**Reason for Referral to Planning Committee as set out in Part 2, Chapter 9 of the Council Constitution**

The application is a major development which is of a scale and importance that should be determined at Planning Committee.

**Address:**

Thames Gateway Waste To Energy Ltd, Plot 2 London Sustainable Industries Park North, Clove Street, Dagenham

**Development:**

Application for variation of conditions following grant of planning permission 13/01134/FUL: Variation of conditions 2 (plan numbers); 3 (maximum waste throughput); 20 (hard landscaping) and 21 (car parking).

**Applicant:**

Thames Gateway Waste To Energy Ltd

**Summary:**

This application seeks a variation of conditions 2, 3, 20 and 21 to the planning permission granted in 2014 for: “Erection of a building (8,925m² internal area) incorporating 55 metre high stack and associated plant to be used as an energy generation facility to generate electricity from residual waste along with car parking, boundary treatment and landscaping”. This Section 73 application seeks to increase the waste throughput capacity by 11% (from 180,000 tonnes to 200,000 tonnes per year).

Pre-commencement conditions have been discharged and the planning permission has been implemented. Construction works to date include the approved foundation and drainage infrastructure.

The development falls within Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 and is therefore accompanied with an updated Environmental Statement (ES). The application site is located within the London Sustainable Industries Park (LSIP), Dagenham Dock and forms part of the Green Enterprise District which focuses on high technology ‘green’ environmental businesses.

Renewable energy is generated in this facility through the processing of commercial and industrial waste that is non-recyclable. This Section 73 application seeks to increase the throughput of waste for two reasons:

1. Significant improvement to the energy efficiency of the combustion process which will result in a higher level of energy output for export: from 19.6 Mega Watts (MW) to 33.6 MW.
2. The process will significantly reduce the input of natural gas required – by around 50%. It has been identified that certain calorific value wastes (‘alternative waste feedstock’) will be used.

As a result, the increase of 20,000 tonnes of waste per annum will be used as follows:
a. Up to 15,000 tonnes for alternative waste feedstock;
b. Up to 5,000 tonnes to form part of the standard throughput to reflect the increase in size of the plant.

The benefits include reducing the amount of waste that would otherwise go to landfill and the generation of renewable energy for export into the grid. This application is of strategic importance and will contribute to the vision of a more sustainable circular economy where resources are not wasted but re-purposed and re-used in the form of energy.

The facility would operate 24 hours a day, 7 days a week and would generate around 11 additional jobs (66 full time in total, roughly 52 of these will be production based and 14 office based).

The proposed increase of waste throughput for this development would satisfy a number of the Borough’s and London Plan strategic objectives and policies: Strategic Objectives SO6, SO8, SO9, SO12, Policies CM1, CR1, CR3, CR4 and CC3 of the Core Strategy; Policies BR1, BR2, BR4, BR5, BR9, BR10, BR11, BR13, BR14, BR15 and BP8 of the Borough Wide Development Plan; and Policies 2.17, 4.4, 4.10, 5.1, 5.2, 5.3, 5.8, 5.12, 5.13, 5.16, 5.21, 6.3, 6.9, 6.10, 6.13, 7.14 and 7.15 of the London Plan.

Recommendation:

That the Planning Committee grant planning permission subject to conditions and the completion of a Deed of Variation to the agreement under Section 106 of the Town and Country Planning Act 1990 in respect of a financial contribution of £15,000 (index linked) for a feasibility study to improve the Goresbrook Interchange.

Conditions:

1. Time Limit

The development permitted on 5 November 2014 under permission 13/01134/FUL was implemented before the expiration of three years from the date of the 13/01134/FUL permission.

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

2. Approved Drawings

The development hereby permitted shall be carried out in accordance with the following approved plans:

CPMG 20-002 Rev 001 16/12/13
CPMG 7487-20-111 Rev P01 07/08/2018
CPMG 7487-70-001 Rev - 16/12/13
CPMG 7487-70-002 Rev - 16/12/13
CPMG 7487-70-011 Rev 02 04/09/2018
CPMG 7487-70-103 Rev P05 23/07/2018
CPMG 7487-70-104 Rev P03 23/07/2018
Reason: For the avoidance of doubt and in the interests of proper planning.

3. Maximum Annual Throughput

The development hereby permitted shall not exceed a total annual throughput of 200,000 tonnes per annum. The applicant shall keep such records as may be required to permit the Local Planning Authority to determine compliance or otherwise with this condition. Those records shall be made available to the Local Planning Authority on request.

Reason: To accord with the submitted scheme and ensure that all planning related impacts are adequately considered.

4. External Materials

No development shall take place following the piling stage until full details, including samples, specifications and annotated plans of all external materials and plant have been submitted to and approved in writing by the Local Planning Authority. The development shall only be implemented in accordance with the approved details.

Reason: To ensure a satisfactory standard of external appearance, in accordance with Policy CP3 of the Core Strategy (July 2010) and Policy BP11 of the Borough Wide Development Policies DPD (March 2011).

5. Open Storage

No open storage shall be permitted on site unless otherwise agreed in writing with the Local Planning Authority.

Reason: To ensure a satisfactory standard of external appearance, in accordance with Policy CP3 of the Core Strategy (July 2010) and Policy BP11 of the Borough Wide Development Policies DPD (March 2011).
6. Travel Plan (Implementation)

The development hereby permitted shall only be occupied in accordance with the Travel Plan prepared by Thames Gateway Waste to Energy Ltd (March 2014). The approved Travel Plan shall be implemented and monitored in accordance with the approved scheme.

Reason: In order to encourage the use of sustainable transport and in accordance with policy BR10 of the Borough Wide Development Policies DPD (March 2011).

7. BREEAM Rating

The development hereby permitted shall achieve as a minimum a BREEAM 'Excellent' rating. A certificated BREEAM Post Construction Review, or other verification process agreed with the Local Planning Authority, shall be provided, confirming that the agreed standards have been met.

Reason: To ensure that the proposed development is constructed in an environmentally sustainable manner and in accordance with Policy BR1 of the Borough Wide Development Policies DPD (March 2011).

8. Noise and Vibration

No development shall take place until a scheme to control noise and vibration emanating from the completed development has been submitted to and approved in writing and implemented to the satisfaction of the Local Planning Authority.

Reason: To protect the amenity of adjoining occupiers, in accordance with Policy BP8 of the Borough Wide Development Policies DPD (March 2011).

9. Noise Level

The rating level of the noise from the combined operation of plant installed pursuant to this permission shall not exceed the existing background noise level at the outside of noise sensitive buildings. Any assessment of compliance with this condition shall be made according to the methodology and procedures presented in BS4142:2014.

Reason: To protect the amenity of adjoining occupiers, in accordance with Policy BP8 of the Borough Wide Development Policies DPD (March 2011).

10. Nitrogen Dioxide Limit

The development shall achieve a daily average nitrogen dioxide (NO$_2$) limit of no greater than 150 mg/Nm$^3$ at the conditions set out in the Industrial Emissions Directive Annex VI Part 3. The applicant shall keep such records as may be required to permit the Local Planning Authority to determine compliance or otherwise with this condition. Those records shall be made available to the Local Planning Authority on request.

Reason: To protect the amenity and air quality of existing and future residents and neighbours, in accordance with Policy BP8 and BR14 of the Borough Wide Development Policies DPD (March 2011).
11. Odour Mitigation

In the event that complaints regarding smell/odour are received by the Local Planning Authority during construction or once the development is operational, from any sensitive receptor, and thereafter notified to the operator, an immediate assessment of the complaint shall be undertaken. A report on the findings, with proposals for removing, reducing or mitigating identified adverse effects resulting from the operation, and a programme for the implementation of remedial measures to be undertaken shall be submitted to the Local Planning Authority no later than 5 working days from the receipt of the complaint, unless otherwise agreed in writing by the Local Planning Authority.

Reason: To protect the amenity and air quality of existing and future residents and neighbours, in accordance with Policy BP8 and BR14 of the Borough Wide Development Policies DPD (March 2011).

12. Hydrogeological Risk Assessment

Development shall take place in accordance with the Hydrogeological Risk Assessment (Rev B) prepared by Enzygo and dated June 2014, as approved under planning permission 14/01252/CDN. Minor amendments may be agreed in writing from time to time by the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with Policies BR4 and BR5 of the Borough Wide Development Policies DPD (March 2011).

13. Contamination Verification Report

No occupation of each phase of development shall take place until a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved, in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include any plan (a "long-term monitoring and maintenance plan") for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan. The long-term monitoring and maintenance plan shall be implemented as approved.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with Policies BR4 and BR5 of the Borough Wide Development Policies DPD (March 2011).

14. Soft Landscaping Cover Soil

All areas of soft landscaping are to be provided with 300mm clean cover soil as a barrier. The screening criteria for a commercial use presented in Page 33 of the Geoenvironmental report, CRM.035.006.R.002.B, dated October 2013, are to be used as
minimum soil acceptance criteria.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with Policies BR4 and BR5 of the Borough Wide Development Policies DPD (March 2011).

15. Unexpected Contamination

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken and where remediation is necessary a remediation scheme must be prepared and implemented to the satisfaction of the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with Policies BR4 and BR5 of the Borough Wide Development Policies DPD (March 2011).

16. Piling Risk Assessment

Development shall take place in accordance with the Risk Assessment for Piling Works prepared by Balfour Beatty Ground Engineering and with reference 33741, as approved under planning permission 15/00002/CDN. Minor amendments may be agreed in writing from time to time by the Local Planning Authority.

Reason: To protect the quality of the water environment and to accord with Policy BR4 of the Borough Wide Development Policies DPD (March 2011).

17. Surface Water Infiltration

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 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 approved details.

Reason: To protect the quality of the water environment in accordance with Policy BR4 of the Borough Wide Development Policies DPD (March 2011).

18. Construction Environmental Management Plan

Development shall take place in accordance with the Construction Environmental Management Plan prepared by Volker Fitzpatrick and with reference C11579 – TWG2E, as approved under planning permission 14/01253/CDN. Minor amendments may be agreed in writing from time to time by the Local Planning Authority.

Reason: In the interest of pollution and residential amenity, in accordance with Policy BP8 of the Borough Development Policies DPD (March 2011).
19. Soft Landscaping (Implementation)

The soft landscaping plan TGP-LP-01-Rev C prepared by Design with Nature dated August 2018, hereby approved shall be implemented in the first planting season following first occupation. Any plants or trees required as part of the implementation of the condition that die or are removed, damaged or diseased within a period of FIVE years from the completion of the development shall be replaced in the next planting season with others of a similar size and species unless the Local Planning Authority gives written consent for a variation.

Reason: In the interest of design quality, public safety and biodiversity, in accordance with Policy CP3 of the Core Strategy (July 2010) and Policy BR3 of the Borough Wide Development Policies DPD (March 2011).

20. Hard Landscaping (Implementation)

The hard landscaping plan TGP-LP-01-Rev C prepared by Design with Nature shall be implemented in accordance with the approved details and thereafter permanently maintained. All external lighting shall be designed to prevent light spill into the Goresbrook.

Reason: In the interest of design quality, amenity, walking, accessibility, public safety and biodiversity, in accordance with Policy CP3 of the Core Strategy (July 2010) and Policy BR3 of the Borough Wide Development Policies DPD (March 2011).

21. Car Parking (Implementation)

The car parking areas indicated on drawing CPMG 7487-70-103 Rev P05 shall be constructed and marked out prior to the occupation of the development, and thereafter retained permanently for the accommodation of vehicles of employees and visitors to the premises and not used for any other purpose.

Reason: To ensure that sufficient car parking areas are provided and not to prejudice the free flow of traffic or conditions of general safety along the adjoining highway in accordance with Policies BR9 and BR11 of the Borough Wide Development Policies DPD (March 2011).

22. Electric Vehicle Charging Points

The development hereby permitted shall not be occupied until details of the electric vehicle charging points and passive provision have been submitted to and approved in writing by the Local Planning Authority. The scheme shall ensure that at least 20% of all spaces are for electric vehicles with an additional 10% passive provision (as defined in the London Plan March 2016) for future use. The scheme shall be implemented in accordance with the approved details, prior to the occupation of the development, and permanently retained thereafter.

Reason: In order to encourage the use of electric cars as a sustainable mode of transport, in accordance with Policy BR10 of the Borough Wide Development Policies DPD (March 2011) and Policy 6.13 in the London Plan.
23. Cycle Parking Details

The development hereby permitted shall not be occupied until full details of cycle parking, including its external appearance, location and the means of secure storage proposed, have been submitted to and approved in writing by the Local Planning Authority. The cycle parking shall be provided prior to the occupation of the development, and shall be retained thereafter, and used for no other purpose.

Reason: In order to encourage the use of cycling as a sustainable mode of transport, in accordance with Policy BR10 of the Borough Wide Development Policies DPD (March 2011).

24. Deliveries and Servicing Plan

The development hereby permitted shall not be occupied until a Deliveries and Servicing Plan has been submitted to and approved in writing by the Local Planning Authority. The Plan shall be designed to minimise deliveries and export of materials within the times of peak traffic congestion on the local road network. The Plan shall be implemented in accordance with the approved details and thereafter maintained.

Reason: In order to minimise the impact of the development on the free flow of traffic on the local highway network during peak periods and in the interests of highway safety and in accordance with Policy BR10 of the Borough Wide Development Policies DPD (March 2011).

25. Construction Vehicle Circulation

Development shall take place in accordance with the details of vehicle circulation as set out in the statement prepared by Amberley Consulting Ltd and on drawings ‘TGW2E – 01 Traffic Management’ and ‘TGW2E – 02 Traffic Management Proposal’, as approved under planning permission 14/01253/CDN. Minor amendments may be agreed in writing from time to time by the Local Planning Authority.

Reason: To ensure the maintenance and operation of High Speed 1 is not prejudiced.

26. Buried Services

Development shall take place in accordance with the measures to identify and protect High Speed 1 and/or UK Power Networks buried services as set out in the statement prepared by Amberley Consulting Ltd and on drawings 0812-VOL-5952 Sheet 1 of 5, Sheet 2 of 5, Sheet 3 of 5, Sheet 4 of 5 and Sheet 5 of 5 prepared by Surveys, as approved under planning application 14/01253/CDN. Minor amendments may be agreed in writing from time to time by the Local Planning Authority.

Reason: To ensure the maintenance and operation of High Speed 1 is not prejudiced.

27. Risk Assessment to HS1 Transformer

Development shall take place in accordance with the risk assessment of the impact of the development on the High Speed 1 isolating transformer statement prepared by Amberley Consulting Ltd, as approved under planning permission 14/01253/CDN. Minor amendments may be agreed in writing from time to time by the Local Planning Authority.
Reason: To ensure the maintenance and operation of High Speed 1 is not prejudiced.

28. Assessment of Electromagnetic Compatibility

No development above ground shall take place until an assessment of Electromagnetic Compatibility (EMC) for the occupation of the site has been submitted to and approved in writing by the Local Planning Authority in consultation with High Speed 1. The assessment shall ensure that the design is compatible with EMC regulations.

Reason: To ensure the maintenance and operation of High Speed 1 is not prejudiced.

29. Drainage Layout

Development shall take place in accordance with the drainage details prepared by Millward and dated 17 April 2015 and with references MA9580-200 F and MA9580-201 F, as approved under planning permission 15/00555/CDN. Minor amendments may be agreed in writing from time to time by the Local Planning Authority.

Reason: To ensure the maintenance and operation of High Speed 1 is not prejudiced.

30. Hazardous Materials Storage

No development above ground shall take place until details of the materials and arrangements for the storage of combustible gases or hazardous materials for the operation phase of the development within 200m of High Speed 1 infrastructure have been submitted to and approved in writing by the Local Planning Authority in consultation with High Speed 1. No such materials shall be introduced to the site without the prior approval of the Local Planning Authority in consultation with High Speed 1.

Reason: To ensure the maintenance and operation of High Speed 1 is not prejudiced.

Contact Officer
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1. Introduction and Description of Development

1.1 The application site is located on land to the north of Choats Road, west of Choats Manor Way in Dagenham. The site forms part of the larger Dagenham Dock area, an area of some 133 hectares (329 acres) of industrial and warehousing land bounded to the south by the River Thames and to the north by the Goresbrook and beyond that the London-Tilbury-Southend railway line and the High Speed 1/Channel Tunnel Rail Link (CTRL). The western boundary of the area is formed by the Goresbrook as it sweeps south towards the Thames and beyond that the Barking Riverside site, which will accommodate 10,800 new homes, along with the services, community facilities and open space needed to deliver a sustainable community.
1.2 The application site and the wider area around is owned by the Greater London Authority (GLA) who are promoting the area as a London Sustainable Industries Park (LSIP) with an emphasis on the environmental business sector. The proposed facility will be developed on land which forms part of the northern area of the LSIP.

1.3 The application site is rectangular in shape, measures approximately 3.35 hectares and is relatively flat in nature, with ground levels ranging from 1.8 metres Above Ordnance Datum (AOD) in the western part of the site to 1.5 metres AOD on the eastern boundary. The site is currently vacant and principally made up of semi-rough ground with earth bunds forming the perimeter to the site. The site is dominated by a series of high voltage pylon lines which cross the site and the surrounding industrial and commercial buildings to the immediate north, east and south. The proposed site previously formed the main part of a wider area which was used for construction purposes in connection with the building of the Channel Tunnel Rail Link (CTRL). The wider LSIP has been developed in recent years to provide new infrastructure in the form of roads, drainage, flood compensation and landscaping which has created a number of development plots. The application site forms Plot 2 of the LSIP.

1.4 A variation of Conditions 2 (plan numbers), 3 (maximum waste throughput), 20 (hard landscaping) and 21 (car parking) of Planning Permission 13/01134/FUL is sought for the following amendments:

- Increase in throughput of commercial and industrial waste from 180,000 tonnes to 200,000 tonnes per annum (11% increase);
- Orientation of the four power island modules changed from approximately north-south to east-west, and relocation of the associated switch room to maintain its proximity to the equipment;
- Amendments to the roof and elevations of the RODECS® (gasification plant) and waste reception buildings;
- Addition of dosing and storage equipment for up to 15,000 tonnes of alternative waste feedstock in the north-east part of the site;
- Nitrogen bulk storage tanks relocated from the north-west corner to the east of the site close to the power island modules with an associated improvement in vehicular access;
- Movement of a number of elements, e.g. flue stack, offices / control room, emissions control and energy generation equipment to improve access and / or avoid underground obstructions;
- Reduction in size of the substation compound;
- Amendments to the interior of the waste reception building to reflect current best practice with consequent amendments to the location of the doors on the western elevation;
Amendments to the drainage strategy as a result of the layout changes; and

Amendments to the landscape design as a result of the layout changes.

1.5 As a result, staffing numbers are expected to increase by 20%, from 55 to 66 staff in total.

2. **Background**

**Planning History**

2.1 Planning permission was granted for the Thames Gateway Waste to Energy facility on 5 November 2014. The permission allowed 8,925m² of industrial floorspace, processing 180,000 tonnes of non-recyclable commercial and industrial waste per annum to produce ‘syngas’ (ref. 13/01134/FUL). The development included a 768m² two storey office building and a range of plant and infrastructure, including a 55 metre high flue stack, to provide a gasification (waste to energy) facility.

2.2 A subsequent Non-Material Amendment application was approved to amend the layout of the development, permitted on 21 April 2015 (ref. 15/00361/NMA). Changes were approved to the following elements of the scheme: retaining wall and embankment around (majority of) site; increase in site base level to approximately 75 cm above the approved scheme’s finished floor levels; perimeter road terminating on north side; relocation of equipment on roofs; weighbridge design to accommodate longer vehicles; increase in size of substation building; additional equipment adjacent to northern elevation; change in orientation of (to north-south) and reduction of power island modules from six to four; and landscape design. Amendments to conditions 19 (Soft Landscaping), 20 (Hard Landscaping) and 21 (Car Parking) were approved as part of this application.

2.3 Development has since commenced and the following pre-commencement conditions have been discharged: 4 (External Materials), 8 (Noise and Vibration), 12 (Contamination Risk Assessment), 16 (Piling Risk Assessment), 18 (Construction Environmental Management Plan), 25 (Construction Vehicle Circulation), 26 (Buried Services), 27 (Assessment of Impact on Highspeed 1 (HS1) Transformer), 28 (Assessment of Electromagnetic Compatibility (Construction Phase)), 29 (Drainage Details), and 30 (Hazardous Materials Storage (Construction Phase)).

2.4 An earlier permission was also granted for a sustainable waste management facility producing low carbon energy, which approved the processing of 120,000 tonnes of waste per annum (ref. 10/00287/FUL). This permission lapsed in 2014.

**Site Context**

2.5 The plant forms part of the London Sustainable Industries Park (LSIP) which is located within the Mayor’s Green Enterprise District.

2.6 There are no statutory heritage assets within the vicinity. The site falls within the Tier 3 Barking Level and Dagenham Marsh Archaeology Priority Area. The site is
designated as Flood Zone 3 on the Environment Agency Flood Map (highest probability of flooding). This area also benefits from flood defences.

2.7 The public transport accessibility level (PTAL) rating is 1a, where 1 is the lowest and 6b is the highest. Nearby transport links include bus route EL2 (East London Transit) with a bus stop on Choats Road, to the south of the site. This route provides access to Barking Town Centre, Dagenham Dock and Dagenham Heathway. Part of the Sustrans National Cycle Network route 13 passes via Goresbrook Road to the north of the development.

2.8 The Joint Waste Development Plan (JWDP) for the East London Waste Authority Boroughs has allocated the LSIP for two medium scale facilities and one small scale facility for In-Vessel Composting / Anaerobic Digestion / Recovery. The ReFood anaerobic plant is located to the south of the application site.

3. Consultations

3.1 Publicity

326 properties within the wider area were consulted by individual letter. A press notice was published in the Barking and Dagenham Post on 19 September 2018.

To date, letters of objection have been received from 3 individuals (one individual, noted to be representing the Scrattons Farm Residents’ Association, provided 3 separate letters of objection). One neutral response has also been received. It is noted that the responses have been received from residents on Scrattons Farm Estate and an unknown address. The responses have been summarised below:

- Principle of industrial waste facility within this location;
- Obstruction of the landscape;
- Additional air pollution, noise and obtrusive odours from the stacks and traffic congestion;
- Concerns over an alleged explosion by the same company in 2017;
- Traffic has increased on Choats Road and the Goresbrook Interchange since the previous permission;
- Concerns regarding the volume of additional traffic from the Section 73 which will cause a major problem to a congested area;
- Safety issues for cars and pedestrians on the Goresbrook Interchange: roundabouts too small for size and number of Heavy Goods Vehicles (HGVs), damaged rail guards, difficulty for pedestrians to cross, and general safety issues for cars and pedestrians to share this space with HGVs;
- Incorrect address used for the application, misleading residents about the planning application due to the lack of a map which would inhibit responses; and
- Query regarding the improvement of electricity by more than 70%, with an increase of waste by only 11%.

Officer Note: This committee report deals with the issues listed above in the subsequent sections.

The street name used in the planning application is Clove Street. This is a new street which has been built and is officially recognised by the Post Office. The
address on the neighbour consultation letters and press notice further referred to the London Sustainable Industries Park which can be located when searching for this location online.

3.2 Environmental Health Officer

The Environmental Health Officer (EHO) responded to the air quality, odour and noise environmental protection issues raised.

**Air Quality**

The air quality assessment dated August 2018 is an update of a previous report submitted in support of planning permission 13/01134/FUL. It presents an evaluation of the impact of emissions to atmosphere in terms of the development permitted pursuant to 13/01134/FUL, the proposed development and the incremental change between the permitted scheme and the proposed development. Further information has also been provided in response to queries during the consultation process.

**Stack Emissions**

The principal pollutant emitted from the plant will be Nitrogen Dioxide (NO$_2$). Modelling of multiple pollutants emitted from the stacks, demonstrates that it is the concentration of this pollutant which, in combination with the existing ambient concentration, will be closest to the corresponding environmental assessment level, which in this case is the Statutory UK National Air Quality Objective. Therefore, in terms of local air quality, the significance of emissions to air from the stacks can be determined by reference to the impacts of NO$_2$.

The EHO generally agreed with the policy assessment and methodological approach presented in the report. However, the EHO had some reservations regarding the baseline concentration of NO$_2$.

Within London, the London air quality management system includes London-specific policy and technical guidance for local authorities to provide tools such as the London Atmospheric Emissions Inventory (LAEI). The LAEI provides, inter-alia, modelled concentrations of NO$_2$, PM$_{10}$ and PM$_{2.5}$ at 20 metre grid level for the base year 2013 and projected forward to 2020, 2025, and 2030. The predictions take into account both background and local sources. The 2020 modelled concentrations provide a more robust indication of baseline ambient air quality than the baseline concentration maps published by the Department for Environment, Food & Rural Affairs (Defra). Defra’s maps provide background concentration of a pollutant to be that which would remain if all local sources of pollution such as roads, chimney stacks etc. were removed, on a 1 kilometre grid basis.

The EHO used the LAEI 2020 modelled concentrations to identify ambient baseline concentrations for existing residential areas and schools located closest to the development. The EHO was satisfied that the application of LAEI modelled concentrations does not affect the veracity of the report’s conclusions regarding these locations that "emissions to atmosphere from the 55 metre main stack are
predicted to not significantly affect air quality at ground level and the impact is considered to be insignificant”.

The report does not evaluate air quality at three yet to be constructed residential development sites located in the vicinity of the Waste to Energy plant which either have, or are in the process of, securing planning permission. These are:

- 17/02144/FUL: Department Of Employment Chequers Lane Dagenham Essex RM9 6PS. Application Permitted.

National Air Quality Standards will be satisfied at all receptors. Judged by the criteria provided in the Institute of Air Quality Management (IAQM) document, “Land-Use Planning & Development Control: Planning for Air Quality”, January 2017, the impact of the facility at all receptors is “negligible”.

Officer Note: Another planning application, 17/01502/OUT, which was identified in the EHO’s full response, relating to the Gill Aggregates site, was finally disposed of on 23 November 2018 and is therefore no longer relevant to the assessment of this application. However, if any future residential development is proposed at that site, the 17/01502/OUT air quality assessment was considered and the EHO concluded that this application would satisfy National Air Quality Standards.

It is the EHO’s view that the impact on local air quality, of emissions from the stacks associated with the proposed increase in throughput, is not so significant as to lead to an objection to the approval of the application.

**Odour**

The EHO evaluated this aspect of the air quality assessment report and concurred with the conclusion that the potential for annoyance due to emissions of odours from the ventilation stack is predicted to be negligible.

**Traffic-related emissions**

The air quality assessment concludes that emissions from HGV movements to and from the plant will have an insignificant effect on air quality. The roadside predicted annual average pollutant concentrations associated with 74 HGV movements per day are very low and this would not change materially if the calculations were re-worked to reflect 82 movements per day.

In the context of the local highway network, Choats Manor Way and Choats Road which carry daily traffic flows of some 2,780 and 2,219 HGVs respectively. The total HGV traffic associated with the operation of the waste to energy plant is approximately 3% of the total level of movements and so will not contribute significantly to the totality of pollutant emissions from those roads.
**Construction phase impacts**

There is no reason to suggest that construction phase impacts will differ from those that would be associated with the construction of the facility permitted pursuant to permission 13/01134/FUL. The EHO noted that that consent is subject to a condition to address construction phase dust and noise emissions.

**Noise**

Whilst Condition 8 (Noise Management Plan) was previously approved under planning permission 14/01252/CDN, the EHO considers that this condition should be resubmitted to reassess the appropriate noise mitigation for the amended scheme.

The EHO noted that regarding Condition 9 (Noise Level), BS4142:1997 has now been superseded by BS4142:2014 but the noise limit criterion set out in Condition 9 remains apposite.

*Officer Note:* Condition 9 (Noise Level) has been updated to reflect the latest British Standard.

The EHO noted that there is a discrepancy between the two reports with regard to the maximum outdoor noise level. The applicant responded that the EHO’s calculations did not consider the noise mitigation within the outer layer of the stack. This mitigation was included in the applicant’s modelling, which reduces the noise levels from the sides and makes the noise levels directional. The EHO accepted this point and that this will reduce the noise levels off-site, at points like Shaw Gardens. The EHO noted it is for the applicant to undertake detailed design and put in place sufficient noise mitigation to ensure compliance with the noise condition, and having revisited this aspect, the applicant has confirmed their confidence in their noise assessment.

In summary, the EHO does not wish to object to this application.

### 3.3 Transport Development Management

The facility has permission currently to process up to 180,000 tonnes of household waste and the permitted use allows the processing plant with annual lorry loads of 10,725. In support of this application, a Transport Statement (TS) dated August 2018 was submitted with the application and has been based on the 2013 Environmental Statement approach accepted for planning application 13/01134/FUL that the predicted number of HGV movements has been compared against those accepted for the site.

**Highway Observations**

Access to the site is approved via the A13/Goresbrook Interchange, Choats Manor Way and Choats Road. Whilst the Borough roads are subject to 30mph speed limits, it is evident and confirmed in the TS that traffic speeds are generally above the signed speed limit. The waste material for processing would be brought onto site by HGVs from several locations which haven’t been identified in the TS and some clarity of the source and distance should be sought.
The routes that the HGVs would take to reach Dagenham would be dependent on the source of waste materials; however, once they exit off the A13 trunk road, entrance to the LSIP is restricted to the use of one route on the local network. This is because HGVs are not permitted to use the western end of Choats Road due to a width restriction which permits "bus access only". Staff travelling by car would be staggered across 24 hours because of shift patterns and this would mean they would not all be concentrated at peak times. The additional 1,561 HGV loads a year, added to the 10,725 loads predicted for the 2013 permission, would take the total annual HGV loads to 12,286 loads per year. However, due to the efficiencies in the process, less residue ash will be produced, so fewer loads will need to be exported from the site. The predicted total HGV loads per year have therefore reduced to 11,573. This translates to a total of 82 HGV movements (41 HGV loads) per day, and an increase of approximately 8 HGV movements per day.

**Officer Note:** The applicant confirmed in response that feedstock contracts have not yet been agreed but detailed discussions have been held with a number of potential suppliers. These discussions are commercially sensitive and no further detail at this stage has been provided. It is expected that over half of the additional 20,000 tonnes will come from London itself, with the remainder being delivered from a number of locations, potentially up to 100 miles away. Thames Gateway Waste to Energy Ltd will not be operating its own transport fleet and so cannot control where a vehicle goes on leaving the site.

The London Plan advises that sites selected for waste management should seek to maximise the potential for rail and water transport. This application does not propose to use the river for transportation to handle the proposed increase in waste materials. It should be noted that the river option has been explored previously under application 13/01134/FUL that was approved. It is understood that the two main reasons why this did not happen were insufficient local waste streams to service the facility and because of the lack of availability of these sources, it was not considered feasible to utilise the river once the facility was operational. Also, there were local concerns associated with transportation of waste material by river which relates to the geographical location of the material and controlling where the waste material arises from.

**Car and Cycle Parking**

The car and cycle parking provisions are consistent with the London Plan and there is a potential for additional spaces for visitors and cycle parking in the communal hub for the wider LSIP. The application includes blue badge spaces and electric vehicle charging points with passive provision in accordance with the London Plan.

**Public Transport Accessibility Level and Sustainable Transport**

The location of the proposed development provides a Public Transport Accessibility Level (PTAL) rating of 1a, determined using the standard methodology issued by TfL, demonstrating the site is located in an area of very poor public transport links and therefore, there is a greater reliance on car use for commuting to this site.
In respect of bus connections, there are two bus stops along Choats Road served by the East London Transit Route (ELT). The ELT service runs at a frequency of 1 service approximately every 12 minutes. TfL has advised that there is enough capacity on existing local buses to serve the needs of the site. This service provides direct access to Dagenham Dock C2C Station.

In terms of sustainable modes of travel which will be available to this site, there is a network of footways in the general locality to a good standard and these are well lit, creating safe walking routes to the local bus stops and locally there are a few cycle routes signed or marked.

**Concluding Comments**

Given that the application site forms part of the wider LSIP which is being promoted and developed as an environmentally friendly, sustainable industries park, it is considered that the development should help to contribute to connections and movement within the locality to help provide and improve the transport infrastructure necessary to sustain sustainable new development. It should therefore follow that the application site and future occupiers of the wider LSIP should be able to travel by a variety of public transport means to reduce traffic congestion.

The main mode of transport accountable for nearly all the trips to the development will be via both private motor vehicles and HGVs both arriving and dispersing via Choats Road with all the HGVs passing through the Goresbrook Interchange and, as a consequence, an increase in traffic in this area. The TS conclusion suggests that the proposed additional trips handling the increase in waste would not give rise to any significant adverse transport impact and the percentage changes on the roads serving the site would be extremely low, less than 0.5% in the peak hours and less than 0.1% daily. However, even though this is low, there is a localised impact when the predicted daily traffic from the development is added to the cumulative transport growth that has already taken place within LSIP and Dagenham Dock since the last permission. During the peak times, Goresbrook Interchange is close to its capacity so with even a slight increase it is probable for further delay and congestion occurring to the local network during these times with the potential to affect the local traffic flows, journey times and air quality.

Table 9 in the TS shows the change in the predicted daily traffic profile for the proposed 200,000 tonnes per annum plant and we are advised this will be managed by having a Delivery and Servicing Plan in place. To encourage staff to make a modal switch to a more sustainable mode of transport instead of a greater reliance on car use for commuting, a Travel Co-ordinator will be appointed to implement the Travel Plan. This is accepted as adequate mitigation.

The Transport Development Management Officer considered it appropriate and necessary that the applicant makes a financial contribution to a more detailed assessment and feasibility study for improvements to Goresbrook Interchange. This is necessary to put in place the resources to monitor and audit the documents to be used for the purpose of mitigating measures to ensure their objectives and targets are achieved relating to a modal switch of transport from private vehicle car travel and the level of HGV movements do not exceed the number proposed.
Officer Note: A contribution for £15,000 (index linked) towards a feasibility study to improve Goresbrook Interchange Junction has been included in the draft Heads of Terms for the Deed of Variation to the Section 106 Agreement.

3.4 Greater London Authority (GLA)

The GLA confirmed that this Section 73 application was assessed and found to be of “No Strategic Importance”. In this instance, the application does not need to be referred back to the GLA for a Stage 2 report.

3.5 Transport for London (TfL)

No objections.

3.6 Environment Agency (EA)

No objections.

3.7 Natural England (NE)

No objections.

3.8 Greater London Archaeology Advisory Service (GLAAS)

No objections.

3.9 High Speed 1 (HS1)

No objections.

4. Local Finance Considerations

4.1 This Section 73 application does not present a change in floor areas and is therefore not subject to a change in the Community Infrastructure Levy.

5. Analysis

5.1 Principle of Uses

5.1.1 The principle of a waste to energy scheme was found acceptable in this location in the original permission 13/01134/FUL. Current policies continue to support the principle of the use in this location.

5.1.2 The application site is located within a Strategic Industrial Location (SIL), the Dagenham Dock Employment Area, as identified in the London Plan (Policy 2.17, Annex 3 and Map 2.7) and is identified as a Strategic Industrial Location within Policy CE3 of the Core Strategy. London Plan Policy 4.10 advises that the Mayor will support the establishment of green enterprise districts such as that being proposed in the Thames Gateway as London is well-positioned to accommodate the expansion of green industries and green practices, with opportunities in renewable energy, low carbon technology, waste reduction and recycling.
5.1.3 Policy CM1 of the Core Strategy outlines that employment growth will be focussed on Dagenham Dock as well as other designated SIL and Locally Significant Industrial Sites. Policy CE4 of the Core Strategy advises that proposals to establish recycling and reprocessing activities and other industries in the environmental business sector are encouraged within the Dagenham Dock employment area.

5.1.4 Policy 5.16 of the London Plan advises that London should be self-sufficient in terms of dealing with its own waste and Boroughs must allocate sufficient land and identify waste management facilities to provide capacity to manage the tonnages of waste apportioned in the London Plan.

5.1.5 The Council has produced a Joint Waste Development Plan Document (JWDPD) up to 2021 for the East London Waste Authorities of Barking and Dagenham, Havering, Redbridge and Newham. The JWDPD refers to the European Union Waste Framework Directive as the principal legislation for waste. A key principle of the directive is the waste hierarchy - reduce, re-use, recycling and composting, energy recovery and disposal - and the objective to manage waste as near to the top of the hierarchy as possible, consistent with Policy CR3 of the Core Strategy and Policy BR15 of the Borough Wide Development Policies DPD.

5.1.6 Schedule 2 of the JWDPD identifies the location of new sites to manage this waste. Specifically, in relation to Barking and Dagenham, the only site listed is the Dagenham Dock LSIP where there is capacity for 3 new waste management facilities. The JWDPD identified a gap of 270,000 tonnes per annum (tpa) recovery capacity in the area. This capacity has been surpassed by the original permission 13/01134/FUL by 120,000 tonnes. This Section 73 application will add a further 20,000 tpa to the area’s capacity. The permission for TEG Dagenham on Plot 7A (ref. 11/00460/FUL) for a 50,000 tpa anaerobic digestion and 20,000 tpa in-vessel composting facility is operational. The Anaerobic Digestion Plant, run by ReFood Ltd to the south of the site, has become operational since the grant of the original permission, processing 160,000 tonnes of food waste per annum and 55,000 tonnes per annum of animal by-products (ref. 13/00649/FUL).

5.1.7 Draft New London Plan Policy SI8 requires proposals to increase the capacity of existing waste sites to be evaluated against five criteria. When assessing the increase in capacity against the above criteria, the development will be consistent in the nature of the activity, scale, location and number of jobs created. The amended scheme will result in further greenhouse gas savings from the 13/01134/FUL permission and achieve a positive carbon outcome. As discussed in the sections below, it is considered that the impact on surrounding areas will not be significantly more as a result of this application and a financial contribution has been sought to mitigate the impacts of additional vehicle movements.

5.1.8 In addition it is worth noting that whilst anaerobic digestion and gasification are both classed as recovery, they would take different waste streams. The anaerobic digestion process typically utilises food/garden waste and wet organic waste, whereas the applicant’s gasification facility utilises drier mixed residual waste. The waste to be treated by the applicant would not be suitable for the anaerobic digestion process nor would the wet organic waste streams used by the anaerobic digestion operators be suitable for the applicant. In view of this, and given the extant planning permission for a similar gasification plant at the application site, it
is considered that the principle of increasing the throughput at this facility is acceptable.

5.2 Waste Management

5.2.1 Policy BR15 of the Borough Wide Development Policies DPD advises that waste should be handled in the most sustainable manner, without endangered human health or harming the natural environment; and by ensuring sufficient and timely provision of waste management in appropriate locations, including waste disposal to meet the needs of communities and accommodate waste management capacity requirements for at least the next 10 years; and by ensuring new waste management facilities do not detract from the quality or the character of distinct areas.

5.2.2 In terms of the process, the proposed facility would utilise commercial and industrial residual waste as a fuel source to generate a synthetic gas ‘syngas’ which is used to generate power in the form of electricity. The process involves combusting the waste product within the presence of oxygen to produce a syngas and a solid residue of non-combustible material (ash). The gasification process takes place in the primary chamber where the waste material is gasified, at temperatures of some 550-600ºC to produce the syngas. Within the secondary chamber, the syngas is then combusted at temperatures of 850-1400ºC. Energy is generated as the syngas is combusted and the hot exhaust gases are fed through a waste heat boiler where steam is produced. Steam drives a turbine which turns the generator producing electricity which would be exported to the grid via a dedicated substation. The residual hot gases leave the boiler at a reduced temperature of approximately 200ºC and are drawn through an Air Pollution Control (APC) system aided by a draft fan and then discharged to atmosphere via the 55 metre flue stack. The APC system consists of a ‘barrier type’ particulate filter and the injection of sodium bicarbonate sorbent and powdered activated carbon to neutralise acid gases and absorb dioxins and furans.

5.2.3 The application proposes to increase the throughput of waste from 180,000 tonnes per annum (tpa) to 200,000 tpa, with associated changes to the site layout, elevations and plant equipment. This represents an 11% increase over the capacity approved in 2014. 75% of the additional 20,000 tonnes will be alternative waste feedstock to replace natural gas and 25% of the 20,000 tonnes will be used to increase the standard throughput.

5.2.4 The site will be used as an energy generation facility to generate 33.6 Mega Watts (MW) of electricity per year (an increase of 14 MW), with the potential for 28 MW exported from the site on a 24/7 basis which would create sufficient power to supply approximately 64,000 homes per year. However, some of this power may be taken by local industrial end-users rather than exported to the grid, or it may feed into a district heating network (e.g. potentially Barking Riverside as an end-user). The waste would comprise residual commercial and industrial waste that is not re-used, recycled or composted and remains to be treated through the recovery of energy and/or through disposal to landfill. The facility would not accept any hazardous waste.

5.2.5 In respect of the waste hierarchy (reduce/re-use/recycling and composting/energy recovery/disposal) the facility is a form of energy recovery and therefore sits in the
last but one solution in the hierarchy. The facility will divert an additional 20,000 tonnes per annum away from landfill to generate electricity.

5.2.6 As part of this, the applicant is required to comply with the duty of care regulations and the site’s Environmental Permit (which requires amongst other things, waste documentation, waste carrier certificates and transfer notes to be available for inspection).

5.2.7 In light of the above, it is considered that the application satisfactorily demonstrates and justifies a more efficient management of waste, by using non-recyclable waste as a resource, promoting the generation of additional renewable energy and diversion of additional waste from landfill.

5.3 Transport Matters

5.3.1 Policy BR10 of the Borough Wide Development Policies DPD requires proposals for new development to assess their impact on the surrounding transport and road network. Policy W5 of the JWDPD advises, inter-alia, that assessments should be made of the transport impact of all movements, including opportunities for use of sustainable transport modes, traffic generation, access and the suitability of the highway network in the vicinity, and access to and from the primary route network.

5.3.2 The vehicle access point is consistent with the approved access point. The internal vehicle routes have been modified around the different site layout. However, the vehicle tracking plans have been found acceptable.

HGV Traffic Generation

5.3.3 The site is accessed via the A13/Goresbrook Interchange, Choats Manor Way and Choats Road. As a result of increased traffic from existing sites and developments being brought forward, there are impacts on the surrounding highways network. While the Borough roads are subject to 30mph speed limits, it is evident and confirmed in the Transport Statement (TS) that traffic speeds are generally above the signed speed limit.

5.3.4 Independent traffic surveys were commissioned and carried out with Automatic Traffic Count surveys on Choats Manor Way and Choats Road over the period from 5th to 11th June 2018 to establish the baseline traffic in Annual Traffic/Daily Traffic and the figures are included in appendix 2 of the TS and all traffic movements for these roads shown in Table 5 of the TS.

5.3.5 The waste material for processing would be brought onto site by HGVs from several locations. The applicant has stated that the source of throughput materials is yet to be confirmed. The site would operate 24 hours a day, seven days a week, with HGV deliveries between 07:00 and 22:00 Monday to Friday and 07:00 to 17:00 on Saturdays, over the equivalent of 304 days a year.

5.3.6 In respect of traffic generation arising from the operational phase with the proposed increase in material to the development, officers sought clarification on the number of HGV movements per year and day. Following clarification from the applicant, officers were advised that Table 9 in the Transport Statement used the 13/01134/FUL approved number of 10,725 HGV loads per year. However, the
process has since become more efficient, (and as part of this Section 73 application), the amount of ash residue will reduce, resulting in less HGV movements to export this residue. The revised number is therefore lower at 11,573 HGV loads per year (taking into account the increase of 1,561 loads per year as a result of the 20,000 tonnes of waste imported and 1,224 tonnes of waste exported per year).

5.3.7 Members are advised of the difference between the number of HGV loads per year and the number of HGV movements per year; the number of HGV loads per year results in double the amount of vehicle movements, as the movements are counted for both import and export. The figures currently use a conservative assumption that HGVs bringing in feedstock waste will not take recycling or residue away from the site. Contracts are yet to be finalised around the ‘backfilling’ arrangements where the number of HGV movements could be reduced to import and export loads within the same trip. This will be managed by the Deliveries and Servicing Plan which will be submitted as part of Condition 24.

5.3.8 The increased amount of feedstock and residue would therefore give rise to approximately 160 vehicular movements per day (78 movements in / 78 movements out). This is broadly broken down to 82 HGV movements for the facility per day (41 movements in / 41 movements out) and 78 movements associated with staff and visitors per day (39 movements in / 39 movements out). The routes that the HGVs would take to reach Dagenham would be dependent on the source of waste materials, however, once they exit off the A13 trunk road, the entrance to the LSIP is restricted to the use of one route as HGVs are not permitted to use the western end of Choats Road that is bus or car access only.

5.3.9 The additional 1,561 HGV loads a year, increasing HGV movements by approximately 8 per day. This daily average is an indication and the number of movements will be spread out over 15 hours during working days.

Staff Travel – Public Transport and Car & Cycle Parking

5.3.10 The location of the proposed development provides a Public Transport Accessibility Level (PTAL) rating of 1a, determined using the standard methodology issued by TfL, demonstrating the site is located in an area of very poor public transport links and therefore, there is a greater reliance on car use for commuting to this site.

5.3.11 However, in respect of bus connections, there are two bus stops along Choats Road which form part of the East London Transit Route (ELT) from Ilford to Dagenham Dock Station via Barking Town Centre and the Thames View Estate. The ELT service runs at a frequency of 1 service approximately every 12 minutes. TfL has advised that there is enough capacity on existing local buses to serve the needs of the site. This service provides direct access to Dagenham Dock C2C Station which provides direct links to Barking Station, as well as regular services into Central London and from Barking Station additional C2C services to Essex and London Underground and Overground services.

5.3.12 In terms of sustainable modes of travel which will be available to this site there is a network of footways in the general locality to a good standard and these are well lit, creating safe walking routes to the local bus stops and locally there are a few
cycle routes signed or marked. The contribution secured as part of the original Section 106 Agreement for local infrastructure (£290,000) will contribute to improvements to local pedestrian and cyclist routes.

5.3.13 The amended site layout makes provision for 17 car parking spaces, including 2 blue badge spaces, 4 active and 2 passive electric vehicle charging points, motor cycle parking, mini bus parking and 20 secure cycle storage spaces. The car and cycle parking provision is consistent with the approved application and in accordance with the London Plan. There is a potential for additional spaces for visitors and cycle parking in the communal hub for the wider Sustainable Industries Park.

5.3.14 Staff travelling by car would be staggered across 24 hours because of shift patterns and this would mean they would not all be concentrated at peak times. To encourage staff to make a modal switch to a more sustainable mode of transport instead of a greater reliance on car use for commuting, a Travel Co-ordinator will be appointed to implement the Travel Plan accepted as an adequate mitigation measure for the previous permission.

Highways Considerations

5.3.15 In consultation with the Transport Development Management and Transport Policy teams, a financial contribution of £15,000 (index linked) has been sought to pay towards a feasibility study for improving the Goresbrook Interchange Junction. This contribution reflects the nature of this application, a Section 73 application. However, a lot has changed since 2013, especially in terms of the current and proposed cumulative uplift of vehicle numbers. It is therefore considered reasonable to seek a contribution to mitigate the additional cumulative HGV numbers that have an impact on the highway network and air quality.

5.4 Air Quality

5.4.1 The whole of the Borough has been designated an Air Quality Management Area (AQMA) as there are exceedances of the air quality strategy for both nitrogen dioxide (NO₂) and small particulate matter (PM₁₀). The main air quality issues therefore relate to the impact of the construction phase and any permanent adverse impacts when the development is operational.

5.4.2 London Plan Policy 7.14 advises that development proposals should minimise increased exposure to existing poor air quality and make provision to address local problems of air quality and be at least ‘air quality neutral’ so as not to lead to a further deterioration of existing poor air quality. In addition, Policy BR14 of the Borough Wide Development Policies DPD advises that where development is likely to have a significant negative impact on air quality, the Council will only grant permission where mitigation measures are introduced which brings the levels of air pollution to an acceptable level.

5.4.3 Once the development is operational, in day to day terms, there would be an increase in vehicular traffic as discussed above, both as a result of the increase in waste throughput and cumulatively with other (forthcoming) developments. A financial contribution has been sought to mitigate this air quality impact on the highways.
5.4.4 Aside from operational traffic, direct emissions from the gasification process within the facility are the main source of pollutant emissions. The air quality assessment advises that oxides of nitrogen ($\text{NO}_x$) are the principal pollutant released from the process. When $\text{NO}_x$ is released into the atmosphere, it reacts with ozone ($\text{O}_3$) to create oxygen and $\text{NO}_2$. Detailed atmospheric dispersion modelling has been undertaken to assess the effects of emissions from the proposed development.

5.4.5 The updated Air Quality Assessment was interrogated in detail, in consultation with the Environmental Health Officer (EHO). The EHO has concurred that the results of the dispersion modelling and assessment demonstrate that, with a flue stack height of 55 metres, the maximum predicted concentrations of all substances emitted comply with relevant air quality objectives at nearby sensitive locations, including residential areas and nature conservation sites.

5.5 Noise

5.5.1 Policy 7.15 of the London Plan states that development proposals should seek to minimise noise by inter-alia, minimising the existing and potential adverse impacts of noise on, from, within, or in the vicinity of, development proposals and should separate new noise-sensitive development from major noise sources wherever practicable through the use of distance, screening or internal layout and promote new technologies that reduce noise at the source. Policy BR13 of the Borough Wide Development Policies DPD advises that where it is not possible to fully separate noise-sensitive and noise-generating land uses, planning permission will only be granted if there will be no exposure to noise above an acceptable level.

5.5.2 The nearest residential properties are located approximately 350 metres to the north-west (Shaw Gardens, Scrattons Farm). In addition, over time as the Barking Riverside development continues, there will be residential occupiers approximately 500 metres south-west of the application site. In addition, there will be adjacent buildings that will contain offices and meeting rooms, etc. Both during the construction and operational phase of the facility, there is potential to emit noise.

5.5.3 The updated Noise Impact Assessment was interrogated in detail, in consultation with the EHO. The EHO concurred that with the implementation of appropriate mitigation measures, in terms of building design, and external plant controlled to reasonable design limits, noise from the operation of the proposed development would be of less than marginal significance at the nearest dwellings. A construction noise and vibration monitoring plan has been prepared to address and control noise during the construction phase.

5.6 Design and Visual Amenity

5.6.1 Policy CP3 of the Core Strategy and Policy BP11 of the Borough Wide Development Policies DPD requires all new development to demonstrate high quality standards in relation to the design and layout of new buildings and spaces. A substantial amount of equipment is located externally. There are three main components on the site comprising (1) the waste reception and post-processed materials handling building which includes the RODECS gasification machines; (2) the two-storey office building; and (3) the energy conversion and plant infrastructure (such as the 55 metre high flue stack, external energy conversion, emissions treatment and control equipment).
5.6.2 The principle of the waste to energy plant has been found acceptable in visual terms. This includes the external equipment, height of the flue stack at 55 metres, and buildings. Additional equipment was approved under the Non-Material Amendment permission 15/00361/NMA. Whilst the development will be highly visible from nearby locations included within the Visual Impact Assessment, the re-arrangement of the site layout will not significantly change this appearance. The quality of the proposed facility will ultimately be dependent upon materials and detail to ensure elevations are robust and solid. In this regard, sample materials will be required by condition.

5.7 Sustainability and Energy Matters

5.7.1 Policy 5.2 of the London Plan, Policy CR1 of the Core Strategy and Policy BR1 of the Borough Wide Development Policies DPD requires all major and strategic developments to meet a high standard of sustainable design and construction.

5.7.2 The permission under 13/01134/FUL included a condition that requires the development to achieve Building Research Establishment Environmental Assessment Method (BREEAM) rating of ‘Excellent’. The BREEAM assessment provides environmental and sustainability ratings for new non-residential developments (such as offices, industrial buildings, schools etc.) ranging from pass (30%), good (45%), very good (55%), excellent (70%) and outstanding (85%). A BREEAM Pre-Assessment report was submitted as part of the planning application and indicates that the proposal will achieve a rating of 72.6% (Excellent). A Certificate of Compliance will need to be submitted as part of the planning condition.

5.7.3 The facility makes provision for export of heat, both in terms of technology and space on site for equipment, and calculations have been undertaken to demonstrate that they can meet the GLA’s requirements for heat export. The submitted calculations show that the carbon intensity floor of 400 grams of CO₂ equivalent generated per kilowatt hour (kWh) of electricity generated can be met. The carbon intensity floor measures the direct burden emissions associated with generating energy from residual waste and assesses the emissions created from the combustion digestion of waste to produce a kWh of energy. However, amount of heat exported would naturally depend on the existence of a suitable end-user(s), but the applicant has confirmed that the plant is CHP-ready.

5.7.4 The Energy Strategy was approved under the original permission.

5.7.5 Overall, the facility is designed to generate renewable energy in the form of electricity from non-recyclable waste destined for landfill which in itself is a significant environmental benefit. In light of this, it is considered that the Energy Strategy is acceptable and actually demonstrates the facility to be carbon negative over the lifetime of the development in accordance with Policies 5.1, 5.2, 5.3, 5.5, 5.7, 5.8 and 5.17 of the London Plan; Policy CR1 of the Core Strategy; and Policies BR1 and BR2 of the Borough Wide Development Policies DPD.
5.8 **Biodiversity**

5.8.1 The application site is located adjacent to the Goresbrook and the Ship & Shovel Site of Importance for Nature Conservation (SINC) which is a designation of local importance.

5.8.2 Natural England responded to the original application stating that the development would have a significant effect on the Epping Forest Site of Special Scientific Interest (SSSI) which is a designation of national importance. As it was considered that the development would result in further degradation of the Goresbrook and Ship & Shovel SINC's, a financial contribution of £10,000 was secured to mitigate this.

5.8.3 The update to the original Extended Phase 1 Habitat Survey found similar results to the 2014 surveys, although slightly less biodiverse the site is now developing from pioneer vegetation into shrub and stable grassland vegetation. The report further concluded that the development would have a permanent negative effect on the open mosaic habitats (locally) if no mitigation or compensation measures are undertaken. The financial contribution of £10,000 will still be paid as part of the original S106 Agreement. In light of the above, Natural England has confirmed that they have no comments on the proposed amendments.

5.9 **Flood Risk**

5.9.1 The site is located in Flood Zone 3, with protection from flood defences. The site is therefore liable to flood, having a 1 in 100 or greater annual probability of flooding. The principle of development has already been established through the original permission 13/01134/FUL.

5.9.2 The Environment Agency (EA) has been consulted on this application and does not object to the proposal. The scheme proposes to raise the ground floor units to 2.80 metres AOD which is above the required minimum finished floor level of 1.625 metres AOD and above the breach level of a 1 in 200 year flood at 2.582 metres AOD.

5.9.3 A Drainage Strategy was approved under conditions permissions 14/01252/CDN and 15/00555/CDN. The amount of hard standing area will be 26,500m$^2$. The updated Flood Risk Assessment by Millward states that the approved drainage scheme has not materially changed. The proposals include a pumped system, 1,013m$^3$ of cellular/concrete storage tanks and further storage within the pipes of the system. The site has been intensely developed and there is no lateral room adjacent to the circulatory roads and buildings to introduce swales on this site. As approved under the conditions, the site’s drainage will 'plug into' the area-wide drainage system with a network of pipes and swales and an attenuation pond, which then treats the water before it falls out into the wider sustainable urban drainage (SUDS) system.

5.10 **Archaeology**

5.10.1 In terms of archaeology, the site is located within an archaeological priority area. The Borough Wide Development Policies DPD Policy BP3 requires assessments and evaluation of sites of archaeological interest to ensure new development has
no adverse impact on any archaeological remains. In this regard, a Written Scheme of Investigation was submitted with the previous planning permission (ref: 10/00287/FUL) which was approved by Historic England (formerly English Heritage).

5.10.2 As part of the consultation exercise for this application, Historic England has advised that having considered the proposal with reference to information held in the Greater London Historic Environment Record, they conclude that the proposal is unlikely to have a significant effect on heritage assets of archaeological interest and no further assessment or conditions are required.

5.11 Land Contamination

5.11.1 Condition 12 (hydrogeological report) of 13/01134/FUL was approved under permission 14/01252/CDN. Further conditions regarding the verification report for remediation measures and unexpected contamination will still require approval.

5.12 Section 106 / Planning Obligations

5.12.1 The original permission 13/01134/FUL sought financial contributions in the Section 106 Agreement for local infrastructure (£290,000), mitigation in relation to impacts on the SINC (£10,000), monitoring (£12,000) and professional and legal fees (£1,200).

5.12.2 A further contribution is being sought as part of this Section 73 application under a Deed of Variation to the signed Section 106 Agreement to mitigate the cumulative impact on the highways network. £15,000 (index linked) is being sought to undertake a feasibility study for improvement works to the Goresbrook Interchange Junction.

6 Conclusion

6.1 The proposed development relates to minor material amendments to the layout and design of an energy generation facility at the LSIP in Dagenham, originally permitted under 13/01134/FUL. The increased throughput and further process efficiency improvements result in a considerable increase in the amount of gross power produced for potential export from approximately 19.6 MW to up to 33.6 MW.

6.2 The proposed development will help manage the waste apportionment to the ELWA Boroughs required by the London Plan and will divert additional waste from landfill.

6.3 On balance, the application is recommended for approval subject to the applicant entering into a Deed of Variation to the Section 106 legal Agreement to secure monies towards a feasibility study for improvements to the Goresbrook Interchange Junction, and subject to the conditions outlined above.
Background Papers

- Planning Application File

Search 18/01501/FUL via: http://paplan.lbbd.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=PE9KY1BLK9Y00

- Core Strategy (2010):
  
  Policy CM1 - General Principles for Development  
  Policy CM4 - Strategic Transport Links  
  Policy CR1 - Climate Change and Environmental Management  
  Policy CR3 - Sustainable Waste Management  
  Policy CR4 - Flood Management  
  Policy CC3 - Achieving Community Benefits through Developer Contributions  
  Policy CE3 - Safeguarding and Release of Employment Land  
  Policy CE4 - Mix and Balance of Uses within Designated Employment Areas  
  Policy CP3 - High Quality Built Environment

  
  Policy BR1 - Environmental Building Standards  
  Policy BR2 - Energy and On-Site Renewables  
  Policy BR3 - Greening the Urban Environment  
  Policy BR4 - Water Resource Management  
  Policy BR5 - Contaminated Land  
  Policy BR9 - Parking  
  Policy BR10 - Sustainable Transport  
  Policy BR11 - Walking and Cycling  
  Policy BR13 - Noise Mitigation  
  Policy BR14 - Air Quality  
  Policy BR15 - Sustainable Waste Management  
  Policy BC7 - Crime Prevention  
  Policy BP3 - Archaeology  
  Policy BP8 - Protecting Residential Amenity  
  Policy BP11 - Urban Design

- The London Plan (2016):
  
  Policy 2.17 - Strategic Industrial Locations  
  Policy 4.4 - Managing Industrial Land and Premises  
  Policy 4.10 - New and Emerging Economic Sectors  
  Policy 5.1 - Climate Change Mitigation  
  Policy 5.2 - Minimising Carbon Dioxide Emissions  
  Policy 5.3 - Sustainable Design and Construction  
  Policy 5.5 - Decentralised Energy Networks  
  Policy 5.7 - Renewable Energy  
  Policy 5.8 - Innovative Energy Technologies  
  Policy 5.10 - Urban Greening  
  Policy 5.12 - Flood Risk Management  
  Policy 5.13 - Sustainable Drainage  
  Policy 5.16 - Waste Self Sufficiency
Policy 5.17 - Waste Capacity
Policy 5.21 - Contaminated Land
Policy 6.3 - Assessing Effects of Development on Transport Capacity
Policy 6.9 - Cycling
Policy 6.10 - Walking
Policy 6.13 - Parking
Policy 6.14 - Freight
Policy 7.2 - An Inclusive Environment
Policy 7.5 - Public Realm
Policy 7.6 - Architecture
Policy 7.14 - Improving Air Quality
Policy 7.15 - Reducing Noise and Enhancing Soundscapes
Table 6.2 - Car Parking Standards
Table 6.3 - Cycle Parking Standards

  
  Policy SI8 - Waste capacity and net waste self sufficiency

- Other Guidance:

  National Planning Practice Guidance