised in relation to the safeguarding and facilitation of certain routes as part of the Green Grid are relevant to this proposal and should be considered - both along the River Thames and along Rainham Creek. An assessment of the tall structures is required.
- **Energy:** Further information and clarification is required from the applicant with regards to energy calculations, estimations of the amount/composition of the processed waste, the amount of energy that could be produced by the waste to energy facility. The applicant should also take into account the calorific power of the biogas and overall plant efficiencies, the parasitic loads (heat and electricity required by the gasification process), etc. The exportation of spare heat to nearby heat loads should be investigated. Carbon emissions and the energy requirements should be quantified.
- **Urban greening:** The Council should secure S106 funds from this development to contribute to the ecological improvement of adjacent areas.
- **Air quality:** A detailed response highlighting the significant air quality issues that this proposal may give rise to will be provided in due course.
- **Transport:** The applicant should prepare a green travel plan, a construction logistics plan and a delivery and servicing plan and provide further information regarding trip generation, car and cycle parking, and pedestrian facilities in order to determine whether the proposals accord with the relevant London Plan policies. River transportation and the use of the nearby wharves should be considered. Havering Council should secure these plans by conditions. The pedestrian and cycle connection alongside the River Thames to link to the Rainham Riverside Walkway and the bus bridge between Ferry Lane and Creek Way should be given consideration and secured by s106.

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for further information, contact Planning Decisions Unit:

**Colin Wilson, Senior Manager - Planning Decisions**

020 7983 4783 email colin.wilson@london.gov.uk

**Justin Carr, Strategic Planning Manager (Development Decisions)**

020 7983 4895 email justin.carr@london.gov.uk

**Sukhpreet Khull, Case Officer**

020 7983 4806 email sukhpreet.khull@london.gov.uk

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