

**REGULATORY SERVICES COMMITTEE  
SUPPLEMENTARY AGENDA**

**30 June 2011**

The following report is attached for consideration and is submitted with the agreement of the Chairman as an urgent matter pursuant to Section 100B (4) of the Local Government Act 1972

- 13 P0650.11 - EAST LONDON SUSTAINABLE ENERGY FACILITY LAND WEST OF FAIRVIEW INDUSTRIAL PARK, OFF MARSH WAY, RAINHAM (Pages 1 - 62)**

**Ian Buckmaster  
Committee Administration and  
Member Support Manager**

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## REGULATORY SERVICES COMMITTEE

## REPORT

30 June 2011

**Subject Heading:**

**P0650.11 – East London Sustainable Energy Facility Land west of Fairview Industrial park, off Marsh Way, Rainham**

**Extension of time limit of U0004.06 – Construction of sustainable energy facility comprising the erection of gasification power generation plant and associated building and plant (Application received 11<sup>th</sup> February 2011, re-registered on 1<sup>st</sup> April 2011)**

**Report Author and contact details:**

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**Policy context:**

**London Plan; Local Development Framework**

**Financial summary:**

**No financial impact to the Council.**

**The subject matter of this report deals with the following Council Objectives**

Clean, safe and green borough	<input checked="" type="checkbox"/>
Excellence in education and learning	<input type="checkbox"/>
Opportunities for all through economic, social and cultural activity	<input checked="" type="checkbox"/>
Value and enhance the life of every individual	<input checked="" type="checkbox"/>
High customer satisfaction and a stable council tax	<input type="checkbox"/>

**SUMMARY**

In June 2006 a proposal was presented to Members for a new Sustainable Energy Facility that would create energy by utilising a synthetic gas produced from Solid Recovered Fuel (SRF) mainly sourced from the neighbouring Frog Island facility using a process known as gasification. Havering were consultees to the application with the decision falling to the LTGDC as the determining Authority. At that time Members resolved to raise an objection to the proposals on the grounds of the cumulative impact of pollution on the health of local residents and that the siting and design of the structures would have significant adverse impacts to the river frontage.

These objections were relayed to the LTGDC who subsequently resolved to grant planning permission subject to conditions and the prior completion of a S106 legal agreement. The S106 agreement was subsequently signed in July 2008 and planning permission granted.

A further application to vary details was submitted in 2009 to allow an alternative to the original scheme by varying the power generation equipment to which no objections were raised.

This application is seeking approval to extend the time limit for the implementation of the 2008 planning consent which imposed a standard 3 year time limit on the commencement of development. A further three years is sought. The submission seeks no changes to the scheme as approved in 2008.

Staff recommend that as there have been no significant change in circumstances since the original approval in 2008, that the extension of time sought be approved subject to a legal agreement to reflect this application and to make LBH party to the agreement instead of the LTGDC and no contrary direction from the Mayor for London.

**RECOMMENDATIONS**

- A. That the Committee resolve that, the application is considered unacceptable as it stands but it would be acceptable subject to:
- a) No direction to the contrary from the Mayor for London;
  - b) The prior completion of a S106 legal agreement Deed of Variation pursuant to Section 106A of the Town and Country Planning Act 1990 (the 1990 Act) to ensure that the provisions of the original S106 dated 1<sup>st</sup> July 2008 as varied by a Deed of Variation dated 20<sup>th</sup> August 2010 relating to U0004.06 (referred to as the "Original Planning Permission") in the original Section 106 as varied) are applicable to this application and to make the London Borough of Havering party to the agreement as

successor Local Planning Authority. Such Section 106 Deed of Variation will ensure that planning application under planning reference P0650.11 will be bound by the planning obligations in the original Section 106 as varied that apply to the “Original Planning Permission” and which are summarised, though not exhaustively below:

- A total financial contribution of £100,000 to cover:
    - i) improved public access to riverside areas;
    - ii) environmental improvements and landscaping in the vicinity of the site;
    - iii) improvements to public transport provision to the area;
    - iv) a contribution to a base line study to be undertaken by the Havering PCT of the impact of air pollution on respiratory problems within the local population (under 15s) and to monitor impact once plant is up and running.
  - To implement, review and maintain a staff travel plan throughout the life of the development and,
  - That no development under the permission is to commence until a contract with the East London Waste Authority (Shanks) for the supply of solid recovered fuel primarily from the Frog Island Bio-MRF (MBT) facility to the power generation plant has been signed and evidence of this provided;
  - The planning permission not be implemented prior to the developer providing conclusive evidence to the Council that all of the necessary authorisations required by the Environment Agency have been secured.
  - That SRF can only be taken from the Jenkins Lane Bio-MRF in circumstances where the Frog Island facility has been closed, totally or partially for maintenance or to maintain the operational capacity of the plant;
  - To specify the limited circumstances where SRF can be brought to the site from sources within the ELWA area other than the Frog Island and Jenkins Lane Bio-MRFs to maintain the necessary input for power generation.
  - To use reasonable endeavours to secure a conveyor link between the plant site and Frog Island; to regularly review the proposal to secure a conveyor link and to regularly report to the local planning authority with details.
  - Save for consequential amendments all other covenants, obligations and recitals of the original Section 106 dated 1st July 2008 shall not be varied.
  - Subject to payment of the Council reasonable legal fees associated with the Deed of Variation.
- c) the planning conditions set out below:

**CONDITIONS:**

1. SC04 – The development to which this permission relates must be commenced not later than three years from the date of this permission.

**Reason:** To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 (as amended by Section 51 of the Planning and Compulsory Purchase Act 2004).

2. No buildings hereby permitted shall be first occupied until provision shall be made within the site for the approved number of car parking spaces. Thereafter the car parking spaces shall be made permanently available for use for car parking and for no other purpose, unless otherwise agreed in writing by the Local Planning Authority.

**Reason:** To ensure that adequate car parking provision is made available off street in the interests of highway safety.

3. Before any of the development hereby permitted is commenced, samples of all materials to be used in the external construction of the building(s) shall be submitted to and approved in writing by the Local Planning Authority and thereafter the development shall be constructed with the approved materials.

**Reason:** To ensure that the appearance of the proposed development will harmonise with the character of the surrounding area, and that the Development Control Policies Development Plan Document Policy DC61

4. No development shall take place until there has been submitted to and approved by the Local Planning Authority a scheme of hard and soft landscaping, which shall include indications of all existing trees and shrubs on the site, and details of any to be retained, together with measures for the protection in the course of development. All planting, seeding or turfing comprised within the scheme shall be carried out in the first planting season following completion of the development and any trees or plants which within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species, unless otherwise agreed in writing by the Local Planning Authority.

**Reason:** In accordance with Section 197 of the Town and Country Planning Act 1990 and to enhance the visual amenities of the development.

5. No goods or materials shall be stored on the site in the open without the prior consent in writing of the Local Planning Authority.

**Reason:** In the interests of visual amenity.

6. The development hereby permitted shall not be carried out otherwise than in complete accordance with the approved plans, particulars and specifications.

**Reason:** The Local Planning Authority consider it essential that the whole of the development is carried out and that no departure whatsoever is made from the details approved, since the development would not necessarily be acceptable if partly carried out or carried out differently in any degree from the details submitted.

7. The development hereby approved shall not be commenced until a report on potential contamination of the site has been prepared by an appropriately qualified person and submitted to and approved in writing by the LPA. The report shall include:

- i) a survey of the scale and nature of any contamination;
- ii) an assessment of potential risks to the public, buildings (existing or proposed) or the environment, including adjoining land and the water environment; and
- iii) details of any remedial measures necessary to make the site suitable for the proposed use or development.

The development hereby approved shall not be commenced until remedial measures have been carried out as approved and completed to the satisfaction of the Local Planning Authority.

If during development works any contamination should be encountered which was not previously identified and is either from a different source or of a different type to that identified in the original approved survey then revised remedial measures shall be submitted to and approved by the local planning authority, and those measures shall be carried out as approved prior to the first occupation of the development.

If during development works any contamination should be encountered in areas previously expected to be free from contamination, remedial measures shall be carried out in accordance with the approved details prior to the first occupation of the development.

**Reason:** To protect those engaged in construction and the occupation of the development from potential contamination.

8. The development hereby approved shall not be commenced until details of the site surface and foul drainage systems have been submitted to and approved in writing by the local planning authority. The drainage system shall be constructed in accordance with the approved details.

**Reason:** To prevent the pollution of the water environment.

9. The development shall not be carried out unless in accordance with the environmental standards, mitigation measures, requirements and methods of implementing the development contained in the Environmental Statement and appendices thereto, submitted in support of the approved planning application U0004.06 produced by Enzygo Limited, unless and to the extent that such standards, measures, requirements and methods are altered by the express terms of this permission and the approved strategies, frameworks, protocols and other documents submitted or to be submitted pursuant to it.

**Reason:** To ensure the development is carried out in accordance with the assessment carried out as part of the environmental statement and the mitigation measures proposed therein.”

- 10 The development shall be carried out in accordance with the environmental standards, mitigation measures, requirements and methods of implementing the development contained in the environmental statement relevant to the development and appendices thereto, submitted with the planning application, the development specification and framework and any Regulation 19 of Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 submission documents, unless and to the extent that such standards, measures, requirements and methods are altered by the express terms of this permission and the approved strategies, frameworks, protocols and other documents to be submitted pursuant to it.

**Reason:** To ensure the development is carried out in accordance with the assessment carried out as part of the environmental statement and the mitigation measures proposed therein.

11. Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

**Reason:** To prevent the contamination of ground water as piles may create pathways for contamination that pose a risk to groundwater resources.

12. No infiltration of surface water drainage into the ground is permitted other than with the express written consent of the Local Planning Authority, which may be given only for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approval details.



**Reason:** To prevent the contamination of ground water as the site is on historic landfill and this may mobilise contaminants.

13. The development hereby approved shall not commence until a surface water drainage scheme for the site, based on sustainable drainage principles and an assessment of the hydrological and hydrogeological context of the development, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed. The scheme shall also include details of how the scheme shall be maintained and managed after completion

**Reason:** To prevent the increased risk of flooding, to improve and protect water quality, improve habitat and amenity, and ensure future maintenance of the surface water drainage system.

14. External artificial lighting within 40m of any surrounding sites of interest for nature conservation (including Rainham Creek, Lower Beam River and the Inner Thames Marshes) shall be directed away from the area and shall be focused with cowlings.

**Reason:** To minimise light spill from the new development into these sites of interest for nature conservation.

15. The development hereby approved shall not be commenced until a detailed method statement for the removal or long term management of giant hogweed present on the site has been submitted and approved in writing by the Local Planning Authority. The method statement should include proposed measures to prevent its spread during any operations relating to the proposal, such as mowing, strimming or soil movement. Any soils brought to the site shall be free of the seeds/root/stem of any invasive plant covered under the Wildlife and Countryside Act 1981 (as amended). Development shall proceed only in accordance with the approved method statement.

**Reason:** Giant Hogweed is an invasive plant, the spread of which is prohibited under the Wildlife and Countryside Act.

16. The development hereby approved shall not be commenced until details of a vegetated Buffer Zone 16 metres wide alongside the Thames, and a vegetated Buffer Zone 5 metres wide alongside the pond to the east of the site and the ditch running in parallel to the Thames has been submitted to and approved in writing by the Local Planning Authority. Thereafter the buffer zones shall be implemented in accordance with the approved details to the satisfaction of the local planning authority. The buffer zones shall be measured from the top of the bank and shall be free of structures, hard standing, car parks and fences in order to avoid problems such as fragmentation of the buffer; the introduction of non-native species into the buffer; and pressure for inappropriate bank retention works.

**Reason:** To maintain the character and ecology of the watercourses and provide undisturbed refuges for wildlife using the river corridor and to retain access to the watercourse for the Environment Agency to carry out its functions and to protect the river environment.

17. No development hereby approved shall be commenced until a watervole survey has been carried out on all riparian and wetland habitats and submitted to the local planning authority for its approval. The survey shall:
- (a) identify presence/absence; population size, etc
  - (b) assess the development's impact on the watervole population.
  - (c) produce a mitigation strategy if a population is present.

Thereafter mitigation measures shall be carried out in accordance with the approved mitigation strategy.

**Reason:** The habitat of water voles is protected under the Wildlife and Countryside Act 1981 and therefore development must not impact on their habitat. Any encroachment within this zone should ensure that this species is not present.

18. Prior to the commencement of development details of the construction of storage facilities for oils, fuels or chemicals shall be submitted to and approved in writing by the Local Planning Authority. The construction of any such facilities shall be carried out in accordance with the approved scheme before first occupation of the development pursuant to the use hereby permitted.

**Reason:** To prevent pollution of the water environment.

19. No development approved by this permission shall be commenced until the Local Planning Authority is satisfied that adequate sewerage infrastructure will be in place to receive foul water discharges from the site. No buildings (or uses) hereby permitted shall be occupied (or commenced) until such infrastructure is in place.

**Reason:** To prevent pollution of the water environment.

20. Details, including drawings as appropriate setting out the means by which any groundwater encountered during site construction works is to be disposed of, including any appropriate mitigation methods, shall be submitted to the local planning authority for approval. The dewatering of the site shall be carried out in accordance with the approved details.

**Reason:** To prevent pollution of the water environment.

21. The development hereby permitted shall not be commenced until such time as a survey of the existing river wall, to establish the following information has been submitted to, and approved in writing by, the Local Planning Authority.

- The structural integrity and stability of the wall, including, if needed, intrusive investigation and or testing of the wall and any buried element.
- Supporting structural calculations.
- A proposal of works needed to raise the defences in the future by 600mm above the current flood defence level if needed to address future climate change.

**Reason:** To establish the condition of the existing river wall to both inform the assessment of needed remedial and or replacement works and the detailed design for any construction close to the flood defence. In addition to preventing the increased risk of flooding to third parties, to the site itself and to prevent any detrimental effect on water quality or biodiversity.

22. The development hereby permitted shall not be commenced until such time as a proposal of the works necessary to bring the defences up to the life expectancy of the development (60 years for commercial) has been submitted to and approved in writing by, the Local Planning Authority. The recommendations of the proposal shall be completed before the development is operational.

**Reason:** To ensure the safety of the facility and occupants for the lifetime of the development.

23. No works shall be commenced on the site until calculations, details and drawings of all works within 16 metres of the River Thames have been submitted to the Local Planning Authority for its prior approval. The works shall be carried out in accordance with the approved details

**Reason:** To maintain the integrity of the flood defences of the River Thames

24. A horizontal access strip 16 metres wide adjacent to the River Thames, Ingrebourne and Havering New Sewer shall be left free from any permanent development, including fences and other obstructions.

**Reason:** To retain access to the watercourse for the Environment Agency to carry out its functions and to protect the river environment.

25. The development hereby approved shall not commence until a flood management strategy fully detailing flood warning and evacuation plans has been submitted to and approved by the Local Planning Authority. The strategy shall be implemented in full accordance with the approved details before first occupation of the development.

**Reason:** To minimise risks from tidal flooding.

## **INFORMATIVES**

Under the Water Resources Act 1991 and the Thames Region Land Drainage Byelaws 1981, the prior written consent of the Environment Agency is required for certain works or structures in, over, under or within 16 metres of the top of the bank of the River Thames, designated a 'main river'. This is irrespective of any planning permission granted. Please contact Ian Blackburn (0207 091 4013) for further details.

### **Reason for Approval:**

The proposed development is considered to be in accordance with the aims, objectives and provisions of Policies CP11, CP15, DC50, DC52 and DC55 of the Core Strategy and Development Control Policies Development Plan Document and the policies of the Joint Waste Development Plan Document.

The proposed development would provide a waste management solution for locally generated wastes in accordance with government guidance in PPS 10 and the London Plan. In particular it would accord with the proximity principle and subregional self-sufficiency. It would generate electricity from a renewable resource in a manner on type of locality advocated in PPS22. It would meet the objectives of the Landfill Directive and government policy on waste. It would achieve these objectives in a manner that would be both sustainable and have insignificant environmental impact. The proposals comply with the Havering LDF preferred options document and London Plan policy sustainable waste management and renewable energy, which set out a positive approach to these issues, including self sufficiency for the ELWA sub-region in waste management. It is considered that the proposals are also acceptable in accordance with policies CP11, CP15 and DC50.of the Core Strategy and Development Control Policies Development Plan Document.

**AND**

- B. That the Head of Development and Building Control in conjunction with the Assistant Chief Executive for Legal and Democratic Services be given delegated authority to negotiate and agree the precise wording of conditions with the Environment Agency to address any issues the Environment Agency may raise in respect in particular to flood risk.

<b>REPORT DETAIL</b>
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## **1.0 Background**

- 1.1 The development of the East London Sustainable Energy Facility (ELSEF) on land at the Ford Motor Company Limited complex, adjacent to the Fairview Industrial Estate, in Rainham was approved by the LTGDC on 14 September 2006, subject to planning conditions and the completion of S106 legal agreements, despite objections from Havering. The S106 Agreement

was completed between the LTGDC, the landowners and the planning permission was subsequently formally granted by the LTGDC on 2 July 2008. This scheme was based on a process of electricity generation from the combustion of synthetic gas to generate steam, which in turn would be used in a condensing steam turbine to produce electrical power.

- 1.2 A variant of this original scheme was subsequently granted planning permission in August 2010 (ref U0017.09) using the same fuel and material input to the facility but based on an alternative power generation equipment and technology, consisting of gas engines instead of the steam turbine. Havering raised no objections to these changes.

## **2. Site Description**

- 2.1 The application site is approximately 2.95 hectares in area and located on the northern bank of the Thames and is currently used by the Ford Motor Company Limited as part of its vehicle holding centre. The site extends westwards as far as the Beam River; beyond which is the Ford works. To the east is the Flogas LPG bottling depot and the southern part of the Fairview Industrial Park. Adjacent to the depot on the east side of the site and approximately 100m away, is the Shanks East London (Bio-MRF) which processes waste from the boroughs of Havering and Barking and Dagenham as part of a contract with the East London Waste Authority (ELWA).
- 2.2 The site lies approximately 1.8km from the centre of Rainham, with the nearest residential properties at Creekside, some 1.4 km away. Larger areas of industrial land, Rainham Sewage Treatment Works, CEME, the A13, CTRL and C2C railways are located between the site and Rainham Village. To the south of the site across the Thames are the industrial areas of Belvedere in the London Borough of Bexley, beyond which are residential areas some 2.3 km away.
- 2.3 Access to the site is through Fords car compound via a private roadway; access can also be gained from Marsh Way, but the entrance is currently obstructed with concrete slabs.
- 2.4 The site is located within the Rainham Employment Area and is identified as a Strategic Industrial Location.

## **3. Description of Proposal**

- 3.1 Approval is sought to extend the time limit for the implementation is sought is for the construction of a power generation plant that would utilise a synthetic gas produced from a solid recovered fuel (SRF) using a process known as gasification. The facility is designed to generate about 18 MW of electricity and operate on a 24 hours per day 7 days a week basis. The delivery of fuel by road would be between 08.00 and 18.00 hrs Monday to Friday, and between 9:00 and 14:00 on Saturdays. Other deliveries and

export of residuals would be 7 days a week. The proposed facility comprises:

- A gas island comprising the gasifier and gas cleaning plant and associated storage silos;
- Associated process and storage plant including condensers, cooling tower, chemical, gas and water storage tanks, effluent treatment plant, heat exchangers and electrical switch gear;
- Buildings housing a pelletiser, pelletiser storage area, steam turbine and boilers;
- A visitor centre;
- A conveyor system between the development site and the Shanks East London (Bio-MRF) on Frog Island;
- A site office and maintenance building; and
- Operational and visitor parking areas, circulation space and a weighbridge together with the extension of Frog Lane from Marsh Way to the operational area of the facility.

The facility would take between 12 and 18 months to construct, following that there would need to be a period of about 6 months for commissioning.

3.2 The solid recovered fuel from the mechanical biological treatment plant at Frog Island, which typically would comprise of a mixture of paper, textile, wood and some plastic would be pelletised to form the fuel for the power generation plant. The bulk of the fuel feedstock will be provided by the Shanks East London (Bio-MRF) approximately 100m to the east of the proposed gasification facility with the balance of the fuel supply material being supplied via the Shanks' plant at Jenkins Lane, in Newham. This plant also manages waste collected in the ELWA area and produces SRF of the appropriate technical specification for use as a fuel in the proposed gasification facility. During periods of maintenance at the primary fuel source location it will be necessary to import a greater proportion of the fuel source from the Jenkins Lane facility. In the very unlikely event that both these sources become unavailable for short periods suitable material would be sought from elsewhere in the ELWA or London to ensure that power generation is not interrupted. The SRF would be transported to the site either by a conveyor system across adjoining land or by road via Creek Way and Marsh Way. Any material from Jenkins Lane would be transported by road via the A13.

3.3 The process of turning the fuel into electricity can be summarized as follows: The fuel material would be delivered to the plant un-pelletised where it would then be mixed with hydrated lime before pelletising. The pellets would be stored from where there would be a continuous conveyor system to transfer the material to the gasification process. The process transfers heat to the fuel which is turned into a synthetic gas composed of mainly nitrogen, carbon dioxide, carbon monoxide and hydrogen. There would be solid by-product arising from the process, including ash, know as char. The char

would be removed from the gas, cooled and stored in silos before being taken off-site for disposal at a suitably licensed landfill site.

- 3.4 The synthetic gas would then be cooled and cleaned by a series of processes which would leave a small quantity of surplus liquor that cannot be reused in the process. This would be neutralized and treated biologically before being discharged to sewer. The gas would then be burned in a boiler plant to generate steam which would be used in a condensing steam turbine to generate electricity. The by-products of the combustion process would be discharged to the atmosphere via a 34 metre high stack.
- 3.5 In the event of emergencies or shut down it would be necessary to divert the synthetic gas to a ground flaring system, with the combustion emissions going directly to atmosphere.
- 3.6 The facility would comprise a number of buildings and structures, the centre piece being the gasification plant. In response to the riverside setting of the facility the proposed layout ensures that a single building fronts and gives definition to the riverside boundary of the site and presents a single architectural solution to the river rather than a series of fragmented facilities. The architectural treatment and the palette of materials used would be common to all the buildings and structures where possible. The riverside and administration buildings would have rendered block work plinths at ground floor level and be clad on upper levels in stucco embossed mill finish aluminum trapezoidal metal cladding. Windows and louvers would be in gray or aluminium. Roofs would be of a similar aluminium finish to the cladding.
- 3.7 Subject to the agreement of the adjoining landowner, an elevated conveyor system would be constructed between the plant and Frog Island in order to transport the SRF from the Frog Island facility. The conveyor would be supported by a series of stilts about 6 metres above ground level and enclosed in a galvanized steel mesh a further 2 metres higher.

#### **4. Consultations and Representations**

- 4.1 The application has been advertised as a major application by reason of the size and nature of the proposals for which the extension of time would apply. The application was advertised by press notice, site notices and letters to neighbouring properties. No letters of representation have been received.
- 4.2 The following consultee responses have been received:
- **London Borough of Bexley** – No objection
  - **London Fire Brigade** – Advise of the need for three additional fire hydrants.
  - **LFEPA** – No objection
  - **National Air Traffic Service (NATS)** – No safeguarding objections

- **Thames Water** – Advises that it is the responsibility of the developer to make proper provision for drainage to ground, water courses or a suitable sewer. Recommends that the applicant should ensure that storm flows are attenuated or regulated into the receiving public network through on or off site storage.
- **Mayor for London** – Advise that the application is strongly supported in strategic planning terms. It is requested that some further information should be provided relating to energy recovery, exportation of heat and flow diagrams to show the waste products from the process. The safeguarding of land for a riverside path should be maintained and car and cycle parking requirements should be in accordance with the draft replacement London Plan.
- **Natural England** – No comments, but would expect the Local Planning Authority to assess and consider the possible impacts arising from the proposal when determining the application.
- **Environment Agency** – No objections subject to updated conditions being imposed..
- **Streetcare/Highways** – No objection
- **Health and Safety Executive** - Does not raise any objections on safety grounds against the granting of planning permission.

## 5. **Planning History**

- 5.1 There is an extensive history of planning applications in the near vicinity. Of most relevance to this application are:

P1969.05. - Construction of sustainable energy facility comprising the erection of gasification/power generation plant and associated buildings and plant - withdrawn following resolution to refuse.

U0004.06 - Construction of sustainable energy facility comprising the erection of gasification power generation plant and associated building and plant – Approved

U0017.09 – Variation of conditions 6 and 9 to planning permission U0004.06 to allow minor amendments to the power generation strategy and ancillary plant and equipment – Approved

## 6. **Relevant Policies**

### Havering LDF Policies

CP3 – Employment  
CP11 – Sustainable Waste Management  
CP15 – Environmental Management  
CP17 – Design  
DC9 – Strategic Industrial Locations  
DC33 – Car Parking  
DC48 – Flood Risk



DC49 - Sustainable Design and Construction  
DC50 – Renewable Energy  
DC52 – Air Quality  
DC53 – Contaminated Land  
DC55 – Noise

**Consolidated London Plan Policies**

4A.1 – Tackling Climate Change  
4A.3 – Sustainable Design and Construction  
4A.7 – Renewable Energy  
4A.12 – Flooding  
4A.13 – Flood Risk Management  
4A.19 – Improving Air Quality  
4A.21 – Waste Strategic Policy and Target  
4A.22 – Spatial Policies for Waste Management  
4A.23 – Criteria for the Selection of Sites for Waste Management and Disposal  
4A.27 – Broad Locations Suitable for Recycling and Waste Treatment Facilities.

**National Guidance**

PPS10 – Planning for Sustainable Waste Management  
PPS22 – Renewable Energy  
PPS23 - Planning and Pollution Control  
PPS25 – Development and Flood Risk

**7. Staff Comments**

- 7.1 The acceptability of the development of a gasification plant in this location has previously been established and currently has planning permission. The proposals seek to extend the time limit for the implementation of that development. In looking at the principle of the development the dual considerations of sustainable waste management and renewable energy were fully assessed in both the original report to Havering's Regulatory Services in its function as consultee and the report to the LTGDC Planning Committee who were the determining Planning Authority at the time. Copies of both reports are appended.
- 7.2 The support for the principle of the development detailed in the previous reports has been strengthened further since the grant of the original consent by the relevant policies of the LDF and the consolidated London Plan and the Draft Climate Change Mitigation and Energy Strategy, all of which seek to promote renewable energy technologies.
- 7.3 Policy DC50 indicates that proposals for the development of renewable energy facilities will be acceptable subject to provisos related to design and impact balanced against the benefits of achieving diverse and sustainable energy supplies and reducing greenhouse effects.

- 7.4 Policy 4A.7 of the London Plan requires Boroughs to identify broad areas where the development of specific renewable energy technologies is appropriate and the Draft Climate Change Mitigation and Energy Strategy encourages the conversion of waste into low carbon energy in waste-to-energy plants.
- 7.5 The original advice to members, that the relevant guidance makes it clear that allocated industrial areas are appropriate locations for renewable energy schemes, is unchanged. The use would be similar in nature to other industrial developments and staff's view that the principle that this is an appropriate site for this renewable energy use remains unchanged.
- 7.6 Turning to the principle of sustainable waste management the level of Policy support for the proposal has also strengthened since the original consent was granted. Policy DC9 accepts that Strategic Industrial Locations are suitable locations for waste uses subject to being consistent with the policies set out in the Joint Waste Development Plan Document and Core Policy CP11. This in turn is supported by Policy 4A.27 of the Consolidated London Plan which sets out broad locations which would be suitable for recycling and waste treatment facilities.
- 7.7 The gasification of processed waste is still a relatively new technology in the field of waste management. However, it is identified as being important to achieving waste management targets for limiting landfill in PPS10 and the London Plan in particular. The Council has accepted the principle of utilising new waste technologies when approving the Frog Island facility. This gasification proposal would provide the next link in the sustainable management of the municipal waste collected in Havering and Barking and Dagenham. The amount of waste that needs to be sent to landfill would be reduced significantly, with only the residues from the process needing to be disposed of in that way. It is considered that the gasification of the by-product from the Frog Island facility would be a sustainable method of waste management which would meet government and London Plan objectives. It would also meet the criteria of Policy CP11 for permitting new waste management facilities.
- 7.8 There is an existing extant permission with over 2 years remaining which would use gas engines as the means of power generation from the synthetic gas produced. This application is to extend the time limit on the original permission which would use the gas in a boiler plant to produce steam, which in turn would be used in a condensing steam turbine to produce electrical power. As yet there has been no final decision on which method will be used due to the fast pace of this developing technology and hence the need to keep the original permission alive in order to maintain the element of choice.
- 7.9 Current national planning advice is that Local Planning Authorities should take a positive and constructive approach towards applications which improve the prospect of sustainable development being taken forward

quickly. In this instance, although the previous decision to grant planning permission was taken by the LTGDC, that decision was in accordance with the policies of the UDP which was at that time the Development Plan. The decision was also made taking full cognisance of the Environmental Impact Assessment and the comments of the Environment Agency and PCT who did not raise any objections on the grounds of public health, pollution or safety. National planning advice states that Local Planning Authorities should, in making their decisions on applications for extensions of time, focus their attention on development plan policies and other material considerations (including national policies on matters such as climate change) which may have changed significantly since the original grant of permission. Although it is within the LPA's power to refuse an application, this should only be where changes in the development plan or other material considerations indicate the proposal should no longer be treated favourably.

- 7.10 In terms of design the scheme is unchanged and staff consider that it involves imaginative design principles that would deliver a scheme that would stand out from its surroundings, without being immediately recognisable as a public service building. This is similar to the approach to the design of the new buildings at the Gerpins Lane Civic Amenity site and on Frog Island that were supported by the GLA. Whilst the standard of design is a matter of judgement it is considered that a high standard would be achieved by this development which would be appropriate for the area and meet the requirements of DC61. It represents a significant investment in an area of historically low quality uses and design standards and it is judged that it would make a significant contribution to the improvement of the environment and character of the area.
- 7.11 The original planning application was submitted with an Environmental Impact Assessment but staff do not consider that the likely impacts arising from the proposed development have changed to any significant degree since that time. The potential impact upon air quality as a result of emissions was of particular concern to Members when the original application was under consideration. It is understood that air quality in the area has not changed to any significant degree since the original application was made. The requirements that the necessary permit under the Pollution Prevention and Control Regulations be obtained from the Environment Agency and that the developer contribute towards a base line study by the PCT into the impact of air pollution on respiratory problems within the local population (under 15s) and to monitor impact once plant is up and running would remain embodied in the Legal Agreement. Although LDF has become the adopted Development Plan for the area since the original application was considered staff are satisfied there have been no changes to planning policy or other material considerations which would require that the effects of the proposal on the environment be reconsidered.
- 7.12 There have been some changes in the advice received from the Environment Agency (EA), but these are concentrated on the issue of flood risk and can be addressed by the imposition of conditions. These conditions remain under discussion with the EA.

- 7.13 Turning to transportation and highways matters, it remains the intention to construct a conveyor link between the Frog Island facility and the application site. This would significantly reduce the transport distances involved with dealing with the Council's waste as residues from Frog Island are currently transported by road to Dagenham Dock for onward transit to a Bedfordshire landfill site. The conveyor link would cross land outside the control of the applicant but the applicant has agreed to maintain efforts to secure the link through a clause in the S106 obligation.
- 7.14 The proposed lorry route to the site would be mainly over private roads, but there would be a short section of public highway, Marsh Way. This is currently unlit and the agreed contribution to help remedy this through the S106 remains. There is already a bus service to the CEME site which employees of the facility could use. A financial contribution to help secure the long term future and extension of the route would be maintained in the legal agreement. The applicant has also agreed to submit and implement a staff travel plan to help reduce reliance on car transport for employees.

8. **Conclusion**

- 8.1 Staff are satisfied that the proposal remains acceptable when considered against the relevant policies in relation to renewable energy, waste management, location and regeneration and environmental impact.
- 8.2 The proposed development would provide a waste management solution for locally generated wastes in accordance with government guidance in PPS 10 and the London Plan. It would also generate electricity from waste in an allocated strategic industrial area within a building of good quality design representing a significant investment in a priority area for regeneration. The S106 would provide necessary safeguards, contributions and obligations.
- 8.3 In all other respects the application remains in accordance with the relevant national guidance, regional and local development plans and it is accordingly recommended that planning permission be granted subject to a variation to the legal agreement and no contrary direction from the Mayor for London.

**IMPLICATIONS AND RISKS**

**Financial implications and risks:**

No financial implications or risks.

**Legal implications and risks:**

A Section 106 planning obligation would need to be prepared and signed prior to the issue of the planning permission.

The heads of the agreement are set out in the report recommendation.

**Human Resources implications and risks:**

There would be no human resource implications or risks.

**Equalities implications and risks:**

There are no specific social inclusion and diversity issues that arise directly from this report. The council's policies and guidance, the London Plan and Government guidance all seek to respect and take account of social inclusion and diversity issues.

**BACKGROUND PAPERS**

1. The planning application as submitted or subsequently revised including all forms and plans.
2. The case sheet and examination sheet.
3. Ordnance survey extract showing site and surroundings.
4. Standard Planning Conditions.
5. Copy of all consultations/representations received and correspondence, including other Council Directorates and Statutory Consultees.
6. The relevant planning history.

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**LONDON THAMES GATEWAY DEVELOPMENT CORPORATION****PLANNING COMMITTEE MEETING: 14<sup>th</sup> September 2006****Planning Application for LTGDC's Determination****Report of the Director of Planning****CASE NUMBER:** LTGDC-06-050-PP      **DATE MADE VALID:** 08/05/2006**APPLICATION NO:** U0004.06/LBHG      **TARGET DATE:** 07/08/2006**APPLICANT:** Novera Energy Limited PLC**AGENT:** RPS Planning, Transport and Environment**PROPOSAL:** Construction of sustainable energy facility comprising the erection of gasification power generation plant and associated building and plant.**LOCATION:** Land west of the Fairview Industrial Park off Marsh Way, within the Ford Motor Co site, Rainham**1. SUMMARY**

1.1 This application is for the development of a power generation facility on land adjacent to the Fairview Industrial Estate on the River Thames frontage. The proposed plant would use a process known as gasification to convert a fuel derived from waste processing operations at the nearby Frog Island site into a gas that can be used generate electricity. The application includes the option of a conveyor link between the two sites to transport the fuel material as an alternative to road transport. The plant would produce energy for the adjoining Ford works and for the National Grid.

1.2 The proposal raises issues relating to waste management, sustainable energy provision, regeneration and environmental impact. The main policy considerations are set out in government guidance for waste management (PPS10); Sustainable energy (PPS22); and the Thames Gateway Planning Framework (RPG9a); the London Plan and UDP policies, EMP1 (Rainham Employment Area), ENV1/MWD1 (environmental impact), MWD13 (recovery & recycling), and ENV25 (Thameside development). The interim planning guidance (IPG) 'An urban strategy for London Riverside' and full council resolution 61 'investment opportunities' of 2/2/05 are also relevant.

1.3 A number of consultees, including the Environment Agency and Havering Primary

Care Trust have not raised any objection to the application. The Mayor of London fully supports the proposals as being in accordance with the London Plan and government policies for sustainable waste management and sustainable energy generation. However, LB Havering, local residents, and the local MP have objected to the proposals.

- 1.4 Taking all the relevant matters into account the report concludes that planning permission should be granted subject to conditions and the developer first entering into a S106 obligation covering the source of fuel material and a financial contribution for environmental and other works. Should members agree the recommendation it would need to be referred to the Mayor of London.

## **2. SITE AND PROPOSAL**

- 2.1 Background to the Proposal
  - 2.1.1 The East London Waste Authority (ELWA) comprises the boroughs of Havering, Barking & Dagenham, Redbridge and Newham. ELWA has entered into a 25-year waste management contract that includes the setting up of new waste management facilities. Two major waste management centres, one at Frog Island, Rainham and the other at Jenkins Lane in Newham have been granted planning permission. The facility at Frog Island is to be fully commissioned over the coming months and it will take municipal waste collected in Havering and Barking and Dagenham.
  - 2.1.2 The waste management centres will treat municipal waste by biological and mechanical means through a system known as a Bio-MRF. This seeks to maximise the amount of waste than can be recycled, but does produce a by-product that needs to be treated or disposed of elsewhere. Under the current contract this material is to be taken by rail to Berkshire via the Dagenham Dock Freightliner Terminal, for disposal by landfill. This by-product has a high calorific value and, therefore, has the potential for use as a fuel. That applicant stated his intention to look for opportunities to use the by-product as a fuel once the plant is up and running, although it is not a requirement of the planning permission. This application offers an opportunity to utilise the waste by-product in a more sustainable way to generate electricity, that minimises transportation distances and significantly reduces the amounts that need to go to landfill. However, the proposal is made independently of ELWA and its waste management partner.
- 2.2 Description of Site & Surroundings
  - 2.2.1 The site lies on the northern bank of the Thames and is currently used by the Ford Motor Company Limited as part of its vehicle holding centre. This extends westwards as far as the Beam River; beyond which is the Ford works. To the east is the Flogas LPG bottling depot and the remainder of the Fairview Industrial Park which contains predominately large shed warehousing units. Adjacent to the depot on the east side of the site and approximately 100m away, is the Shanks East London (Bio-MRF) which is due to process waste from the boroughs of Havering and Barking and Dagenham.
  - 2.2.2 The proposed site amounts to some 2.95 hectares and lies approximately 1.8 Km (1.1 miles) from the centre of Rainham, with the nearest residential properties at Creekside between Rainham Creek and the sewage works, some 1.4 km away. Between the site and Rainham are industrial areas, the A13, the CTRL and C2C railways, the new CEME building and the sewage works. To



the south across the Thames are the industrial areas of Belvedere in the London Borough of Bexley, beyond which are residential areas some 2.3 km away. Within the Ford car compounds are two wind turbines that supply power to the car plant; these are about 85 metres high. Looking northward from the site the view is dominated by a row of electricity pylons and the elevated A13, with glimpsed views of Dagenham and Rainham beyond, especially the high-rise tower blocks in South Hornchurch.

2.2.3 Access to the site is through the car compound via a private roadway; access can also be gained from Marsh Way, but the entrance is currently obstructed with concrete slabs. Immediately to the south of the site is the Thames earth flood protection embankment that separates the site from the river, this is predominately vegetated by grass, with the occasional shrub. A drainage balancing pond (approximately 30 x 10m) is situated in the south-east corner of the application site.

## 2.3 Description of Proposal

2.3.1 It is proposed to construct a power generation plant that would utilise a synthetic gas produced from a solid recovered fuel (SRF) using a process known as gasification. The facility is designed to generate about 13 MW of electricity and operate on a 24 hours per day 7 days a week basis. The delivery of fuel by road would be between 08.00 and 18.00 hrs Monday to Friday, and between 9:00 and 14:00 on Saturdays. Other deliveries and export of residuals would be 7 days a week. The proposed facility comprises:

- A gas island comprising the gasifier and gas cleaning plant and associated storage silos;
- Associated process and storage plant including condensers, cooling tower, chemical, gas and water storage tanks, effluent treatment plant, heat exchangers and electrical switch gear;
- Buildings housing a pelletiser, pelletiser storage area, steam turbine and boilers;
- A visitor centre;
- A conveyor system between the development site and the Shanks East London (Bio-MRF) on Frog Island;
- A site office and maintenance building; and
- Operational and visitor parking areas, circulation space and a weighbridge together with the extension of Frog Lane from Marsh Way to the operational area of the facility.

The facility would take between 12 and 18 months to construct, following that there would need to be a period of about 6 months for commissioning.

2.3.2 The solid recovered fuel from the mechanical biological treatment plant at Frog Island, which typically would comprise of a mixture of paper, textile, wood and some plastic would be pelletised to form the fuel for the power generation plant. The bulk of the fuel feedstock will be provided by the Shanks East London (Bio-MRF) approximately 100m to the east of the proposed gasification facility with the balance of the fuel supply material being supplied via the Shanks' plant at Jenkins Lane, in Newham. This plant also manages waste collected in the ELWA area and produces SRF of the appropriate technical specification for use as a fuel in the proposed gasification facility. During periods of maintenance at the primary fuel source location it will be necessary to import a greater proportion of the fuel source from the Jenkins Lane facility. In the very unlikely event that both these sources become unavailable for short periods suitable

material would be sought from elsewhere in the ELWA or London to ensure that power generation is not interrupted. The SRF would be transported to the site either by a conveyor system across adjoining land or by road via Creek Way and Marsh Way. Any material from Jenkins Lane would be transported by road via the A13.

- 2.3.3 The process of turning the fuel into electricity can be summarized as follows: The fuel material would be delivered to the plant un-pelletised where it would then be mixed with hydrated lime before pelletising. The pellets would be stored from where there would be a continuous conveyor system to transfer the material to the gasification process. The process transfers heat to the fuel which is turned into a synthetic gas composed of mainly nitrogen, carbon dioxide, carbon monoxide and hydrogen. There would be solid by-product arising from the process, including ash, know as char. The char would be removed from the gas, cooled and stored in silos before being taken off-site for disposal at a suitably licensed landfill site.
- 2.3.4 The synthetic gas would then be cooled and cleaned by a series of processes which would leave a small quantity of surplus liquor that cannot be reused in the process. This would be neutralized and treated biologically before being discharged to sewer. The cleaner gas would then be burned in a boiler plant to generate steam which would be used in a condensing steam turbine to generate electricity. The by-products of the combustion process would be discharged to the atmosphere via a 34 metre high stack.
- 2.3.5 In the event of emergencies or shut down it would be necessary to divert the synthetic gas to a ground flaring system, with the combustion emissions going directly to atmosphere.
- 2.3.6 The facility would comprise a number of buildings and structures, the centre piece being the gasification plant. In response to the riverside setting of the facility the proposed layout ensures that a single building fronts and gives definition to the riverside boundary of the site and presents a single architectural solution to the river rather than a series of fragmented facilities. The architectural treatment and the palette of materials used would be common to all the buildings and structures where possible. The riverside and administration buildings would have rendered block work plinths at ground floor level and be clad on upper levels in stucco embossed mill finish aluminum trapezoidal metal cladding. Windows and louvers would be in gray or aluminium. Roofs would be of a similar aluminium finish to the cladding.
- 2.3.7 Subject to the agreement of the adjoining landowner, an elevated conveyor system would be constructed between the plant and Frog Island in order to transport the SRF from the Frog Island facility. The conveyor would be supported by a series of stilts about 6 metres above ground level and enclosed in a galvanized steel mesh a further 2 metres higher.
- 2.3.8 The environmental statement submitted considers the potential impact of the proposal from the following factors:
- **Surface water flooding:** the existing flood defences are considered to be adequate to protect the site from flooding and can be improved if necessary. A Surface Water and Flood Risk Assessment concludes that the proposed arrangement for the discharge of surface water runoff from the development into the nearby watercourses (the Beam River, the unnamed drainage ditch, and/or the Ingrebourne) will be of negligible impact. (Effluent from the proposed facility will be discharged to sewers, not

released into the River.) The assessment concludes that the flood defences already in place are adequate to protect the site from tidal and coastal flooding that might happen once every 200 and 1,000 years respectively.

- **Landscape and visual appraisal:** The quality of the architectural design of the proposal is considered to have a positive impact upon the appearance of this section of the River Thames waterfront. The Landscape and Visual Appraisal has concluded that the landscape has a generally high capacity to accept development of the kind proposed due to the surrounding heavy industry and utilities' infrastructure. The Facility has been designed to integrate well with the adjoining river bank location. The Visitor Centre will open up visual access to previously inaccessible sections of the northern Thames riverbank. The proposed architectural treatment will have a neutral or slight beneficial impact on existing views in the area.
- **Nature conversation:** The site has very limited value for nature conservation, which will not be significantly impacted upon. The development does not lie within any designated or protected areas of conservation importance and is not considered to impact on any within the surrounding area. The development will result in a loss of habitat that is of very limited nature conservation value, as the proposed layout involves retaining a significant proportion of the grass and scrub banks along the south and east boundaries. The assessment concludes that, the significance of the proposed activities on the site is considered to be low in relation to ecology and nature conservation.
- **Traffic:** The proposed development will have no significant impact on local roads and can significantly reduce vehicle haulage of the Solid Recovered Fuel produced at the Frog Island waste management facility. Without development of the Sustainable Energy Facility approximately 80,000 tonnes per annum of Solid Recovered Fuel would be transported further afield for energy generation or landfill. If the Sustainable Energy Facility was developed the need for a number of these trips would be avoided. Solid Recovered Fuel will be delivered to the Sustainable Energy Facility either by road or by conveyor. Development of the Sustainable Energy Facility will therefore reduce the distance that this fuel will need to be hauled from its source to a location where it can be used. The existing Frog Lane carriageway and junction will be reopened to adopted highway standards keeping its simple priority controlled 'T' junction status. The Traffic Impact Assessment that forms part of the Environmental Statement concludes that the development proposals can be integrated into the transport network without any major mitigation measures and there will be no significant impact on local roads.
- **Air Quality:** Emissions from the Sustainable Energy Facility will comply with the strictest regulatory standards. A detailed Air Quality Assessment has been carried out using a widely accepted computer model to predict the ground level concentrations of emissions from the Sustainable Energy Facility. In order to be conservative, the maximum level of emissions allowed by the Environment Agency has been assessed. The assessment is therefore a 'worst case' scenario and has shown that the output levels from the facility will not cause a breach of the UK Air Quality Standards or other benchmark air quality levels. The facility will be operated within all legislative requirements.

- **Noise:** Assessment of noise conditions during construction and operation of the facility concludes that noise impacts will be of no significance, providing the proposed mitigation measures are incorporated into the final design of the facility.
- **Archaeology:** There are no Scheduled Monuments, Listed Buildings, Registered Historic Parks and Gardens or Registered Battlefield sites present on the proposed site therefore the potential for significant remains to exist is low.
- **Land Contamination Hydrogeology and Geotechnical Issues.** A desktop assessment and site investigation relating to land contamination, hydro-geological and geotechnical conditions have been carried out on the proposed site. The site formed part of a historic landfill site. This will be taken into account in the design of the construction methods and drainage systems for the proposed development.

2.3.9 The Environmental Statement has identified no significant impact from the proposed development. It has shown that the proposed gasification facility will create mostly beneficial environmental impacts and that mitigation measures embodied within the project design, or imposed through planning conditions, will limit any minor impact identified.

### 3. MAIN ISSUES

1. Land Use Principle & Accordance with Policy
2. Assessment of Environmental Issues
3. Highways Issues
4. Other Matters

### 4. RELEVANT SITE HISTORY

4.1 There is an extensive planning history in the vicinity of the application site, the main applications are:

- L/HAV/1369/68 -approved Facilities building, Car Park, Storage Area and Bridge;
- L/HAV/1506/69- approved Outline Application for steam wash building, full application for covered way;
- L/HAV/1131/70 Approved Additional facility building comprising offices & mess room;
- L/HAV/1949/71 Approved Erection of 11000 volt overhead line;
- L/HAV/1068/76 Approved Regrading of river frontage adj. Frog Island in accordance Thames Flood Barrier scheme;
- L/HAV/350/80 Approved Erection of 11000 volt overhead line on wooden poles;
- L/HAV/245/81 Approved Portakabin reception office;
- L/HAV/1604/81 Approved Vehicle storage area, new buildings offices, canteen, inspection bay, gate house & lighting towers;
- P0279.93 Approved Construction of two carriageway roads for internal access within Ford Estate

## 5. CONSULTATIONS/NOTIFICATIONS

### London Borough of Havering

LB Havering objects to the application on two main grounds: i) the likely detrimental impact on the health of local residents arising from the cumulative impact of pollution from the emissions of the gasification plant and others in the area; and ii) the serious detrimental impact on the visual amenities of the riverside. A copy of the Council's full response is appended to the report, at Appendix 4.

### Greater London Authority

The Mayor of London supports the scheme and has requested that the applicant ensure that there is provision of a riverside path. A copy of the GLA's Stage 1 report on the application is appended to the report at Appendix 5. Should LTGDC be minded to approve the application it is then referable to the Mayor to decide whether or not to direct refusal.

### London Waste Authority

The London Waste Authority has been reviewing its waste strategy in accordance with statutory requirements set out in new legislation to divert more waste from landfill. Two key actions being considered: i) the reduction of the amount of biodegradable waste sent to landfill from the Bio-MRFs, including the recovery of fuel; and ii) examining the possibility of introducing new technology (including advanced thermal treatment) to manage the outputs from the Bio-MRF. The current proposal, if permitted could help to meet these objectives. Therefore, the ELWA waste strategy supports the principle of the proposal as having the potential to meet its waste strategy objectives.

### Environment Agency

Has no objections to the proposal subject to conditions and informatives to protect riverside habitats and to prevent pollution.

### Havering Primary Care Trust

Has advised that a report by the London Health Commission indicates that Havering has a relatively high hospital admission rate for 1-19 year olds for respiratory disease. The report does not propose any reasons for this, but the Trust suggests that there could be a number of explanations, including the way respiratory conditions are managed by professionals and by parents. Figures show that Rainham and Wennington Ward rank highly in Havering for respiratory disease, including emergency admissions. The Trust has confirmed that general health in Rainham and Wennington as shown by the rate of illness is very similar to the Havering figure overall, indicating that there isn't a particular problem here. The response quotes from its own annual report that *'there is no reasonable scientific evidence to support the idea that asthma is caused by outdoor pollution, but asthma can be exacerbated in some circumstances by ambient air pollution'*. The impact of NO<sub>2</sub> on respiratory illness is highlighted and the need for a community based monitoring system. The response concludes that from the NO<sub>2</sub> levels modelled the proposed facility will not increase levels by any significant amount in terms of health.

### English Heritage

EH has no objections subject to an appropriate archaeological condition.

### National Grid

There are no high voltage lines in the immediate vicinity of the application site.

### Health and Safety Executive

Does not raise any objections on safety grounds against the granting of planning permission.

**London Borough of Barking and Dagenham**  
No objections

**London Borough of Bexley**

Has raised a number of queries regarding the assessment of emissions from the facility, but has not raised any objections to the principle of the development. The queries have been addressed by the applicant; no further comments from Bexley have been received.

**Essex and Suffolk Water**  
No comments

**DEFRA**  
No objections

**London Fire and Emergency Planning Authority (LFEPA)**

Has no objections but identifies the need for one fire hydrant within the site. This should conform to the appropriate British Standard. Further details of the buildings would be required before fire fighting access can be approved.

**Countryside Agency**

Considers that the application does not affect any of its priority interests within Greater London.

**Havering Crime Prevention Design Advisor**

Recommends that community safety, lighting and CCTV conditions/informatives be included on any planning permission.

**LB Havering Environmental Health**  
No significant impact on air quality.

**6. APPLICATION PUBLICITY**

**6.1 Site Notice Expiry:** 09/06/2006

**6.2 Press Notice Expiry:** 09/06/2006

**6.3 Neighbour Notification:**

A total of 347 addresses were notified of the application by LB Havering on 11<sup>th</sup> May 2006.

**7. REPRESENTATIONS**

7.1 There have been 211 letters of objection received in total. This includes letters from Adamsgate Action Group, Rainham Preservation and Improvement Society, Rainham Friends of the Earth and CPRE North London, Local MP James Brokenshire, and two Rainham Councillors. One letter of support has also been received. The objections raised can be summarised as follows:

**Comment**

Havering Council has already rejected this proposal reflecting the wishes of local people. This application should be rejected on the same grounds

**Response to Comment**

LTGDC are the planning authority for this application

The proposed facility would increase pollution levels in the area to the detriment of the health of local residents. The health implications of the scheme have not been properly assessed. Pollutants emitted would be highly toxic and carcinogenic, and in the case of carbon dioxide contribute to impact of greenhouse gases;

These issues are dealt with in section 9.3 of the report

The process involved is unreliable and dangerous and there have been both environmental and economic failures of similar plant elsewhere in the world. The validity of the air quality and pollution assessment and modelling is questioned. The cumulative effect of emissions from the various waste and industrial processes in the area has not been properly assessed.

Further information on the cumulative impact of the proposal have been provided by the applicants. This issue is dealt with in section 9.3 of the report.

The proposal is anti-recycling and composting as the fuel materials could be recovered without burning. The Council could miss recycling targets which would lead to council tax penalties. A less costly 'zero waste management strategy' should be adopted instead

This issue is dealt with in section 9.1 of the report

The proposal does not reflect the vision for the area and is contrary to the community strategy. It should be refused on the ground of the erosion of the well being of the local community by poor neighbour uses with insufficient consideration being given to the additive effects

This issue is dealt with in sections 9.2 of the report

The proposal would undermine the Thames Gateway vision of the riverside for residential, leisure and business enhancement and help to perpetuate the negative image of the Rainham area as a place to invest

The proposal is not considered to conflict with regeneration aspirations for the area, and this matter is dealt with in section 9.2 of the report.

It is likely that waste would be brought to the facility from outside of the immediate area generating additional lorry traffic;

This matter is dealt with in section 9.4 of the report

It is premature to consider the application before the air quality study to be undertaken by Council staff has been completed;

LB Havering's officers have advised that the results of the Air Quality study are not material to the consideration of this application.

The fear of a material impact on public health is a material planning consideration and high level of asthma sufferers in the area is a major source of this fear.

It is not considered that there is any evidence that the proposed development will have a significant impact on air quality, this matter is dealt with at section 9.3 of

the report.

## **8. RELEVANT PLANNING POLICY**

### **8.1 Planning Policy Guidance**

PPS1 Delivering sustainable Development  
 PPS10 Planning for Sustainable Waste  
 PPG13 Transport  
 PPS22 Renewable Energy  
 PPS23 Planning and Pollution Control  
 PPG25 Development and Flood Risk  
 RPG9a The Thames Gateway Planning Framework

### **8.2 The London Plan (Feb 2004)**

4A.1 Waste strategic policy and targets  
 4A.2 Spatial Policies for waste management  
 4A.3 Criteria for the selection of sites for waste management  
 4A.7 Energy efficiency and renewable energy  
 4B.1 Design principles for a compact city  
 4B.2 Promoting world class architecture and design  
 4C.21 Design statements

### **8.3 LB Havering UDP & LDF**

Adopted UDP Policies:  
 EMP1 Rainham Employment Area  
 ENV1 Environmental Impact  
 MWD1 Environmental Impact  
 MWD13 Recovery & recycling  
 ENV25 Thames side development

LB Havering's LDF Preferred Options document includes a section on renewable energy and waste management.

### **8.4 Other Relevant Planning Policies & SPG's**

LB Havering IPG "An urban Strategy for London Riverside"  
 Mayor of London Energy Strategy

## **9. ASSESSMENT OF MAIN ISSUES**

### **9.1. Land Use Principle & Accordance with Policy**

9.1.1 Principle of the development: There are two related considerations when assessing whether development of this nature is acceptable in principle in the location proposed. These concern sustainable waste management and renewable energy. Consideration also needs to be given to the appropriateness of the development in terms of policies for regeneration of the area.

9.1.2 Assessment of renewable energy issues: The main guidance on this matter is in PPS22 and in the London Plan, supported by the Mayor's energy strategy. There are no specific policies on renewable energy in the Havering UDP, although the preferred options document does address the issue. The guide that accompanies PPS22 explains what renewable energy is and draws a distinction between the mass burn incineration of waste and gasification schemes. For 'advanced' technologies such as gasification, any municipal solid waste (biodegradable and non degradable) may be used as fuel, but only the biodegradable fraction qualifies as a renewable resource. The waste in this case



would have been processed by heating to reduce its volume and to stabilise it, but it would include both biodegradable (wood and paper) and non-degradable (plastic) fractions. However, biodegradable material would make up the larger fraction of the resultant fuel. In these circumstances it can be considered that the solid recovered fuel derived from the waste would essentially be a renewable resource. The government is particularly keen to encourage the development of new technology, such as gasification which is inherently cleaner than other thermal waste treatments and can be deployed on a smaller scale, and this is reflected by the status of the proposal as a DEFRA demonstration project.

- 9.1.3 PPS22 is particularly clear on the importance that the government attaches to renewable energy and the approach local authorities should take to encourage such developments in appropriate localities. Where the technology is viable schemes should be accommodated where environmental, economic and social impacts can be addressed satisfactorily. Local development documents (DPDs) should promote and encourage, rather than restrict, the development of renewable energy sources. Havering in its preferred options document does not allocate any specific sites for renewable energy, even though this proposal would meet the base criteria in PPS22 for doing so, but does propose a positive approach to standalone schemes. The Government's energy policy, including its policy on renewable energy, is also set out in the Energy White Paper (Our Energy Future – Creating a Low Carbon Economy), published in February 2003. The Government has set a target to generate 10% of UK electricity from renewable energy sources by 2010 subject to the costs to consumers being acceptable. The White Paper sets out the Government's aspiration to double that figure to 20% by 2020, and suggests that still more renewable energy will be needed beyond that date. The Mayor of London supports these proposals through policies in the London Plan.
- 9.1.4 PPS22 provides further guidance on the consideration of applications for renewable energy schemes. In particular planning authorities should consider such proposals in the same way in which they would handle any other industrial scheme. The relevant planning considerations are largely the same. In addition the wider environmental and economic benefits of renewable energy schemes are material considerations that should be given significant weight.
- 9.1.5 PPS22 identifies particular issues in relation to siting which are important, which include the source of the fuel, the economic implications of transporting the fuel, site access and proposed energy use. Where the fuel is waste PPS22 also stresses the importance of having regard to waste management plans for the area; in this case the ELWA strategy. Waste issues will be addressed later in the report, including the importance of this scheme to the sustainable management of Havering's waste.
- 9.1.6 It is clear from the guidance that allocated industrial areas are appropriate locations for renewable energy schemes as they are similar in nature to other industrial developments. Locational and regeneration issues are dealt with in more detail later in the report, but it is considered that in principle this is an appropriate site for this renewable energy use in terms of the criteria in PPS22. The site is close to the source of the fuel which can be transported directly from the Frog Island plant by conveyor or by a very short road journey, mostly on private roadways. There is already an access onto Marsh Way that links to the proposed site. Whilst the applicant has yet to secure a route for the proposed conveyor link, this still remains an option that would take the supply of the fuel off the roads altogether. The proposed site is also very close to the proposed recipient of the energy, Fords at Dagenham. Therefore, in terms of these criteria the proposed site is ideally located.

9.1.7 Assessment of waste issues: Whilst it can be argued that the main purpose of the proposed facility is to generate electricity, it also has a dual role in managing waste materials. Therefore, it is appropriate to consider the waste management implications of the proposal. The main guidance for this is in the London Plan and PPS10 which include the following principles for the location of new waste management facilities:

- To use industrial sites, such as the Preferred Industrial Locations (PILs) identified in the London Plan and sites where waste facilities can be co-located;
- To give priority to re-using previously developed land;

Government guidance and London Plan policies set out the approach that should be taken to achieve sustainable waste management as follows:-

- To aim to manage most of London's waste within its boundaries and to seek to achieve sub-regional self-sufficiency;
- To increase the use of new and emerging technologies to reduce reliance on landfill in accordance with Government and European objectives;
- To move waste management up the waste hierarchy and to landfill as a last resort, and;
- Transporting waste by modes other than road.

9.1.8 The relevant London Plan policies are 4A.1-4A.3. These include a target of managing 85% of London's waste within its boundaries by 2020. This proposal would assist in reaching these targets and also help meet the objective of utilising new technologies to reduce the reliance on landfill. National waste policy reflected in PPS 10 aims to break the link between economic growth and the environmental impact of waste by only accepting the disposal of waste as a last resort. To achieve this aim significant new investment in waste facilities is required. This proposal helps to achieve this aim.

9.1.9 The gasification of processed waste is new in the field of waste management. However, it is identified as being important to achieving waste management targets for limiting landfill in PPS10 and the London Plan in particular. Havering Council has accepted the principle of utilising new waste technologies when approving the Frog Island facility. This gasification proposal would provide the next link in the sustainable management of the municipal waste collected in Havering and Barking and Dagenham. The amounts that need to be landfilled would be reduced significantly, with only the residues from the process needing to be disposed of in that way. It is considered that the gasification of the by-product from the Frog Island facility would be a sustainable method of waste management, that would meet government and London Plan objectives. It would also meet the requirements of MWD13 for permitting recycling and recovery facilities.

9.1.10 The alternative to treating the dried waste in the ELWA strategy is to take the material to Bedfordshire for landfilling. Whilst there are other landfill sites nearer to Frog Island this is the option proposed by ELWA's waste contractor. Whilst most of the transport to the landfill site would be by rail, there would also be significant road transport, especially compared with the current proposal. Therefore, from a road transport point of view the gasification proposal would be much more sustainable. Should the developer be able to secure the conveyor link between Frog Island and the site then only residues and a small portion of the waste input (from Jenkins Lane) would need to be transported by road.

9.1.11 Another relevant consideration is the requirements of the Landfill Directive. The Government has set a limit for each local authority on the amount of waste it can landfill. This limit will reduce over time to meet the targets set out in the Directive and Government's waste strategy. Exceeding the limits could result in significant fines or extra costs in purchasing additional landfill allowances. Whilst this is not strictly a planning consideration it does clearly indicate the importance that is attached to reducing reliance on landfill. The current proposal would, if permitted, ensure that Havering's and Barking and Dagenham's municipal waste is managed in a sustainable fashion in accordance with government policy and at the same time avoiding the potential for additional costs or fines.

9.1.12 Objectors have suggested that much of the material to be gasified could be recovered and that the proposal is therefore, anti-recycling. However, it is necessary to bear in mind that the fuel has already been through a materials separation process designed to meet government targets for waste recycling. Havering approved the Frog Island facility in the full knowledge that there would be a residue that could be used as a fuel and that the developer at Frog Island would be seeking such outlets. The Frog Island facility is designed to meet government recycling targets. The alternative to this would be landfilling which is much less sustainable. In these circumstances it is considered that the facility would not undermine Havering's or ELWA's recycling objectives.

9.1.13 Another important potential benefit arising from the proposal would be that the process would be a source of hydrogen which could be extracted from waste gases and used in fuel cell schemes powering public transport. A pilot scheme is currently being run in London for powering buses by this method. The Mayor of London supports the introduction of fuel cell technology as a means of reducing the emission of greenhouse gases and other pollutants such as NO<sub>x</sub> (NO<sub>2</sub> and NO).

## 9.2 Assessment of location and regeneration issues

9.2.1 The site lies within the Thames Gateway, the Rainham Employment Area (Policy EMP1) and the River Thames Area of Special character (Policy ENV25). RPG9a sets out the main planning framework for the Thames Gateway area. The principles of the framework have been further developed with the establishment of London Riverside, one of the Government's 'zones of change' for the Thames Gateway Strategic Partnership. The area is also a priority area for the Mayor and the London Development Agency. The 'Urban Strategy for London Riverside' identifies the site as continuing to play a role as part of Ford's car distribution network, but with opportunities for more intensive development. The document seeks to bring about regeneration in line with sustainable development principles, including the provision of high quality environments with good design and mix of land uses. It seeks a design led approach, which accepts a range of land uses and seeks the highest possible standards of sustainable architecture and urban design. This scheme is considered to meet these objectives and is linked to the Ford's works as a supply of renewable energy. The location of the site within the Ford Estate is determined by two factors; its isolation from other Ford activities and its proximity to Frog island and existing industrial areas.

9.2.2 The Rainham Employment Area is suitable for industrial uses (B1 & B2), storage and distribution (B8) and other employment opportunities that do not conflict with other policies. Whilst legally power generation does not fall into any of these industrial categories, it is an employment generating use where the proposed activities can be considered to be similar in character to a general industrial use (B2) and therefore not necessarily incompatible within an industrial area. The

guidance in PPS22 referred to earlier in this report fully supports this approach. Therefore, in principle the proposal is one that can be considered acceptable in the Rainham Employment Area. However, its location on the riverside requires further consideration in respect of the criteria set out in the appendix to ENV25 and other guidance. This is addressed later in this report.

9.2.3 The proposal is judged to involve imaginative design principles to deliver something that would stand out from its surroundings, but not immediately recognisable as a public service building. This is similar to the approach to the design of the new buildings at the Gerpins Lane Civic Amenity site and on Frog Island that were supported by the GLA. Whilst the standard of design is a matter of judgement it is considered that a high standard would be achieved by this development and would be appropriate for an industrial area. Therefore, it can be considered to meet the requirements of ENV25. It represents a significant investment in an area of generally low quality uses and design standards. It is judged that it would make a significant contribution to the improvement of the environment and character of the area. The London Development Agency, which owns a number of redevelopment sites in the area, is minded to support the proposal as it will help to further develop new energy technologies, thereby contributing to a reduction in London's Carbon footprint and provide a further mechanism for managing London's waste.

9.2.4 Additional issues arise because of the site's location adjacent to the River Thames. There is a common theme throughout the various policy documents that sites adjacent to the river need special consideration. Policy ENV25 in particular sets criteria for such development and these are reflected in later guidance. Generally along the riverside priority should be given to developments that need a riverside setting. Policy TRN26 seeks to encourage the development of proposals for the transport of goods by river. The Ford estate is served by a number of jetties and many of the cars stored in the car compound are brought in by river. There are no safeguarded wharves/jetties in the immediate vicinity of the site and the length of river frontage affected is relatively short. Therefore, in these circumstances it is considered that this development would not prejudice the use of the river for the transport of goods. There would be no opportunities or need to use river transport in relation to the proposed facility given the close proximity of the source fuel. The developer has agreed to enter into a planning agreement to secure public access along the river frontage in line with ENV25 that could form part of a future riverside foot/cycleway.

### 9.3 Assessment of environmental issues:

9.3.1 Environmental Impacts: The planning application is accompanied by an environmental statement (ES) that considers the main potential impacts of the development. Further details are given at Section 2 of this report. The conclusion of the assessment is that there would be no significant environmental impacts. Subject to the development being carried out in accordance with the statement the development would meet the criteria set out in MWD1 and the guidance in PPS10 and PPS22. The main potential impacts identified would arise from the atmospheric emission from the facility and the visual impact of the facility. The main impact from emission would fall within the industrial areas around the site and not on residential areas either in Rainham or in Bexley. The main visual impacts would be from and across the river, and not so much from residential areas in Rainham.

9.3.2 The potential impact from emissions from the facility has been assessed by the applicant in accordance with current best practice and modelling techniques. This was undertaken using appropriate meteorological data and the government

standards for emissions from such processes. The modelling looked at the worse case situation whereas in practice the actual emissions would be much lower than those modelled. The approach adopted calculated the additional contribution that the new development would have to current air quality; this takes account of the emissions from existing power stations and industrial plant. It is considered that the potential impacts have been assessed in accordance with the guidance in PPS23.

9.3.3 The cumulative impact of these various processes, including a proposed mass burn incinerator at Belvedere across the river in Bexley, was assessed in a study commissioned by local authorities in the area in the early 1990s. The study concluded that the cumulative impact of the various schemes at that time would not have a significant impact on air quality, in particular from NO<sub>x</sub>. Any increase would be insignificant compared with existing levels arising mainly from motor vehicles. A subsequent assessment by the Environment Agency (HMIP) reached similar conclusions. The modelling process in this case took account of those new facilities subsequently constructed as part of the background and reached similar conclusions, although the possible impact of a new incinerator at Belvedere was not considered. This has now been approved by government, but will need to meet stringent air quality emission controls. Therefore, it is considered that the same conclusions can be drawn as reached in the earlier studies, that there would not be a significant impact on air quality. Further information has been submitted by the applicant regarding the cumulative impact on air quality. It is hoped to have comments from LB Havering's Environmental Health Officer on this additional information to report to the meeting.

9.3.4 Nevertheless, one of the main concerns raised by the local MP, local Councillors, the public and other local organisations is the potential impact on air quality from emissions on the health of local residents. This is especially strong given the perceived high incidence of asthma sufferers in the Rainham area, especially amongst the under 15's and the concern that additional pollutants in the atmosphere would exacerbate the situation. Similar concerns were raised in respect of the autoclave proposal at the Cleanaway site. In considering this issue a number of factors relating to this matter need to be taken into account.

9.3.5 As well as making an application for planning approval, the applicants have made an application for a permit to the Environment Agency under the Pollution Prevention and Control Regulations. These regulations incorporate the European Directive on waste incineration, which covers other technologies, such as gasification where waste is used as a fuel. The aim of the regulations is to prevent or limit as far as practicable, negative effects on the environment and the resulting risk to public health. The Directive requires the setting and maintaining of stringent operational conditions, technical requirements and emission limit values for plant. A permit is required from the Environment Agency before any such plant can operate. In considering this issue members will need to consider government guidance in relation to planning decisions where there are other controls. Planning authorities should not seek to stray into areas where there are other statutory controls and it would not normally be appropriate to refuse permission on grounds covered by other controls such as air quality unless the regulating body advises accordingly. Although a permit has not yet been issued the Environment Agency has not objected to the application subject to conditions. In order to address this concern a planning obligation could be sought preventing construction before a permit is in place. This is set out in the recommendation.

9.3.6 From the evidence that has been submitted there is no evidence to suggest that the impact on air quality or public health would be significant. This is demonstrated by the evidence submitted through the ES. The Havering PCT has

not objected to the application on health grounds. In these circumstances it is recommended that there are no grounds to refuse this proposal on the basis of air quality or impact on public health. Due to concerns about respiratory illness in the under 15's in the Rainham area the PCT considers that further monitoring should be undertaken to help to establish the reasons for the high hospital referral levels in Havering and the south of the borough in particular. The applicant has agreed to the principle of making a contribution to such a study, by way of a S106 agreement.

9.3.7 Information in the PCT annual reports indicates that parts of the south of the borough experience relatively poor health compared with other parts of the borough, but with wards in the north being by far the worst. In terms of long-term illness in people of working age the numbers in Rainham and Wennington is average for the borough and below the London and national averages, whereas South Hornchurch is above the Havering and London averages. However, there is no data in these reports that makes a link between illness and air quality. The link that is made in the case of South Hornchurch is with socio-economic factors, such as diet and lifestyle. As far as asthma is concerned the PCT report states that the causes are not well understood, but does point to risk factors such as tobacco smoke, diet and exposure to allergens in early life. There is no evidence in the reports to suggest that exposure to air pollution causes asthma. However, poor air quality can exacerbate asthma both inside and outside of buildings and can also trigger asthma attacks for those who already suffer. Triggers can include airborne particles and dust, but the PCT report suggests that the most common triggers are in the home. Air quality has improved significantly in the Rainham area over the last few decades with the closure of all the main polluting industries (the Ford foundry and Murex being the last) and the construction of the new A13 which takes road traffic, a major contributor to poor air quality, further from residential areas. The PCT are unable to provide any evidence or reasons to explain the elevated levels of hospital referrals of under 15's with respiratory problems in the south of the borough, especially as the figures for those above 15 shows a different pattern. Studies referred to by the PCT suggest that NO<sub>x</sub> levels are a short term triggering factor in respiratory illness, but that the interaction with other factors such as allergens, domestic fuel combustion, diet and viral infections needs further study.

9.3.8 Council staff currently monitor NO<sub>x</sub> levels throughout Havering having declared the whole area an air quality management area (AQMA). The main concentrations are found by major transport routes and there are monitoring points in Rainham. This monitoring will continue during the period of the operation of the proposed facility, but emissions should not add significantly to background levels. Havering staff are also carrying out dust monitoring in the area, but this is dust that settles out of the atmosphere and not that which has an potential impact on health. The sources of dust to be monitored include that from roads, agricultural and other operations, including landfilling and mineral extraction. However, it will not be possible to monitor the source of the dust, only the amount and composition. The current proposal would produce minimal amounts of such dust and the results of this monitoring would have no bearing on this application. Any possible cumulative effect could not be detected.

9.3.9 The application site has previously been tipped with waste materials and therefore the impact this would have on the development needs to be considered in accordance with the guidance in PPS23. Whilst the site does contain some contaminants as identified in the ES, due to the nature of the development it is considered that the site can be safely developed. An appropriate condition is recommended.

#### 9.4 Highway Issues

- 9.4.1 The proposed conveyor link between the Frog Island facility and the application site crosses land not under the control of the applicant. The owner of that land has indicated that currently no agreement has been reached on such a link. There may be concerns that the environmental benefits that would arise from such a link might not be achieved. However, under current approvals the residue from Frog Island would be transported by road to a depot at Dagenham Dock for onward transmission by rail to Bedfordshire. The current proposals would, therefore, significantly reduce transport distances even allowing for some input from the Jenkins Lane site. Even if the nearest landfill at Rainham were used instead of Bedfordshire, the road journeys would be significantly greater. Therefore, notwithstanding the benefits of a conveyor, it is considered that objections on road transport grounds could not be sustained. The applicant has also agreed to maintain efforts to secure a conveyor link through a clause in the S106 obligation.
- 9.4.2 The proposed lorry route to the site would be mainly over private roads, but there would be a short section of public highway, Marsh Way. This is currently unlit and the applicant has agreed contribute to this on traffic safety grounds through a S106. There is already a bus service to the CEME site which employees of the facility could use. However, there is a need to ensure this is secured for the long term and need to secure this in the long terms and establish extension to it. In these circumstances the applicant has agreed to make a financial contribution. The applicant has also agreed to submit and implement a staff travel plan to help reduce reliance on car transport for employees.

## 10 . Conclusions

- 10.1 The report assesses four main issues arising from the application; renewable energy, waste management, location and regeneration and environmental impact.
- 10.2 The proposed development would provide a waste management solution for locally generated wastes in accordance with government guidance in PPS 10 and the London Plan. In particular it would accord with the proximity principle and sub-regional self-sufficiency. It would generate electricity from a renewable resource in a manner on type of locality advocated in PPS22. It would meet the objectives of the Landfill Directive and government policy on waste. It would achieve these objectives in a manner that would be both sustainable and have insignificant environmental impact. The Havering UDP does not address many of the issues of sustainable waste management and renewable energy, but the preferred options document does set the basis for a positive approach to these issues, including self sufficiency for the ELWA sub-region in waste management. It is considered that the proposals would also be acceptable in accordance with UDP policy MWD 13.
- 10.3 The site is located in the Thames Gateway, a strategically important area for regeneration that is recognised in RPG9a as being in need of significant investment and environmental improvement. In the preferred options document and the London Riverside Area the site is identified as having the potential for future industrial development. The Havering UDP identifies the area as suitable for industrial uses (EMP1) and where the highest standards of design and landscaping are appropriate (ENV25). This proposal would provide significant investment in the area and would provide an imaginative design solution to this large public service building. Its location would help to enhance the current run down nature of this part of the river frontage and represent a significant environmental improvement to the area. Although the site could not provide the levels of landscaping that might normally be required a financial

contribution to environmental improvements in the vicinity has been offered as an alternative. In conclusion it is considered that the proposal would not conflict with the objectives of the various regeneration frameworks and would provide an important contribution to the regeneration of the area, by helping in the process of economic uplift and environmental improvement.

- 10.4 The issue of environmental impact arising from the emission from the plant and the impact this could have on public health has raised considerable concern. If it could be demonstrated that there would be a significant impact then there would be grounds for refusing permission under ENV1/MWD1. However, there is no evidence to support this view. In fact the ES demonstrates that the impact would not be significant and would be within the relevant air quality regulations, and the comments of the Environmental Health Officer confirm this. Neither the Environment Agency nor the PCT have raised any objections on health, pollution or safety grounds. Members should give weight to the fact that there is a separate system of regulatory control on such processes designed to ensure that emissions, and their impact on air quality and public health, are within acceptable limits. There is no evidence to suggest that the separate system of regulatory control will not adequately assess and address this issue. Therefore, it is considered that there is no basis for objecting to the proposals on this ground. Nevertheless it is recommended that an appropriate clause is included in the S106 agreement to ensure that the development is not commenced until the relevant permit is issued. In terms of contamination it is considered that the site can be safely developed in accordance with the guidance in PPS23.
- 10.5 In terms of the Havering UDP it can be concluded that the proposals would be acceptable meeting the criteria in policy MWD13, MWD1/ENV1, subject to a planning obligation first being entered into. This is considered necessary to cover additional landscaping (ENV25), to provide improved public access (ENV25/LAR9), Green Travel Plan (TRN15) and other environmental benefits. The development would also be in accordance with the general principles set out in the preferred options document as part of the Havering LDF.
- 10.6 Taking all these factors into account officers consider that no objections to the proposals can be sustained and it is, therefore, recommended that planning permission should be granted subject to the developer first entering into a S106 agreement as set out in the recommendation.

## **11. RECOMMENDATION AND REASONS FOR APPROVAL**

That the application be deferred to the Director of Planning to approve subject to there being no direction for refusal by the Mayor; and subject to completion of an agreement under S106 of the Town and Country Planning Act 1990 to provide for the following:

- a) A total financial contribution of £100,000 towards:
  - i) improvements to public access to riverside areas;
  - ii) environmental improvements and landscaping in the vicinity of the site;



- iii) improvements to public transport provision to the area;
  - iv) improvements to street lighting in Marsh Way in the vicinity of the site entrance;
  - v) a contribution to a base line study to be undertaken by the Havering PCT of the impact of air pollution on respiratory problems within the local population (under 15s) and to monitor impact once plant is up and running.
- b) To implement, review and maintain a green travel plan throughout the life of the development and,
  - c) That no development under the permission is to commence until a contract with the East London Waste Authority (Shanks) for the supply of solid recovered fuel primarily from the Frog Island Bio-MRF (MBT) facility to the power generation plant has been signed and evidence of this provided to the local planning authority;
  - d) That SRF can only be taken from the Jenkins Lane Bio-MRF in circumstances where the Frog Island facility has been closed, totally or partially for maintenance or to maintain the operational capacity of the plant;
  - e) To specify the limited circumstances where SRF can be brought to the site from sources within the ELWA area other than the Frog Island and Jenkins Lane Bio-MRFs to maintain the necessary input for power generation.
  - f) To use reasonable endeavours to secure a conveyor link between the plant site and Frog Island; to regularly review the proposal to secure a conveyor link and to regularly report to the local planning authority with details.
  - g) The planning permission not be implemented prior to the developer providing conclusive evidence to the Local Planning Authority that all of the necessary authorisations issued by the Environment Agency have been secured.

And subject to the following conditions:

#### **Conditions & Reasons:**

1. The development to which this permission relates must be commenced not later than three years from the date of this permission.

Reason: To comply with the requirements of section 91 of the Town and Country Act 1990 as amended

2. No buildings hereby permitted shall be first occupied until provision shall be made within the site for the approved number of car parking spaces. Thereafter the car parking spaces shall be made permanently available for use for car parking and for no other purpose, unless otherwise agreed in writing by the Local Planning Authority.

Reason: To ensure that adequate car parking provision is made available off street in the interests of highway safety.

3.No development hereby approved shall commence until samples of all materials to be used in the external construction of the building(s) shall be submitted to and approved in writing by the Local Planning Authority. Thereafter the development shall be constructed with the approved materials.

Reason: To ensure that the appearance of the proposed development will harmonise

4. No development shall take place until there has been submitted to and approved by the Local Planning Authority a scheme of hard and soft landscaping, which shall include indications of all existing trees and shrubs on the site, and details of any to be retained, together with measures for the protection in the course of development. All planting, seeding or turfing comprised within the scheme shall be carried out in the first planting season following completion of the development and any trees or plants which within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with other similar size and species, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In accordance with Section 197 of the Town and Country Planning Act 1990 and to enhance the visual amenities of the development.

5. No goods or materials shall be stored on the site in the open without the prior consent in writing of the Local Planning Authority.

Reason: In the interests of visual amenity.

6.The development hereby permitted shall not be carried out otherwise than in complete accordance with the approved plans, particulars and specifications.

Reason: The Local Planning Authority consider it essential that the whole of the development is carried out and that no departure whatsoever is made from the details approved, since the development would not necessarily be acceptable if partly carried out or carried out differently in any degree from the details submitted.

7.The development hereby approved shall not be commenced until a report on potential contamination of the site has been prepared by an appropriately qualified person and submitted to and approved in writing by the LPA. The report shall include:

i) a survey of the scale and nature of any contamination;

ii) an assessment of potential risks to the public, buildings (existing or proposed) or the environment, including adjoining land and the water environment; and

iii) details of any remedial measures necessary to make the site suitable for the proposed use or development.

The development hereby approved shall not be commenced until remedial measures have been carried out as approved and completed to the satisfaction of the Local Planning Authority.

If during development works any contamination should be encountered which was not previously identified and is either from a different source or of a different type to that identified in the original approved survey then revised remedial measures shall be

submitted to and approved by the local planning authority, and those measures shall be carried out as approved prior to the first occupation of the development.

If during development works any contamination should be encountered in areas previously expected to be free from contamination, remedial measures shall be carried out in accordance with the approved details prior to the first occupation of the development.

Reason: To protect those engaged in construction and the occupation of the development from potential contamination.

8.The development hereby approved shall not be commenced until details of the site surface and foul drainage systems have been submitted to and approved in writing by the local planning authority. The drainage system shall be constructed in accordance with the approved details.

Reason: To prevent the pollution of the water environment.

9.The development hereby approved shall not be commenced until details of the site foundations have been submitted to and approved in writing by the local planning authority. The foundations shall be constructed in accordance with the approved details.

Reason: To prevent the pollution of the water environment.

10.The development shall be carried out in accordance with the environmental standards, mitigation measures, requirements and methods of implementing the development contained in the environmental statement relevant to the development and appendices thereto, submitted with the planning application, the development specification and framework and any Regulation 19 submission documents, unless and to the extent that such standards, measures, requirements and methods are altered by the express terms of this permission and the approved strategies, frameworks, protocols and other documents to be submitted pursuant to it.

Reason: To ensure the development is carried out in accordance with the assessment carried out as part of the environmental statement and the mitigation measures proposed therein.

11.No soakaways shall be constructed in contaminated ground.

Reason: To prevent the contamination of ground water.

12.No development hereby approved shall commence until surface water control measures have been submitted to and approved in writing by the local planning authority before the development commences. The surface water control measures shall be implemented in accordance with the approved details.

Reason: To prevent the increased risk of flooding and to improve water quality.

13.External artificial lighting within 40m of any surrounding sites of interest for nature conservation (including Rainham Creek, Lower Beam River and the Inner Thames Marshes) shall be directed away from the area and shall be focused with cowlings.

Reason: To minimise light spill from the new development into these sites of interest for nature conservation.

14.No development hereby approved shall be commenced until a detailed method

statement for the removal or long term management of giant hogweed present on the site shall be submitted and approved in writing by the Local Planning Authority. The method statement should include proposed measures to prevent its spread during any operations relating to the proposal, such as mowing, strimming or soil movement. Any soils brought to the site shall be free of the seeds/root/stem of any invasive plant covered under the Wildlife and Countryside Act 1981 (as amended). Development shall proceed only in accordance with the approved method statement.

Reason: Giant hogweed is an invasive plant, the spread of which is prohibited under the Wildlife and Countryside Act.

15.No development hereby approved shall be commenced until details of a vegetated Buffer Zone 16 metres wide alongside the Thames, and a vegetated Buffer Zone 5 metres wide alongside the pond to the east of the site and the ditch running in parallel to the Thames has been submitted to and approved in writing by the Local Planning Authority. Thereafter the buffer zones shall be implemented in accordance with the approved details to the satisfaction of the local planning authority. The buffer zones shall be measured from the top of the bank and shall be free of structures, hard standing, car parks and fences in order to avoid problems such as fragmentation of the buffer; the introduction of non-native species into the buffer; and pressure for inappropriate bank retention works.

Reason: To maintain the character and ecology of the watercourses and provide undisturbed refuges for wildlife using the river corridor.

16.No development hereby approved shall be commenced until a watervole survey has been carried out on all riparian and wetland habitats and submitted to the local planning authority for its approval. The survey shall:

- (a) identify presence/absence; population size, etc
- (b) assess the development's impact on the watervole population.
- (c) produce a mitigation strategy if a population is present.

Thereafter mitigation measures shall be carried out in accordance with the approved mitigation strategy.

Reason: The habitat of water voles is protected under the Wildlife and Countryside Act 1981 and therefore development must not impact on their habitat. Any encroachment within this zone should ensure that this species is not present.

17.The construction of storage facilities for oils, fuels or chemicals shall be carried out in accordance with details submitted to and approved in writing by the Local Planning Authority before first occupation of the development pursuant to the use hereby permitted.

Reason: To prevent pollution of the water environment.

18.The development hereby approved shall not be first occupied until details of the surface water drainage system has been submitted to and approved in writing by the Planning Authority. The construction of the surface water drainage system shall be carried out in accordance with the approved details before first occupation of the development.

Reason: To prevent pollution of the water environment.

19 No development approved by this permission shall be commenced until the Local

Planning Authority is satisfied that adequate sewerage infrastructure will be in place to receive foul water discharges from the site. No buildings (or uses) hereby permitted shall be occupied (or commenced) until such infrastructure is in place.

Reason: To prevent pollution of the water environment.

Details, including drawings as appropriate setting out the means by which any groundwater encountered during site construction works is to be disposed of, including any appropriate mitigation methods, shall be submitted to the local planning authority for approval. The dewatering of the site shall be carried out in accordance with the approved details.

Reason: To prevent pollution of the water environment.

21.No works shall be commenced on the site until details and drawings of all works within 16 metres of the River Thames have been submitted to the Local Planning Authority for its prior approval. The works shall be carried out in accordance with the approved details

Reason: To maintain the integrity of the flood defences of the River Thames

22. A horizontal access strip 16 metres wide adjacent to the River Thames, Ingrebourne and Havering New Sewer shall be left free from any permanent development, including fences and other obstructions.

Reason: To retain access to the watercourse for the Environment Agency to carry out its functions and to protect the river environment.

23. No development hereby approved shall commence until a flood management strategy fully detailing flood warning and evacuation plans has been submitted to and approved by the Local Planning Authority. The strategy shall be implemented in full accordance with the approved details before first occupation of the development pursuant to the use hereby permitted.

Reason: To minimise risks from tidal flooding.

**CASE OFFICER:** Sara Purvis

**Appendix 1: Site Location Plan**

**Appendix 2: Proposed Site Layout Plan**

**Appendix 3: Proposed Elevations**

**Appendix 4: LB Havering Consultation Resopnse**

**Appendix 5: Mayor of London Stage 1**

**Appendix 6: RPS Response to LB Havering Comments**

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MEETING	DATE	ITEM
<b>REGULATORY SERVICES COMMITTEE</b>	<b>22 JUNE 2006</b>	<b>7</b>

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### **REPORT OF THE CHIEF EXECUTIVE**

**SUBJECT: U0004.06: Land adjacent to Fairview industrial Estate, Ford Motor Company land off Frog Lane, Rainham**

**PROPOSAL: Construction of sustainable energy facility comprising the erection of gasification/power generation plant and associated buildings and plant**

**WARD: South Hornchurch**

#### **SUMMARY**

1. This application submitted to the Council will be considered by the London Thames Gateway Development Corporation under its planning powers for determining applications for larger scale development, including waste and energy proposals, within its area. The purpose of this report is to seek Members' views on the application which will be included with those of other consultees in the report to the LTGDC planning Committee.
2. This application is for the development of a power generation facility on land to the west of the Fairview Industrial Estate on the Thames frontage. The proposed plant would use a process known as gasification to convert a fuel derived mainly from waste processing operations at the nearby Frog Island site into a gas that can be used generate electricity. The plant would produce energy for the adjoining Ford works and for the National Grid.
3. An earlier application that Members resolved to refuse was withdrawn before a decision notice was issued. However, this is a new application that needs to be considered again. In line with the original recommendation staff consider that the proposals would accord with UDP and London Plan policies and government guidance, especially those for waste management and

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renewable energy and that subject to appropriate safeguards that no objections should be raised to the application. However, in resolving to refuse the earlier application the Committee expressed concern over the adverse visual impact of such a facility on the river frontage, contrary to UDP policy ENV25 and interim planning guidance for London Riverside. Members may wish to consider whether this concern still remains and should form the basis of an objection to the LTGDC.

<b>RECOMMENDATION</b>
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- 1) That the Committee considers:
  - a) Whether, in light of its previous decision to refuse planning application P1969.05 that it wishes to raise objections to the revised application; or
  - b) Whether it agrees with staff that the development complies with government guidance and London Plan and Havering UDP policies as set out in this report and that subject to appropriate controls on the development as set out at the end of the report, no objections are raised to the application: and
  - c) whether a) or b) is adopted as the resolution of the committee and the London Thames Gateway Development Corporation (LTGDC) are minded to grant permission that the proposed planning obligations and planning conditions set out in this report be endorsed by the committee and that the LTGDC be asked to adopt them.
- 2) That the Head of Development and Building Control be authorised to prepare a written response to the London Thames Gateway Development Corporation in accordance with the recommendation or as otherwise resolved by the Committee at the meeting.

<b>REPORT DETAIL</b>
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**1.0 Introduction:**

- 1.1 This report is made to seek the views of Members on this planning application which will be determined by the London Thames Gateway Development Corporation. The Development Corporation will take these views into account, along with those of other consultees and any local representations, when making its decision on the application. The style and scope of this report is similar that that normally made to Members on planning applications,



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but only consultation responses/representations from ward Members are reported in accordance with agreed procedures.

- 1.2 This application is a resubmission of one considered by the Committee on 16 March 2006 when Members resolved that permission be refused on the grounds that the siting and design of the building would have a significant adverse impact on the river frontage, contrary to UDP policy ENV25 and Interim Planning Guidance for London Riverside. The applicant withdrew the original application before a decision notice was issued; a fresh application was then resubmitted with minor amendments from the original. The application is, therefore, essentially the same as that previously considered by Members.

**2.0 Site Description:**

- 2.1 The site lies on the northern bank of the Thames and is currently used by the Ford Motor Company Limited as part of its vehicle holding centre. This extends westwards as far as the Beam River; beyond which is the Ford works. To the east is the Flogas LPG bottling depot and the remainder of the Fairview Industrial Park which contains predominately large shed warehousing units. Adjacent to the depot on the east side of the site and approximately 100m away, is the Shanks East London (Bio-MRF) which has just started operation. This is due to process waste from the boroughs of Havering and Barking and Dagenham as part of a recently signed contract with the East London Waste Authority (ELWA).
- 2.2 The proposed site amounts to some 2.95 hectares and lies approximately 1.8 Km (1.1 miles) from the centre of Rainham, with the nearest residential properties at Creekside between Rainham Creek and the sewage works, some 1.4 km away. Between the site and Rainham are industrial areas, the A13, the Channel Tunnel Rail Link and C2C railways, the new CEME (Centre for Engineering and Manufacturing Excellence) building and the sewage works. To the south across the Thames are the industrial areas of Belvedere in the London Borough of Bexley, beyond which are residential areas some 2.3 km away. Within the Ford car compounds are two wind turbines that supply power to the car plant; these are about 85 metres high. Looking northward from the site the view is dominated by a row of electricity pylons and the elevated A13, with glimpsed views of Dagenham and Rainham beyond, especially the high-rise tower blocks in South Hornchurch.
- 2.3 Access to the site is through the car compound via a private roadway; access can also be gained from Marsh Way, but the entrance is currently obstructed with concrete slabs. Immediately to the south of the site is the Thames earth flood protection embankment that separates the site from the river, this is predominately vegetated by grass, with the occasional shrub. A drainage balancing pond (approximately 30 x 10m) is situated in the south-east corner of the application site.

### 3.0 Description of proposal:

3.1 It is proposed to construct a power generation plant that would utilise a synthetic gas produced from a solid recovered fuel (SRF) using a process known as gasification. The facility is designed to generate about 13 MW of electricity and operate on a 24 hours per day 7 days a week basis. The delivery of fuel by road would be between 08.00 and 18.00 hrs Monday to Friday, and between 9:00 and 14:00 on Saturdays. Other deliveries and export of residuals would be 7 days a week. The proposed facility comprises:

- A gas island comprising the gasifier and gas cleaning plant and associated storage silos;
- Associated process and storage plant including condensers, cooling tower, chemical, gas and water storage tanks, effluent treatment plant, heat exchangers and electrical switch gear;
- Buildings housing a pelletiser, pelletiser storage area, steam turbine and boilers;
- A visitor centre;
- A conveyor system between the development site and the Shanks East London (Bio-MRF) on Frog Island;
- A site office and maintenance building; and
- Operational and visitor parking areas, circulation space and a weighbridge together with the extension of Frog Lane from Marsh Way to the operational area of the facility.

The facility would take between 12 and 18 months to construct, following that there would need to be a period of about 6 months for commissioning.

3.2 The solid recovered fuel from the mechanical biological treatment plant at Frog Island, which typically would comprise of a mixture of paper, textile, wood and some plastic would be pelletised to form the fuel for the power generation plant. The bulk of the fuel feedstock will be provided by the Shanks East London (Bio-MRF) approximately 100m to the east of the proposed gasification facility with the balance of the fuel supply material being supplied via the Shanks' plant at Jenkins Lane, in Newham. This plant also manages waste collected in the ELWA area and produces SRF of the appropriate technical specification for use as a fuel in the proposed gasification facility. During periods of maintenance at the primary fuel source location it will be necessary to import a greater proportion of the fuel source from the Jenkins Lane facility. In the very unlikely event that both these sources become unavailable for short periods suitable material would be

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sought from elsewhere in the ELWA or London to ensure that power generation is not interrupted. The SRF would be transported to the site either by a conveyor system across adjoining land or by road via Creek Way and Marsh Way. Any material from Jenkins Lane would be transported by road via the A13.

- 3.3 The process of turning the fuel into electricity can be summarized as follows: The fuel material would be delivered to the plant un-pelletised where it would then be mixed with hydrated lime before pelletising. The pellets would be stored from where there would be a continuous conveyor system to transfer the material to the gasification process. The process transfers heat to the fuel which is turned into a synthetic gas composed of mainly nitrogen, carbon dioxide, carbon monoxide and hydrogen. There would be solid by-product arising from the process, including ash, know as char. The char would be removed from the gas, cooled and stored in silos before being taken off-site for disposal at a suitably licensed landfill site.
- 3.4 The synthetic gas would then be cooled and cleaned by a series of processes which would leave a small quantity of surplus liquor that cannot be reused in the process. This would be neutralized and treated biologically before being discharged to sewer. The cleaner gas would then be burned in a boiler plant to generate steam which would be used in a condensing steam turbine to generate electricity. The by-products of the combustion process would be discharged to the atmosphere via a 34 metre high stack.
- 3.5 In the event of emergencies or shut down it would be necessary to divert the synthetic gas to a ground flaring system, with the combustion emissions going directly to atmosphere.
- 3.6 The facility would comprise a number of buildings and structures, the centre piece being the gasification plant. In response to the riverside setting of the facility the proposed layout ensures that a single building fronts and gives definition to the riverside boundary of the site and presents a single architectural solution to the river rather than a series of fragmented facilities. The architectural treatment and the palette of materials used would be common to all the buildings and structures where possible. The riverside and administration buildings would have rendered block work plinths at ground floor level and be clad on upper levels in stucco embossed mill finish aluminium trapezoidal metal cladding. Windows and louvres would be in grey or aluminium. Roofs would be of a similar aluminium finish to the cladding.
- 3.7 Subject to the agreement of the adjoining landowner, an elevated conveyor system would be constructed between the plant and Frog Island. The conveyor would be supported by a series of stilts about 6 metres above ground level and enclosed in a galvanized steel mesh a further 2 metres higher.

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3.8 The application is accompanied by an environmental statement (ES) that addresses the following potential impacts: Surface water flooding; landscape and visual appraisal; nature conservation; traffic; air quality; noise and archaeology. The ES has identified no significant impact from the proposed development. It has shown that the proposed gasification facility will create mostly beneficial environmental impacts and that mitigation measures embodied within the project design, or imposed through planning conditions, will limit any minor impact identified.

**4.0 History:**

4.1 There is an extensive planning history in the vicinity of the application site, the main applications are:

L/HAV/1369/68 – approved. Facilities building, Car Park, Storage Area and Bridge;

L/HAV/1506/69 – approved. Outline Application for steam wash building, full application for covered way;

L/HAV/1131/70 – approved. Additional facility building comprising offices & mess room;

L/HAV/1949/71 – approved. Erection of 11000 volt overhead line;

L/HAV/1068/76 - approved. Re-grading of river frontage adjacent Frog Island in accordance Thames Flood Barrier scheme;

L/HAV/350/80 - approved. Erection of 11000 volt overhead line on wooden poles;

L/HAV/245/81 – approved. Portakabin reception office;

L/HAV/1604/81 – approved. Vehicle storage area, new buildings offices, canteen, inspection bay, gate house & lighting towers;

P0279.93 – approved. Construction of two carriageway roads for internal access within Ford Estate

P1969.05. Construction of sustainable energy facility comprising the erection of gasification/power generation plant and associated buildings and plant withdrawn following resolution to refuse.

**5.0 Representations:**

5.1 As part of the procedures established by the council for considering applications to be determined by LTGDC, ward councillors in the South Havering area have been consulted. At the time of preparation of the report two objections had been received raising the following main issues:

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- The proposed facility would increase pollution levels in the area to the detriment of the health of local residents.
- The process involved is unreliable and dangerous;
- The proposal does not reflect the vision for the area and is contrary to the community strategy;
- The proposal would undermine the Thames Gateway vision of the riverside for residential, leisure and business enhancement and help to perpetuate the negative image of the Rainham area as a place to invest;
- The Mayor London opposes all forms of incineration.

Any further representations received will be reported at the meeting

### 6.0 Policy Considerations & Issues:

#### 6.1 Policy guidance: the main policy guidance is as follows:

6.1.1 Government guidance in PPS22 (Renewable energy) PPS10 (Planning for sustainable waste management) and the London Plan. The London Plan includes policies that support the Mayor's Waste Strategy and Energy Strategy. PPS23 (Planning and pollution control) is also relevant. These documents are up to date and relevant to this application and significant weight should be given to them. Further guidance is set out in RPG9a (The Thames Gateway Planning Framework).

6.1.2 UDP policies EMP1 (Rainham Employment Area), ENV1/MWD1 (environmental impact), MWD13 (recovery & recycling), and ENV25 (Thameside development). The UDP does not include any policies specifically relating to energy generation. Interim Planning Guidance (IPG) 'An urban strategy for London Riverside' and full council resolution 61 'investment opportunities' of 2/2/05 are also relevant.

6.1.3 The preferred options consultation document as part of the Local Development Framework (LDF) preparation includes a section on renewable energy and waste management.

#### 6.2 Issues:

##### 6.2.1 The main issues arising from these policies are:

- Is the proposed development acceptable in principle in this location in terms of UDP, London Plan and government policies in PPS10 and PPS22?

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- Would the development meet the sustainability objectives in the London Plan, for both waste management and energy production, including draft modifications, and those in PPS10 and PPS22? Would the waste be managed in accordance with the proximity principle?
- Would the environmental impact of the development be acceptable, including the impact on air quality and public health in terms of the guidance in PPG23?
- Would the development be acceptable in principle in this location in relation to regeneration and other strategies for the area?
- Would the development be acceptable in visual terms on the river frontage?

**6.2.2 Principle of the development:** There are two related considerations when assessing whether development of this nature is acceptable in principle in the location proposed. These concern sustainable waste management and renewable energy. Consideration also needs to be given to the appropriateness of the development in terms of policies for regeneration of the area.

**6.2.3 Assessment of renewable energy issues:** The main guidance is in PPS22 and in the London Plan, supported by the Mayor's energy strategy. There are no specific policies on renewable energy in the UDP, although the preferred options document does address the issue. The guide that accompanies PPS22 explains what renewable energy is and draws a distinction between the mass burn incineration of waste and gasification schemes. For 'advanced' technologies such as gasification, any municipal solid waste (biodegradable and non degradable) may be used as fuel, but only the biodegradable fraction qualifies as a renewable resource. The waste in this case would have been processed by heating to reduce its volume and to stabilise it, but it would include both biodegradable (wood and paper) and non-degradable (plastic) fractions. However, biodegradable material would make up the larger fraction of the resultant fuel. In these circumstances staff are of the view that the solid recovered fuel derived from the waste would essentially be a renewable resource.

**6.2.4** PPS22 is particularly clear on the importance the government attaches to renewable energy and the approach local authorities should take to encourage such developments in appropriate localities. Where the technology is viable schemes should be accommodated where environmental, economic and social impacts can be addressed satisfactorily. Local development documents (DPDs) should promote and encourage, rather than restrict, the development of renewable energy sources. The Council in its preferred options document does not allocate any specific sites for renewable energy, even though this proposal would meet the base criteria in PPS22 for doing so, but does propose a positive approach to standalone schemes. The

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Government's energy policy, including its policy on renewable energy, is also set out in the Energy White Paper (Our Energy Future – Creating a Low Carbon Economy), published in February 2003. The Government has set a target to generate 10% of UK electricity from renewable energy sources by 2010 subject to the costs to consumers being acceptable. The White Paper sets out the Government's aspiration to double that figure to 20% by 2020, and suggests that still more renewable energy will be needed beyond that date.

- 6.2.5 PPS22 provides further guidance on the consideration of applications for renewable energy schemes. In particular planning authorities should consider such proposals in the same way in which they would handle any other industrial scheme. The relevant planning considerations are largely the same. In addition the wider environmental and economic benefits of renewable energy schemes are material considerations that should be given significant weight.
- 6.2.6 PPS22 identifies particular issues in relation to siting which are important, which include the source of the fuel, the economic implications of transporting the fuel, site access and proposed energy use. Where the fuel is waste PPS22 also stresses the importance of having regard to waste management plans for the area; in this case the ELWA strategy. Waste issues will be addressed later in the report, including the importance of this scheme to the sustainable management of the borough's waste.
- 6.2.7 It is clear from the guidance that allocated industrial areas are appropriate locations for renewable energy schemes as they are similar in nature to other industrial developments. Locational and regeneration issues are dealt with in more detail later in the report, but staff consider that in principle this is an appropriate site for this renewable energy use in terms of the criteria in PPS22. The site is close to the source of the fuel involving a very short road journey, mostly on private roadways. There is already an access onto Marsh Way that links to the proposed site. Whilst the applicant has yet to secure a route for the proposed conveyor link, this still remains an option that would take the supply of the fuel off the roads altogether. The proposed site is also very close to the proposed recipient of the energy, Fords at Dagenham. Therefore, in terms of these criteria the proposed site is ideally located.
- 6.2.8 **Assessment of waste issues:** Whilst it can be argued that the main purpose of the proposed facility is to generate electricity, it also has a dual role in managing waste material. Therefore, it is appropriate to consider the waste management implications of the proposal. The main guidance for this is in the London Plan and PPS10 which include the following principles for the location of new waste management facilities:

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- To use industrial sites such as the Preferred Industrial Locations (PILs) identified in the London Plan and sites where waste facilities can be co-located;
- To give priority to re-using previously developed land;

6.2.9 Since the adoption of the UDP there have been significant changes to the way waste needs to be managed and the recent Government guidance and London Plan policies reflect this as follows:

- To aim to manage most of London's waste within its boundaries and to seek to achieve sub-regional self-sufficiency;
- To increase the use of new and emerging technologies to reduce reliance on landfill in accordance with Government and European objectives;
- To move waste management up the waste hierarchy and to landfill as a last resort, and;
- Transporting waste by modes other than road.

6.2.10 The relevant London Plan policies are 4A.1 - 4A.3. These include a target of managing 85% of London's waste within its boundaries by 2020. This proposal would assist in reaching these targets and also help meet the objective of utilising new technologies to reduce the reliance on landfill. National waste policy reflected in PPS 10 aims to break the link between economic growth and the environmental impact of waste by only accepting the disposal of waste as a last resort. To achieve this significant new investment in waste facilities is required. This proposal helps to achieve this aim.

6.2.11 The gasification of processed waste is new in the field of waste management. However, it is identified as being important to achieving waste management targets for limiting landfill in PPS10 and the London Plan in Particular. Members have previously accepted new waste management technology when approving the Frog Island facility. This gasification proposal would provide the next link in the sustainable management of the municipal waste collected in Havering and Barking and Dagenham. The amounts that need to be landfilled would be reduced significantly, with only the residues from the process needing to be disposed of in that way. Staff consider that the gasification of the by-product from the Frog Island facility is a sustainable method of waste management that would meet government and London Plan objectives. It would also meet the requirements of MWD13 for permitting recycling and recovery facilities.

6.2.12 The alternative to treating the dried waste in the ELWA strategy is to take the material to Bedfordshire for landfilling. Whilst there are other landfill sites nearer to Frog Island this is the option proposed by ELWA's waste contractor.



Most of the transport to the landfill site would be by rail, there would also be significant road transport, especially compared with the current proposal. Therefore, from a road transport point of view the gasification proposal would be much more sustainable. Should the developer be able to secure the conveyor link between Frog Island and the site then only residues and a small portion of the waste input (from Jenkins Lane) would need to be transported by road.

6.2.13 Another factor Members should be aware of is the implications of the Landfill Directive. The Government has set a limit for each local authority on the amount of waste it can landfill. This limit will reduce over time to meet the targets set out in the Directive and Government's waste strategy. Exceeding the limits could result in significant fines or extra costs in purchasing additional landfill allowances. Whilst this is not strictly a planning consideration it does clearly indicate the importance that is attached to reducing reliance on landfill. The current proposal would, if permitted, ensure that Havering's municipal waste is managed in a sustainable fashion in accordance with government policy and at the same time avoiding the potential for additional costs or fines.

#### **Assessment of location and regeneration issues**

6.2.14 The site lies within the Thames Gateway, the Rainham Employment Area (Policy EMP1) and the River Thames Area of Special Character (Policy ENV25). RPG9a sets out the main planning framework for the Thames Gateway area. The principles of the framework have been further developed with the establishment of London Riverside, one of the Government's 'zones of change' for the Thames Gateway Strategic Partnership. The area is also a priority area for the Mayor and the London Development Agency. The 'Urban Strategy for London Riverside' identifies the site as continuing to play a role as part of Ford's car distribution network, but with opportunities for more intensive development. The document seeks to bring about regeneration in line with sustainable development principles, including the provision of high quality environments with good design and mix of land uses. It seeks a design led approach, which accepts a range of land uses and seeks the highest possible standards of sustainable architecture and urban design. This scheme is considered to meet these objectives and is linked to the Ford's works as a supply of renewable energy. The location of the site within the Ford Estate is determined by two factors; its isolation from other Ford activities and its proximity to Frog island and existing industrial areas.

6.2.15 The Rainham Employment Area is suitable for industrial uses (B1 & B2), storage and distribution (B8) and other employment opportunities that do not conflict with other policies. Whilst legally power generation does not fall into any of these industrial categories, it is an employment generating use where the proposed activities can be considered to be similar in character to a general industrial use (B2) and therefore not necessarily incompatible within an industrial area. The guidance in PPS22 referred to earlier fully supports

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this approach. Therefore, in principle the proposal is one that can be considered acceptable in the Rainham Employment Area. However, its location on the riverside requires further consideration in respect of the criteria set out in the appendix to ENV25 and other guidance. This is addressed further below.

6.2.16 The proposal is judged to involve imaginative design principles to deliver something that would stand out from its surroundings, but not immediately recognisable as a public service building. This is similar to the approach to the design of the new buildings at the Gerpins Lane Civic Amenity site and on Frog Island that were supported by the GLA. Whilst the standard of design is a matter of judgement staff consider that a high standard would be achieved by this development and would be appropriate for an industrial area and meet the requirements of ENV25. However, when considering the earlier application Members took a different view and were critical of the design of the building considering that it would have an adverse impact on the river frontage. Members will wish to consider again whether the building would be an intrusive feature in the landscape exacerbated by its prominent location on the river frontage. In reaching a view Members will need to take account of the other public service buildings on this part of the Thames and the industrial nature of the riverside. The main view of the building would be from the river itself and the opposite bank. The visual impact from residential areas in Rainham is judged by staff unlikely to be not significant.

6.2.17 Staff suggest to Members that rather than being an intrusive feature it represents a significant investment in an area of generally low quality uses and design standards. It is the judgement of staff that it would make a significant contribution to the improvement of the environment and character of the area.

6.2.18 Additional issues arise because of the site's location adjacent to the River Thames. There is a common theme throughout the various policy documents that sites adjacent to the river need special consideration. Policy ENV25 in particular sets criteria for such development and these are reflected in later guidance. Generally along the riverside priority should be given to developments that need a riverside setting. Policy TRN26 seeks to encourage the development of proposals for the transport of goods by river. The Ford estate is served by a number of jetties and many of the cars stored in the car compound are brought in by river. There are no safeguarded wharves/jetties in the vicinity of the site and the length of river frontage affected is relatively short. Therefore, in these circumstances staff consider that this development would not prejudice the use of the river for the transport of goods. There would be no opportunities or need to use river transport in relation to the proposed facility given the close proximity of the source fuel. The developer has agreed to enter into a planning agreement to secure public access along the river frontage in line with ENV25 that could form part of a future riverside foot/cycleway.

## Assessment of environmental issues

- 6.2.19 **Environmental Impacts:** The planning application is accompanied by an environmental statement (ES) that considers the main potential impacts of the development. Further details are given at the beginning of this report. The conclusion of the assessment is that there would be no significant environmental impacts. Subject to the development being carried out in accordance with the statement the development would meet the criteria set out in MWD1 and the guidance in PPS10 and PPS22. The main potential impacts identified would arise from the atmospheric emission from the facility and its visual impact. The main impact from emission would fall within the industrial areas around the site and not on residential areas either in Rainham or in Bexley. The main visual impacts would be from and across the river, and not so much from residential areas in Rainham.
- 6.2.20 The potential impact from emissions from the facility have been assessed in accordance with current best practice and modelling techniques. This was undertaken using appropriate meteorological data and the government set standards for emissions from such processes. The modelling looked at the worse case situation whereas in practice the actual emissions would be much lower than those modelled. The approach adopted calculated the additional contribution that the new development would have to current air quality; this takes account of the emissions from existing power stations and industrial plant. Staff consider that the potential impacts have been assessed in accordance with the guidance in PPS23.
- 6.2.21 Should Members be concerned about the cumulative impact of these various processes, including the possibility of a new mass burn incinerator at Belvedere, account should be taken of a study commissioned by the council some years ago when the Belvedere and Crossness schemes were first proposed. The study concluded that the cumulative impact of the various proposals at the time would not have a significant impact on air quality, in particular pollutants such as NO<sub>x</sub>, that were of concern because of the impact on public health. Any increase would be insignificant compared with existing levels arising mainly from motor vehicles. A subsequent assessment by the Environment Agency reached similar conclusions. The modelling process in this case took account of those new facilities subsequently constructed as part of the background and reached similar conclusions, although the possible impact of a new incinerator at Belvedere was not considered. However, staff consider that the same conclusions can be drawn as the earlier studies.
- 6.2.22 Nevertheless, one of the main concerns raised by the MP, local Councillors, the public and other local organisations to the previous application is the potential impact on air quality from emissions on the health of local residents. This is especially strong given the perceived high incidence of asthma sufferers in the Rainham area, especially amongst the under 15's and the

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concern that additional pollutants in the atmosphere would exacerbate the situation. Similar concerns were raised in respect of the autoclave proposal at the Cleanaway site. In considering this issue Members will need to take account of a number of factors relating to this matter.

6.2.23 As well as making an application for planning approval, the applicants have made an application for a permit to the Environment Agency under the Pollution Prevention and Control Regulations. These regulations incorporate the European Directive on waste incineration, which covers other technologies such as gasification where waste is used as a fuel. The aim of the regulations is to prevent or limit as far as practicable, negative effects on the environment and the resulting risk to public health. The Directive requires the setting and maintaining of stringent operational conditions, technical requirements and emission limit values for plant. A permit is required from the Environment Agency before any such plant can operate. In considering this issue Members will need to take account of government guidance in relation to planning decisions where there are other controls. Planning authorities should not seek to stray into areas where there are other statutory controls and it would not normally be appropriate to refuse permission on ground covered by other controls such as air quality unless the regulating body advises accordingly. Although a permit has not yet been issued the Environment Agency did not object to the previous application subject to conditions. Should Members, nevertheless, continue to be concerned then it could request in its response to the LTGDC that a planning obligation be sought preventing construction before a permit is in place.

6.2.24 There is no evidence that staff are aware of that indicates that the impact on air quality or public health would be significant. Staff are satisfied that the evidence submitted through the ES satisfactorily demonstrates this. The Havering PCT did not object to the earlier application on health grounds. Members may take comfort from the fact the PCT is a consultee on the permit application (as are the council) and have the opportunity to give detailed consideration to any public health effects. In these circumstances staff recommend that there are no objections on the grounds of air quality or impact on public health. Reports from the Havering PCT identify problems with respiratory health in the area but do not present data that makes a link between this illness and air quality. Should Members, nevertheless remain concerned about potential health effects it could request that the LTGDC satisfies itself on the potential health impact before granting a planning permission. The LTGDC could also be asked to consider whether funding should be sought from the developer to carry out research into respiratory impacts on health, especially the under 15's, where there is a high number of hospital referrals for respiratory problems in the Rainham area, during the life of the development.

6.2.25 The application site has previously been tipped with waste materials and therefore the impact this would have on the development needs to be

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considered in accordance with the guidance in PPS23. Whilst the site does contain some contaminants as identified in the ES staff are satisfied that because of the nature of the development that the site can be safely developed. An appropriate condition is recommended.

### 7.0 Conclusions

7.1 The report assesses four main issues arising from the application; renewable energy, waste management, location and regeneration and environmental impact. In considering how to respond to the LTGDC, staff consider that the issues to which Members need to pay particular regard are as follows:

- The proposed development would provide a waste management solution for locally generated wastes in accordance with government guidance in PPS 10 and the London Plan. In particular it would accord with the proximity principle and sub-regional self-sufficiency;
- It would generate electricity from a renewable resource in a manner on type of locality advocated in PPS22.
- The LDF preferred options document takes a positive approach to self sufficiency for the ELWA sub-region in waste management and to renewable energy proposals.
- The UDP (EMP1) and the LDF preferred options document identify the site as having the potential for future industrial development.
- The proposal would provide significant investment in the area and would provide an imaginative design solution to this large public service building. Its location could help to enhance the current run down nature of this part of the river frontage and represent a significant environmental improvement to the area. This would comply with the principles of interim planning guidance, *an urban strategy for London Riverside* and policy ENV25.
- The environmental statement demonstrates that the impacts arising from emissions from the plant, including those on public health, would not be significant and be within the relevant air quality regulations. There is a separate system of regulatory control on such processes designed to ensure that emissions, and their impact on air quality and public health, are within acceptable limits.
- In terms of the Havering UDP it can be concluded that the proposals would be acceptable meeting the criteria in policy MWD13, MWD1/ENV1, and ENV25. The development would also be in accordance with the general principles set out in the preferred options consultation report

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- 7.2 In conclusion staff consider that the proposal would not conflict with the objectives of the various regeneration frameworks and would provide an important contribution to the regeneration of the area, by helping in the process of economic uplift and environmental improvement. However, should Members take a different view on the design and impact of the building then this could form the basis of an objection to the LTGDC. Members may also wish to consider whether because of these objections a building of this type is acceptable on the Havering river frontage.
- 7.3 On the other hand should Members be satisfied with the principle of the development, they may wish to leave the judgment on the design and visual impact of the building to the LTGDC to make and suggest areas to be covered by conditions and a planning obligation should it be judged these aspects are acceptable.
- 7.4 Notwithstanding these considerations, should Members, nevertheless, be of the view that the development is unacceptable and wish to raise objections to the application then the response to the LTGDC can be framed in accordance with Members objections.
- 7.5 Should Members agree with staff that no objections, subject to the consideration set out above, be raised, staff recommend that any permission should be subject to the following:

Planning conditions to cover:

- Assessing and dealing with any site contamination;
- Measures to minimise the environmental impacts on surrounding areas, including ground water and nature conservation interests;
- Materials;
- Landscaping;
- Limits on open storage;
- Carrying out the development in accordance with the environmental standards, mitigation measures, requirements and methods of implementing the development contained in the environmental statement;

Planning obligation under S106 to cover:

- A financial contribution to cover:
  - i) improved public access to riverside areas;

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- ii) environmental improvements and landscaping in the vicinity of the site;
  - iii) improvements to public transport provision to the area;
  - iv) a contribution to a base line study to be undertaken by the Havering PCT of the impact of air pollution on respiratory problems within the local population (under 15s) and to monitor impact once plant is up and running.
- To implement, review and maintain a staff travel plan throughout the life of the development and,
  - That no development under the permission is to commence until a contract with the East London Waste Authority (Shanks) for the supply of solid recovered fuel primarily from the Frog Island Bio-MRF (MBT) facility to the power generation plant has been signed and evidence of this provided;
  - The planning permission not be implemented prior to the developer providing conclusive evidence to the Council that all of the necessary authorisations issued by the Environment Agency have been secured.

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**STEPHEN EVANS**  
**Chief Executive**

**Background Papers**

1. The planning application as submitted or subsequently revised including all forms and plans.
2. The environmental statement submitted with the application

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