Borough of Broxbourne

Original consultation response

You may be aware that this Council considered a report in respect of the above planning application at the meeting of the Planning and Regulatory Committee on 18th April, 2017. A copy of that report is enclosed. Its recommendations were unanimously supported by the members of the committee. This report is in advance of the full and formal consideration of the planning application by the same committee which will take place in advance of the County's determination. I would be grateful if you could keep me informed of the likely timing of that. I would also still welcome your attendance at this Council's Planning and Regulatory committee meeting in due course.

You will note from the report and recommendations that this Council has undertaken a preliminary assessment of the planning application against the key policies within the Development Plan. It is my strongly considered view that this application is contrary to the key determining policies of the Development Plan and that it is therefore contrary to the Development Plan as a whole. I would be very concerned if the County Council did not reach a similar conclusion as the starting point for determining whether or not there are sufficient material circumstances to justify approving this application contrary to the provisions of the Development Plan. I am also extremely concerned by the process that has been followed by Veolia and the County Council as waste disposal authority to promote the largest waste facility in the history of Hertfordshire on a site that is contrary to the provisions of the Development Plan. This also raises serious questions about the respective roles of the County Council as waste disposal authority and waste planning authority and the apparent lack of empathy between those roles.

For the above reasons, and following initial assessment of the other material planning considerations, I have recommended to the Council that it should at this stage indicate to the County Council an objection in principle to the planning application. The Council has agreed with that recommendation and I would be grateful if you could treat this letter as forming the first part of this Council's objection to the planning application. I would also recommend that you address all of the matters raised within my report within your own detailed consideration. In particular, I would ask that you and your colleagues reflect on the matters relating to the Development Plan and the question of due process.

It may be the case that having reflected on these and other matters relating to this highly controversial planning application, the County Council considers that determination would benefit from the Secretary of State's intervention through immediate referral/call in, and possibly public inquiry. This would ensure a full, open and independent assessment of the material planning issues, free of any allegations and possible actions that could follow any resolution to approve the application by the County Council. Broxbourne Council would therefore invite Hertfordshire County Council to jointly

recommend such an approach to the Secretary of State. I would be grateful if you could respond to this request by Friday 5th May.

Notwithstanding the foregoing, there are a number of outstanding issues on which we have previously corresponded. I am going to respond to your helpful response of 1st March to my questions and apologise for not having done so before now. Once I have done so, it may be helpful for us to meet with Veolia and your waste colleagues so that there is a full and common understanding of the way forward on those issues. One issue that I would like to raise in this letter is a previous request that I had made for the County Council/Veolia to make use of the Paramics traffic model produced for the development of c. 500 houses at High Leigh to the west of Hoddesdon. This would graphically demonstrate to the decision makers the true impact of the additional vehicle trips to the ERF. It does need to be brought up to date with the most recent trip analyses but that should be relatively straightforward. Perhaps you could discuss this with your highways colleagues and respond to me.

Report to the Planning and Regulatory Committee dated 18th April, 2017

RECOMMENDED that:
(a) the principle that the Council will object to the planning application is agreed;
(b) Hertfordshire County Council be advised that a formal objection will be submitted in due course; and
(c) a report on the detailed reasons for objection be brought to the Committee later in the year.

Purpose

To advise the Committee of the main issues related to the proposed Veolia Energy Recovery Facility at Ratty's Lane, Hoddesdon and to seek members' preliminary views on the development.

Introduction

Veolia ES (Hertfordshire) Ltd has submitted a planning application for a waste burning Energy Recovery Facility (ERF) on a site at the end of Ratty's Lane within Hoddesdon Business Park. The site is currently used as an aggregates depot. The ERF will annually burn up to 350,000 tonnes of waste and generate 33.5 megawatts of power. Most of the waste will be municipal, delivered through a contract between Hertfordshire County Council and Veolia to manage the county's municipal waste. The municipal waste stream will also be supplemented by commercial and industrial waste from a wider catchment.

The planning application has been submitted to Hertfordshire County Council as the waste planning authority. The Borough has been consulted on the application and will be making a written response. The content of that response will be agreed by this Committee.

Requests have been submitted to the Secretary of State to call in this planning application, including from Charles Walker OBE MP. It may also be the view of this

Council that the application should be called in. It is considered that this decision should be made when this Committee formally considers its position on the planning application. The County Council has indicated that it is unlikely to consider the application until late Summer/early Autumn. This being the case, it is considered that this Council should delay its formal consideration until closer to the point of determination. This will enable officers to undertake further dialogue on certain outstanding issues with the County Council.

When the application is formally presented to this Committee, it will be through the usual format of reporting planning applications. This will enable members to fully consider the planning issues in making a detailed response to the County Council and in possibly seeking call in of the application.

The Development

Whilst the full application site is 5 hectares, this includes Ratty's Lane and rail sidings. The effective site development area for the ERF is c. 2.5 hectares. The relative limitations of the site have required a tall and utilitarian box like design as indicated below. This covers a built footprint of 8,250 square metres.

The contents of this structure would include a tipping hall, an incineration chamber, a boiler hall, various treatment facilities, an administration building and a visitor centre. The main building would be 48 metres in height (the adjacent Rye House Power Station is 28 metres). There will be two chimneys of 87 metres in height (the adjacent power station chimneys are 58 metres).

Outside the main building will be a circulation area for waste vehicles, parking, a large storage shed alongside the railway for incineration bottom ash and flood water storage areas, as indicated below.

Waste collected by Broxbourne, East Herts and Welwyn Hatfield is planned to be delivered straight from domestic rounds. The remaining Hertfordshire authorities' collected mixed refuse would be bulked at Waste Transfer Stations at Waterdale (Watford) and a more northerly location prior to delivery to Ratty's Lane. Waste would also be collected at the Household Waste Recycling Centres at Hoddesdon, Turnford, Buntingford, Bishops Stortford, Ware and Cole Green. In total, approximately 76.7% of the waste received at the site is anticipated to be domestic waste generated within the County. In addition, commercial/industrial/medical waste would be brought in from Hertfordshire and beyond.

Most, but not necessarily all, waste will be delivered to the site from the A10, along the Dinant Link Road, along Essex Road and into the site through Ratty's Lane. Ratty's Lane is a narrow, dead end road through which for much of its length waste vehicles will not be able to pass. A traffic light system is therefore proposed. Officers are seeking further clarification on the operation of this system.

HGV waste vehicle movements are proposed to be 134 vehicles in and 134 vehicles out daily.

Planning History

The established use of the application site is as an aggregates depot which is operated by Tarmac.

Veolia had previously submitted a Development Consent Order application to the Planning Inspectorate in 2012 for the construction of a Power Station on the Ratty's Lane site – then described as Fielde's Lock. Broxbourne Council was identified by Veolia as the responsible local planning authority.

The Power Station was to be fuelled by solid recovered fuel and natural gas. The application was in support of Veolia's tender to manage waste from the North London Waste Partnership. Waste was to be delivered to the site by rail. That application was withdrawn before its determination.

The current application is very similar in its make-up but does not include natural gas and it is understood that waste will not be in a 'solid recovered' form. The development is not therefore described as a power station. Its new description as an Energy Recovery Facility has enabled Veolia to submit the application to Hertfordshire County Council as the responsible local planning authority. Furthermore, the removal of the natural gas feed has reduced the power output below the 50 megawatt trigger point for determination by the Planning Inspectorate.

In July 2011, Hertfordshire County Council awarded a contract to Veolia to manage its municipal waste. The contract was awarded on the basis of a preferred site for a Recycling and Energy Recovery Facility at New Barnfield, Hatfield. Members may be aware that Veolia, the County Council and the appeal Inspector had all remarked on the unsuitability of the Ratty's Lane site for the proposed facility. Indeed, Veolia's own evidence to the public inquiry stated:

Whilst unidentified in the Waste Development Framework, this 'windfall site' has some advantages as it adjoins the power station (adjacent to the unallocated Trent site where permission was granted in 2010 for a medium scale C&I energy facility). The site was formerly the subject of a (now withdrawn) Development Consent Order application for an SRF and natural gas power station designed to treat rail served SRF from North London. However, the site is a safeguarded strategic rail aggregate depot, is located adjacent to the River Lea within an area subject to flood risk and is proximate to a RAMSAR designation. The site is also very compact and has local highway capacity constraints that require a rail linked solution. Such constraints do not facilitate the development of an RERF at this site, where the local rail network presents operational and logistical difficulties to serve the Waste Collection Authorities of Hertfordshire.

In July 2015, the Secretary of State refused planning permission for the facility at New Barnfield. In March 2016, the County entered into a Revised Project Plan with Veolia for the delivery of an alternative site. That alternative site is Ratty's Lane.

In 2014, an examination took place into the Hertfordshire Waste Site Allocations Local Plan. That examination considered the merits of the Ratty's Lane site in determining whether or not it should be identified as a waste site or encompassed within a Waste Site Area of Search. The Inspector concluded that the site was not suitable for such identification or inclusion.

Issues for Consideration

It is incumbent on the County Council to comprehensively and dispassionately assess the planning application that has been submitted to it. This Council will not have the benefit of all the information or the resources available to the County Council. However, the report to be submitted to a future meeting of this committee to inform this Council's detailed response on the planning application will as far as possible seek to address the main issues. These are anticipated to be as follows:

i. The principle of the development
ii. The sustainability of the development
iii. Impacts on traffic, the suitability of access and methods of access
iv. The visual impacts
v. Impacts on Hoddesdon and the Conservation Area
vi. Impacts on Hoddesdon Business Park
vii. Impacts on residential amenity
viii. Ecological impacts
ix. Pollution – including light
x. Hazardous substances
xi. Section 106 mitigations

<u>The Principle of Development</u>

The principle of development will be assessed against the terms of the National Planning Policy Framework and the Development Plan. This assessment would include the suitability of the location, planning policies (in particular those relating to waste, minerals, sustainability and transport) and the need for the facility. As this development has been submitted as a waste facility, the first point of consideration will be the Hertfordshire Waste Development Framework Waste Core Strategy and Development Management Policies DPD 2012. Of particular importance within this document is Policy 1: Strategy for Waste Management Facilities. As the application site is currently an aggregates depot, policies within the Hertfordshire Minerals Plan Review 2007 are also important. This Council's adopted Development Plan is the Broxbourne Local Plan Second Review 2005 which will also inform the consideration along with emerging policies in the draft Broxbourne Local Plan.

From initial consideration, it is concluded that the proposed development does not accord with key policies within the Development Plan and therefore the Development Plan as a whole. The next report to this Committee will provide a detailed assessment.

<u>The Sustainability of the Development</u>

As the principal waste management facility within the County, it is incumbent on the County Council to demonstrate that this is the most sustainable solution to the long term management of its waste. That would relate to both the method of this management (incineration) and if that is the most sustainable method, that the location or locations of the resultant facilities are the most sustainable solutions. That is, or should be, the purpose of undertaking a waste strategy and a waste development plan.

From initial consideration, it is concluded that neither the County Council nor Veolia have demonstrated that a single major incinerator and its location on an edge of County site at Ratty's Lane constitute that most sustainable solution to strategic waste management in Hertfordshire. The next report to this Committee will examine the position in more detail.

Impacts on Traffic and the Suitability of Access

Essex Road will be the strategic point of entry into the site for waste vehicles. That route becomes congested at peak times. The relative impact of the number of vehicles, and particularly waste vehicles, into the proposed ERF will therefore be an important consideration. In undertaking that consideration, this Council has previously invited the County Council to utilise a Paramics highways model developed for the proposed High Leigh development. This would graphically demonstrate to decision makers the true impacts of the ERF development on the strategic road network. It is disappointing that the County Council has not taken up that invitation and a further request will be submitted. Given the strategic nature of this facility, it is also of concern that Veolia has not made use of either the Broxbourne Transport Model or the County's transport model to assess future impacts.

As set out within the planning application, the proposed signalisation system within Ratty's Lane does not work and creates residual issues for the wider highway network. These include an absence of information on where vehicles awaiting entry to the site will be queued. Concerns have already been raised with the County Council and whilst a holding response has been received, officers are still awaiting a detailed response on the issues raised.

£6.5 million has recently been awarded from Local Enterprise Partnership Growth Deal funding to provide a new bridge link into Hoddesdon Business Park. Whilst that new bridge will do little to ease congestion, it is considered that this new bridge is necessary to enable the satisfactory operation of the ERF. Further information in respect of this relationship will be included within the next report to this Committee.

Design and Wider Visual Impact

The ERF would be one of the largest, bulkiest and most prominent buildings in Hertfordshire. The main building and its chimney stack would be highly visible from many public vantage points in both Hertfordshire and Essex. Officers will be considering whether the images presented by Veolia in its planning application give a true representation of the visual impacts. Whilst, it is not located within the Green Belt, the ERF will have a significant industrialising impact on the Green Belt and on the Lee Valley Regional Park. The scale of that impact will require careful consideration.

Other Impacts

The impacts of the ERF on Hoddesdon, Hoddesdon Town Centre, the economy and the successful operation of Hoddesdon Business Park, on residential amenity and important wildlife and habitats are all of concern. Each one of these could form the basis of objection and they will all be considered within the next report to this Committee.

Pollution and Hazardous Substances

If approved, the ERF will operate under licence from the Environment Agency. That will control all emissions from the facility within allowable legal limits. The Council does not have any evidence to counteract the licensing process and this is unlikely to form territory for objection.

There is a residual issue regarding pollution from refuse vehicles that service the ERF. That is the basis of further assessment and will be considered further.

Section 106

It is an important principle of planning that major developments should seek to mitigate against their impacts. Those mitigations can be set out as planning obligations within a section 106 agreement. This Council will seek to ensure that the County Council seeks full mitigation against the considerable impacts that the ERF will have on the foregoing receptors.

Conclusion

Veolia's proposed ERF will have a major impact on Hoddesdon, Broxbourne, Hertfordshire and Essex. Initial consideration concludes that the development does not accord with the policies of the Development Plan. This consideration also concludes that due process has not been followed by Veolia and Hertfordshire County Council as Waste Planning Authority in pursuing this development as being the best and most sustainable solution for managing Hertfordshire's waste for the next 25 years. As such, an in principle objection exists to the planning application which is unlikely to change.

When a more comprehensive assessment is presented to this Committee later in the year, the detailed reasons for objection will be included and it is anticipated that a case for call in of the application will be made to the Secretary of State. Should the County Council be minded to approve the planning application, it will be incumbent on the County Council to either take (and fully explain) an alternative view in relation to the Development Plan and due process or to set out the circumstances as to why this development should be approved contrary to the Development Plan and the processes that have been followed. At the present time, it is not clear that those circumstances exist. Further dialogue will take place with the County Council over the next couple of months to enable this Council to reach a conclusion about the final position it should take in relation to the development. In the meantime, the Committee is asked to agree that the Council should take the position of objecting in principle at present.

Further consultation response

I wrote to you on 20th April 2017 expressing this Council's reservations regarding the proposed Energy Recovery Centre at Ratty's Lane in Hoddesdon. I also informed you that this Council's Planning and Regulatory Committee would be considering a full response in advance of the County Council's determination of the planning application. The proposed content of that response was considered by this Councils Planning and Regulatory Committee on 3rd October 2017. A copy of that report is enclosed. Its recommendations were unanimously supported by the members of the

committee. The County Council should therefore be in no doubt as to the strength of opposition from the Council that would be the recipient of this facility should it ultimately be approved.

This letter is formalising Broxbourne Council's objection to the planning application. We are seeking refusal of the application for the following reasons:

1. That the facility does not contribute positively to the character and quality of the area and is not in accordance with the planning strategy in the Local Plan, contrary to the terms of the National Planning Policy for Waste 2014;

2. It is a departure from the Hertfordshire Waste Development Framework Waste Core Strategy and Development Management Policies DPD 2012 in that it is contrary to the terms of Policy 1: Strategy for Waste Management Facilities;

3. It is a departure from the Hertfordshire Minerals Plan Review 2007 in that it is contrary to Minerals Policy 10 – Railheads and Wharves;

4. The proposed development represents an unsustainable solution for the management of local authority collected waste, contrary to the principles and policies of the National Planning Policy for Waste and the Development Plan, consisting of the Hertfordshire Waste Development Framework Waste Core Strategy and Development Management Policies DPD, 2012, the Hertfordshire Minerals Plan Review 2007 and the Broxbourne Local Plan 2005;

5. The proposed development constitutes an inefficient and unsustainable form of energy recovery in that it fails to provide for a Combined Heat and Power Network;

6. The constrained site results in a facility that by reason of its bulk and height would lead to the delivery of an unacceptable design solution that fails to contribute positively to the character and quality of the area, contrary to the terms of the NPPF, the National Planning Policy for Waste 2014 and the Development Plan;

7. The proposed development would exacerbate unacceptable and unsustainable levels of severe congestion on Essex Road, contrary to the terms of the National Planning Policy Framework and the Development Plan;

8. The applicant has failed to put in place an acceptable framework for the management of traffic to the facility in relation to the constraints of Ratty's Lane and the residential impacts on the local highways network, contrary to the terms of the National Planning Policy Framework and the Development Plan;

9. The proposed development would have a significant unacceptable visual impact on the wider character of Hoddesdon and the surrounding area;

10. The proposed development would have a significant unacceptable impact on the Green Belt contrary to the NPPF and the Development Plan;

11. The proposed development would have an unacceptable economic impact on local businesses in terms of traffic congestion and business perceptions, contrary to the NPPF; and

12. Insufficient/misleading information has been submitted by the Applicant in respect of:

    1. Views of the development;
    2. The assessment of traffic impacts;
    3. The assessment of refuse vehicle emissions;
    4. De-commissioning;
    5. The ability to meet the required operating temperatures;
    6. The polluting impacts of the development; and
    7. The storage of ammonia.

On points 7 and 12/2 above, we have previously requested the use of more strategic modelling of future traffic conditions on Essex Road and the wider network and that remains available to you and your highways colleagues. Should the County Council not be willing to take that on board, future representations are likely. I would recommend a meeting on these points to iron them out and will leave that in your hands.

As each of the foregoing reasons for refusal could stand individually, it is incumbent on the County Council as local planning authority to address and refute each specific reason should it be intended to recommend approval of the planning application. This Council will be closely scrutinising the comprehensiveness and veracity of that process.

In the light of the foregoing it remains my strongly considered view that this application is contrary to the key determining policies of the Development Plan and that it is therefore contrary to the Development Plan as a whole. I would be very concerned if the County Council did not reach a similar conclusion as the starting point for determining whether or not there are sufficient material circumstances to justify approving this application contrary to the provisions of the Development Plan.

I also remain extremely concerned by the process that has been followed by Veolia and the County Council as waste disposal authority to promote the largest waste facility in the history of Hertfordshire on a site that is contrary to the provisions of the Development Plan. This continues to raise serious questions about the respective roles of the County Council as waste disposal authority and waste planning authority and the apparent lack of empathy

between those roles. This Council is therefore also raising concerns about the County Council's waste planning processes in relation to waste planning in general and this matter in particular. The Waste Plan has been found wanting in that it has failed to conclude an assessment of options for a suitable network of facilities to deliver sustainable waste management across Hertfordshire. This being the case, it is impossible for your committee to conclude that a single major incinerator is the most sustainable method of local authority waste disposal. If it is, your policies do tell us that this particular site is not suited. I am therefore struggling to see that you can positively recommend this planning application. This being the case, Broxbourne Council would request that the application be rejected and that the County Council accelerates a new Waste Local Plan to provide for a suitable network of facilities to deliver sustainable waste management, as recommended by national policy.

If in spite of all the foregoing, the County Council is still minded to approve this application, it is not called in and it survives any legal challenge, this Council seeks inclusion of the following conditions:

1. The Facility is not to come into use until the Essex Road Bridge improvement scheme is in operation;

2. A limitation on the height of the main building and the chimneys;

3. A strategy for de-commissioning;

4. A delivery vehicles management plan;

5. A Construction Management Plan; and

6. A lighting control strategy

This Council would like to continue to be involved in all these matters.

In the event that planning permission is granted, this Council would also seek mitigation of the effects of the development through the following Heads of Terms for a Section 106 agreement:

1. Financial contribution towards the improvement of Hoddesdon Town Centre;

2. Financial contribution towards the mitigation of congestion on Essex Road;

3. Financial contribution to the environmental enhancement of Hoddesdon Business Park;

4. Financial contribution towards the regeneration of the Rye Park area; and

5. A specified requirement for the implementation of a combined heat and power network for the local area within an agreed timescale.

This Council has previously indicated that it would like to be involved in the details of an Agreement and that remains the case.

On the matter of call-in, I have shared with you this Council's representation to the National Planning Casework Unit. Should the County Council be minded to approve the application, the Unit has informed us that a Direction will be issued to prevent a decision being issued before the Minister has had the opportunity to consider the case for call-in. This Council would expect to make further representations at that juncture. I therefore trust that the County Council will advise the NPCU of the outcome of the committee's consideration should it make a resolution to approve the application. I would be grateful if you could confirm that to be the case.

You are receiving a separate representation from our colleagues in Environmental Health and this representation is without prejudice to any matters raised within that.

Report to the Planning and Regulatory Committee dated 3rd October 2017

1. PURPOSE

To expand on the Council's preliminary objection to the proposed Energy Recovery Facility and to provide the basis for a formal objection from the Council seeking refusal of the planning application.

2. INTRODUCTION

2.1 Veolia ES (Hertfordshire) Ltd has submitted a planning application for a waste burning Energy Recovery Facility (ERF) on a site at the end of Ratty's Lane within Hoddesdon Business Park. The site is currently used as an aggregates depot. The ERF will annually burn up to 350,000 tonnes of waste and generate 33.5 megawatts of power. Most of the waste will be municipal, delivered through a contract between Hertfordshire County Council and Veolia to manage the county's municipal waste. The municipal waste stream will also be supplemented by commercial and industrial waste from a wider catchment.

2.2 The planning application has been submitted to Hertfordshire County Council as the waste planning authority. The Borough has been consulted on the application and has already made a preliminary objection to the planning application following consideration at the April meeting of this Committee. A copy of that letter of objection is attached at Appendix A.

2.3 In certain instances, the Secretary of State may “call in” a planning application for his own determination. In general, the government is not inclined to call in applications, preferring that decisions are left to local planning authorities. For applications to be called in, a very strong case therefore needs to be presented. Given many of the circumstances around this application, this Council has requested call in by the Government and officers consider that a strong case has been made. A copy of that letter is attached as Appendix B.

2.4 The Government has informed the Council that it will not call in the application at this stage. Rather it will be left to the County Council to make a resolution for determination. If that resolution is to approve, the Government will issue a Direction to the County Council informing it that a decision should not be issued until the Minister has considered whether or not it should be called in. At that point, this Council’s current case will be supplemented with a further representation. A public inquiry has been, and will continue to be, requested.

3. THE DEVELOPMENT

3.1 Whilst the full application site is 5 hectares, this includes Ratty’s Lane and rail sidings. The effective site development area for the ERF is c. 2.5 hectares. The relative limitations of the site have required a tall and utilitarian box like design as indicated below. This covers a built footprint of 8,250 square metres.

3.2 The contents of this structure would include a tipping hall, an incineration chamber, a boiler hall, various treatment facilities, an

administration building and a visitor centre. The main building would be 48 metres in height (the adjacent Rye House Power Station is 28 metres). There will be two chimneys of 87 metres in height (the adjacent power station chimneys are 58 metres). As the ground levels will be raised the effective heights of the ridge and chimneys will be c. 50 and 89 metres.

3.3 Outside the main building will be a circulation area for waste vehicles, parking, a large storage shed alongside the railway for incineration bottom ash and flood water storage areas, as indicated below.

3.4 Waste collected by Broxbourne, East Herts and Welwyn Hatfield is planned to be delivered straight from domestic rounds. The remaining Hertfordshire authorities' collected mixed refuse would be bulked at Waste Transfer Stations at Waterdale (Watford) and a more northerly location prior to delivery to Ratty's Lane. Waste would also be collected at the Household Waste Recycling Centres at Hoddesdon, Turnford, Buntingford, Bishops Stortford, Ware and Cole Green. In total, approximately 76.7% of the waste received at the site is anticipated to be domestic waste generated within the County. In addition, commercial/industrial/medical waste would be brought in from Hertfordshire and beyond.

3.5 Most, but not necessarily all, waste will be delivered to the site from the A10, along the Dinant Link Road, along Essex Road and into the site

through Ratty's Lane. Ratty's Lane is a narrow, dead end road through which for much of its length waste vehicles will not be able to pass. A complex of traffic lights is therefore proposed.

3.6 HGV waste vehicle movements are proposed to be 134 vehicles in and 134 vehicles out daily.

4. PLANNING HISTORY

4.1 The established use of the application site is as an aggregates depot which is operated by Tarmac.

4.2 Veolia had previously submitted a Development Consent Order application to the Planning Inspectorate in 2012 for the construction of a Power Station on the Ratty's Lane site – then described as Fielde's Lock. Broxbourne Council was identified by Veolia as the responsible local planning authority.

4.3 The Power Station was to be fuelled by solid recovered fuel and natural gas. The application was in support of Veolia's tender to manage waste from the North London Waste Partnership. Waste was to be delivered to the site by rail. That application was withdrawn before its determination.

4.4 The current application is very similar in its make-up but does not include natural gas and it is understood that waste will not be in a 'solid recovered' form. The development is not therefore described as a power station. Its new description as an Energy Recovery Facility has enabled Veolia to submit the application to Hertfordshire County Council as the responsible local planning authority. Furthermore, the removal of the natural gas feed has reduced the power output below the 50 megawatt trigger point for determination by the Planning Inspectorate.

4.5 In July 2011, Hertfordshire County Council awarded a contract to Veolia to manage its municipal waste. The contract was awarded on the basis of a preferred site for a Recycling and Energy Recovery Facility at New Barnfield, Hatfield. Members may be aware that Veolia, the County Council and the appeal Inspector had all remarked on the unsuitability of the Ratty's Lane site for the proposed facility. Indeed, Veolia's own evidence to the public inquiry stated:

Whilst unidentified in the Waste Development Framework, this 'windfall site' has some advantages as it adjoins the power station (adjacent to the unallocated Trent site where permission was granted in 2010 for a medium scale C&I energy facility). The site was formerly the subject of

a (now withdrawn) Development Consent Order application for an SRF and natural gas power station designed to treat rail served SRF from North London. However, the site is a safeguarded strategic rail aggregate depot, is located adjacent to the River Lea within an area subject to flood risk and is proximate to a RAMSAR designation. The site is also very compact and has local highway capacity constraints that require a rail linked solution. Such constraints do not facilitate the development of an RERF at this site, where the local rail network presents operational and logistical difficulties to serve the Waste Collection Authorities of Hertfordshire.

4.6 In July 2015, the Secretary of State refused planning permission for the facility at New Barnfield. In March 2016, the County entered into a Revised Project Plan with Veolia for the delivery of an alternative site. That alternative site is Ratty's Lane.

4.7 In 2014, an examination took place into the Hertfordshire Waste Site Allocations Local Plan. That examination considered the merits of the Ratty's Lane site in determining whether or not it should be identified as a waste site or encompassed within a Waste Site Area of Search. The Inspector concluded that the site was not suitable for such identification or inclusion.

5. APPRAISAL

5.1 There are multiple issues related to the assessment of this planning application and in order to make a sound decision, the County Council must objectively and dispassionately appraise all of those issues. If it does not, it will open itself to the greater likelihood of call in of the application by the Government and/or legal challenge. This report does not set out to address all of those issues, particularly where they are of a more technical nature, but officers of this Council will be closely assessing the County Council's reporting and decision making. Rather, this report expands on and supplements the reasons that were presented to and agreed by the April meeting of this Committee as constituting potential reasons for refusal of the planning application.

Principles of Development

5.2 The principle of the proposed development should be assessed against the terms of the National Planning Policy Framework, the National Planning Policy for Waste and the Development Plan. This assessment would include the suitability of the location, planning policies (in particular those relating to waste, minerals, sustainability and transport) and the need for the facility.

5.3 The National Planning Policy for Waste 2014 states that in preparing local plans, waste planning authorities should:

Work collaboratively in groups with other waste planning authorities, and in two tier areas with district authorities, through the statutory duty to co-operate, to provide a suitable network of facilities to deliver sustainable waste management.

5.4 Although it pre-dates the national policy, the forum for having undertaken this fundamental process was the Hertfordshire Waste Development Framework which was adopted in November 2012. This did not establish a network of facilities but did provide the principles and locational context within which such a network could be facilitated.

5.5 The first point of consideration is therefore the Hertfordshire Waste Development Framework Waste Core Strategy and Development Management Policies DPD 2012. As the Ratty's Lane proposal would be the most strategic and by far the largest waste structure to have ever been constructed in Hertfordshire, the primary determining policy within the Waste Core Strategy is Policy 1: Strategy for Waste Management Facilities. This states that:

Provision will be made for a network of waste management facilities that drive waste management practices up the waste hierarchy and are sufficient to provide adequate capacity for existing and future waste arisings within the county and for any agreed apportionment for waste arisings from outside the county

Provision for new appropriate and adequate Local Authority Collected waste management facilities will be provided within the broad areas A, B, C, D and E as shown on the Key Diagram.

5.6 The application site does not lie within any of these broad areas. Examination of the Core Strategy explicitly considered whether or not it should be included. The result of that examination was a categorical exclusion of this site, the Inspector concluding that the site was not suitable for such identification or inclusion.

5.7 Given that this Policy explicitly sets out the strategy for local authority collected waste, and that this waste stream provides the business case and rationale for the proposal, the application is contrary to the Policy. Given the nature of the facility, there can be no other conclusion than on this point alone, the application is a departure from the Development Plan.

5.8 As the application site is currently an aggregates depot, the second key policy of the Development Plan that impacts on the consideration of the

principle of this development arises from the Hertfordshire Minerals Plan Review 2007. Minerals Policy 10 – Railheads and Wharves states that:

Existing and disused railheads and wharves will be safeguarded where they have potential for the exportation and importation of minerals and secondary/recycled aggregates. The retention of existing and disused railheads and wharves will be expected unless:

a) The existing or disused facility can be satisfactorily relocated within the development proposals in terms of operational requirements and environmental criteria; or

b) It can be demonstrated that the site is no longer viable for use as a rail aggregates depot or wharf; or

c) The facility has been or will be replaced in an appropriate alternative location.

5.9 It is not considered that this application fulfils any of these criteria or the requirement of the NPPF that minerals railheads are to be safeguarded.

5.10 In summary, the fundamental determining polices of the Development Plan against which this application should be determined are Policy 1 of the Hertfordshire Waste Development Framework and Policy 10 of the Hertfordshire Minerals Plan Review. There can be no doubt that the application proposal is contrary to the terms of those policies. It should only therefore be approved if material circumstances justify a Departure from the Development Plan and that should be the basis of the County Council's consideration of this planning application.

Sustainability

5.11 *At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking* (NPPF paragraph 14). The NPPF requires that local planning authorities should positively seek opportunities to meet the development needs of their area (through the Development Plan) and that development proposals which accord with the development plan should be approved without delay.

5.12 Given the scale, longevity and strategic importance of the proposal, it is incumbent upon the County Council in determining the application to demonstrate that a single major incinerator in this particular location represents the most sustainable solution to waste management in Hertfordshire for the foreseeable future. As directed by national policy, the County Council should be assessing the options available to it both

in the strategy and method of waste disposal and in the selection of the most suitable site(s). To an extent the Waste Development Framework has done that and as set out above it provides no support to the application site.

5.13 The application site lies in the south eastern corner of the County, remote to the majority of waste arisings. There is no evidence within the application that non road based forms of transport will be utilised to any significant extent; congestion on the local road network will become severe without major mitigation; and there will be a major environmental impact on the Lee Valley Regional Park and the Green Belt as a result of the design solution. In this context, it appears impossible for the County Council to be sure this is a sustainable way forward and this leaves it in something of a vacuum. That vacuum means that the correct and sustainable way forward would be for the County Council to return to first principles and to prepare a new Waste Local Plan in full accordance with national policy. That Local Plan would link strategy and policies through to the most sustainable planned network of facilities for the future of waste management within the County. To make an opportunistic and illogical decision in favour of the application now would be a let down to the residents and businesses of Hoddesdon, Broxbourne and Hertfordshire.

Combined Heat and Power

5.14 One of the charges levelled against energy recovery plants is that they are a fundamentally inefficient method of recovering energy. Plants can potentially address those inefficiencies where they are taking waste heat from the incineration process and converting those into local power networks. This is known as combined heat and power (CHP). Veolia had been assessing the potential for such a network through its original application for this plant. It is understood that this would have provided a network of hot water pipes to provide energy to the Business Park and to the nurseries within the Lee Valley. In theory that could have been a persuasive mitigation in favour of the case for the plant. However, Veolia has claimed that such a network would not be viable at the present time. As with other energy recovery plants, the application therefore states that the facility is CHP ready. In the absence of evidence that there is a commitment to implementation of a CHP network, this is a sop. Had the application included a business case setting out the proposed network and a plan for its implementation, it may have merited greater credence within the overall sustainability case. As it stands, however, the absence of proposals for combined heat and power allied to the inefficiency of the process would be a further reason for refusing the planning application.

Impacts on Traffic, the Suitability of Access and Methods of Access

5.15 The National Planning Policy Framework states that:

Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe

5.16 Essex Road is reputedly the busiest non A road or motorway in Hertfordshire. This Council has produced the Broxbourne Transport Model and utilised the County Council's own Comet Transport model to assess the cumulative impacts of development in the borough over the next 15 years on the borough's roads. Both models are demonstrating that, with the mitigations proposed through the Local Plan, the levels of traffic on roads and passing through junctions will generally be acceptable. There is one very notable exception - Essex Road. Both models are showing severe congestion along Essex Road and in particular at the Pindar Road junction. To add a significant number of additional movements through this network, particularly where those movements are large refuse trucks, is not considered to be acceptable. This factor on its own is considered to constitute grounds for refusing this planning application. The fact that those trucks are accessing a facility that should be maximising alternative forms of transport, as had been proposed in the original power station proposal for this site, compounds the problem. The County Council has latterly agreed to undertake joint work to assess the Essex Road corridor and to look at possible mitigations but that will not be completed until next year. Until it can be demonstrated that the application proposal will not exacerbate an already severely congested network, the County Council should not entertain this planning application.

5.17 The County Council has disappointingly eschewed the use of more visual media to demonstrate the true impacts of traffic to members and the public. A virtual reality Paramics model was produced to demonstrate and mitigate the impacts of the proposed High Leigh development. Officers had recommended that this would easily be extended to cover Essex Road and this proposal. That has been resisted.

5.18 One mitigation that has been proposed is the new Essex Road bridge. The County Council has to date stated that this bridge is not required for the proposed facility. Whilst it will not address the congestion, officers of this Council take a different view. Both councils have long been of the opinion that the existing Essex Road bridge is not fit for purpose and that it needs to be widened or replaced. It is simply too narrow to safely enable two large vehicles to pass one another. That safety issue is compounded by the fact that pedestrians also cross the

bridge. Officers of both councils have therefore fully supported the successful LEP bid to replace the bridge. In this context, it is considered unacceptable for 268 refuse freighter movements to be added to the bridge traffic without the improvements. The lack of acceptability of the Essex Road bridge to accommodate the increased use by refuse freighters to the proposed ERF should therefore be an additional reason for refusing this planning application. Should it be determined that the application is acceptable on all other grounds, any approval should condition occupation of the facility against opening of the new bridge.

5.19 As set out within April report, the proposed signalisation system within Ratty's Lane does not work and creates a number of residual issues:

1. Safe egress from the eastern end of Ratty's Lane
2. Vehicles meeting within the one way system;
3. Access into and egress from the users on the southern side of Ratty's Lane;
4. The capacity of the western end of the signals to accommodate no more than one refuse freighter at a time. This would require a stacking system before vehicles arrive at Ratty's Lane.

5.20 The County Council's response to these issues appears to have been to add two more intermediate traffic signals, making four in all, and to make amendments to the junction at the east end of Ratty's Lane. How these multiple signals will operate is not clear. However, it is evident that phase times must increase and that issue 4 above will result in additional stacking. This Council has no information on how that stacking will be managed but the overall result appears to be a contrived muddle that will lead to idling, polluting and time wasting delays for all the users of Ratty's Lane. The application should fail on this point alone.

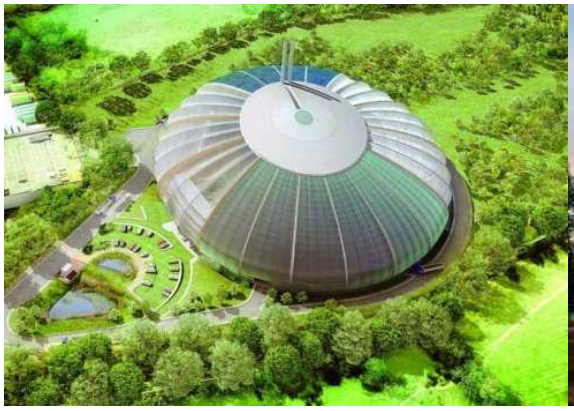
<u>Design and Wider Visual Impact</u>

5.21 The Environmental Statement submitted with the planning application concludes that: *"the operation of the Proposed Development would cause limited significant visual effects with the introduction of a new visual landmark that is designed to add interest to existing industrial views. The industrial nature of the Proposed Development is in character with the surrounding industrial estate and in general within the built-up area in Hoddesdon."* Officers are concerned that this assessment is grossly misleading and that it fails to identify and then

properly appraise the significant visual impacts of the facility. It is hoped that the County Council's assessment will be more robust.

5.22 The ERF would be one of the largest, bulkiest and most prominent buildings in Hertfordshire. The main building and its chimney stack would be highly visible from many public vantage points in the Lee Valley, Hertfordshire and Essex. The vehicle ramp and the impact and noise from refuse vehicles travelling up and down the ramp will have a major impact on views from and the tranquillity of the Lee Valley Regional Park.

5.23 On a larger site, a more harmonious design would be achievable and that was demonstrated by Veolia's proposed design for the New Barnfield site.



5.24 Given the nature of the technology and the space constraints of the application site to accommodate that technology, the proposed design is an almost inevitable outcome and it is difficult to imagine how a better design or materials would ameliorate the impact. That by no means makes it acceptable, rather it reinforces that this site is too small

and too constrained to accommodate a facility of the scale proposed. The consequence is a major and unacceptable industrialising impact on Hoddesdon, the Green Belt and the Lee Valley Regional Park. The bulk and appearance of the ERF and the resultant visual impacts are considered to constitute a further reason for the refusal of this planning application.

Impacts on Hoddesdon and the Conservation Area

5.25 Hoddesdon is an historic town with one of the finest town centres in Hertfordshire. The ambience of the town is already significantly impacted by views of the existing power station at Ratty's Lane. The application proposal will be of a different order altogether in terms of the visual impacts. It will be disproportionately dominant and therefore have a significant detrimental impact on large areas of Hoddesdon which include the town centre, the main approach roads and several residential areas for which it will loom as an imposing backdrop.

5.26 If this application is approved and the ERF is constructed, officers are of the view that it will tip the scales in terms of the perception of Hoddesdon from an historic Hertfordshire market town to a factory town that is the dumping ground for Hertfordshire.

5.27 Whilst this is an emotive assessment, the importance of it should not be dismissed. The decision makers should not underestimate the blighting effect that this massive industrial structure will have on the town. It is considered that it is the wrong design in the wrong place. There will be many locations in Hertfordshire that an ERF could be accommodated without these impacts and it is beholden on the County Council to fully assess the alternatives through a new planning process.

Impacts on Hoddesdon Business Park and Lee Valley businesses

5.28 The impacts of traffic on the roads leading into the Business Park have been considered in section 5.15 onwards above. Congestion and delays will have a detrimental impact on many of the businesses operating in the local area. This development would needlessly exacerbate the situation. The business community has indicated that it is particularly concerned about recruitment and retention of employees if getting into and out of the Business Park becomes more difficult and time consuming. Apart from the traffic impacts, many businesses are concerned by the perceptions that will be created by having a major incinerator on their doorstep. That is particularly the case with the Lee Valley growers whose ability to continue to sell to the major supermarkets could be significantly damaged by any perceptions in future, that its produce could be 'contaminated'. Whatever the evidence suggests in terms of polluting impacts, these are real concerns that must be addressed by the County Council.

Pollution and the Environmental Permit

5.29 The National Planning Policy for Waste advises that in determining planning applications, waste planning authorities should concern themselves with implementing the planning strategy in the Local Plan and not with the control of processes which are a matter for the pollution control authorities. Waste planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced. In this case, that regime will be operated through a permit from the Environment Agency and Veolia has submitted a permit application. This Council has assessed the application and, notwithstanding the Government's advice, there are matters that are pertinent to the planning application.

5.30 This Council's environmental consultant has noted that gas oil burners will be used to maintain combustion temperatures above 850°C and questions why natural gas cannot be used to fire the auxiliary burner. Natural gas contains less sulphur than gas oil and does not require a fuel store. Further strengthening this position, the consultant notes that if hazardous wastes were to be incinerated, and if the wastes comprise more than 1% halogenated organic substances (expressed as chlorine) as secondary combustion, chamber temperature of 1100°C would be required. This facility is likely to be capable of handling hazardous waste. However, as controls are unlikely to be robust enough to ensure that hazardous materials are not present in the waste streams, it should be assumed that the higher temperatures will need to be achieved. It is not clear if the incinerator is capable of achieving such temperatures. As set out in paragraph 4.4, the relevance of this to the current application is that were natural gas to have been proposed, the facility would be similar in nature to the original scheme. If the necessity is ultimately for natural gas to achieve the required temperatures, the determination of this planning application may correctly reside with either this Council or the Planning Inspectorate.

5.31 The environmental consultant has also advised that it is not clear how the applicant has derived the chimney height for use in the dispersion model for the plume. The chimney height is already considered to be excessive in terms of its wider visual impact. Should the height need to be even further increased in relation to the environmental permit application that environmental impact would be even more extreme. The County Council needs to be absolutely certain on this matter and should this application ultimately be determined for approval, a condition is recommended limiting the chimney heights to no more than is currently proposed.

5.32 The installation proposes to use ammonia solution injection for NOx (Nitrogen oxides) abatement. Ammonia can be highly problematic to handle and store and has a high odour impact potential if released.

This potential does not appear to have been examined in detail within the permit application. It is not clear where the applicant plans to store ammonia. It is also not clear if the odour impact potential on local receptors has been sufficiently considered.

5.33 The installation will be located immediately adjacent to the Lock Keepers Cottage (which is a residential property), and residentially moored canal boats. The consultant considers that these residents will inevitably be adversely impacted by proposed incinerator operations (noise, dust and odour), for which it is unlikely that any best practice operations will be able to mitigate.

5.34 Large refuse vehicles are heavily polluting, and particular concentrations of carbon dioxide can accumulate where they are idling at junctions or when laying over. The application has failed to address these impacts within its environmental assessment or within its environmental permit application.

<u>De-commissioning</u>

5.35 To date, officers have seen nothing in the planning application to state what will happen to the ERF when at some point in the future it is de-commissioned. In the absence of a requirement to dismantle the structure, it could continue to blight Hoddesdon and the Lee Valley as a derelict hulk for many decades. In the event that the planning application is ultimately approved, this Council would strongly recommend that a de-commissioning strategy be required by condition prior to commencement.

6 CONCLUSION

6.1 This application represents the largest waste facility and one of the largest and bulkiest buildings ever to have been proposed within Hertfordshire. The County
Council has failed to undertake and complete an options appraisal and plan that consider:

1. The most sustainable spatial response to the vision, principles and policies of its own waste Development Framework that would lead to a suitable network of facilities to deliver sustainable waste management in the County;

2. The most sustainable solution for locating a facility or facilities of this nature.

6.2 In the absence of such a plan, this planning application falls to be considered against the Development Plan as it exists as well as national policies and guidance. It is considered that it fails to successfully address either. It is contrary to key defining policies within

the Waste Development Framework and the Hertfordshire Minerals Plan Review and therefore a departure from both those plans, the Development Plan as a whole and the NPPF. It would stand in an unsustainable location at the south east corner of the County, maximising vehicle travel distances within a road network that is ill suited to the predominant east west movements that would result. The local road network will in future be severely congested and there are no mitigations proposed to address that congestion. This facility will significantly exacerbate that congestion and would be accessed across the narrow New River bridge. Ratty's Lane, the road that will directly access the facility cannot accommodate two passing refuse vehicles and the signalised solution is unacceptable in its current guise.

6.3 The proposed ERF would be bulky and unsightly. It would be a monolithic, carbuncular eyesore that would blight Hoddesdon throughout its lifetime, and possibly beyond. It would also have a destructively harmful impact on the Green Belt in Hertfordshire and Essex as well as the Lee Valley Regional Park. It is recommended that this Council objects to the proposed facility in the strongest terms seeking refusal of the planning application.

7. RECOMMENDED that:

A. Without prejudice to any further potential reasons that arise during the processing of the planning application that Broxbourne Council seeks refusal of planning permission for the following reasons:

1. That the facility does not contribute positively to the character and quality of the area and is not in accordance with the planning strategy in the Local Plan, contrary to the terms of the National Planning Policy for Waste 2014;

2. It is a departure from the Hertfordshire Waste Development Framework Waste Core Strategy and Development Management Policies DPD 2012 in that it is contrary to the terms of Policy 1: Strategy for Waste Management Facilities;

3. Departure from the Hertfordshire Minerals Plan Review 2007 in that it is contrary to Minerals Policy 10 – Railheads and Wharves;

4. The proposed development represents an unsustainable solution for the management of local authority collected waste, contrary to the principles and policies of the National Planning Policy Framework, the National Planning Policy for Waste and the Development Plan, consisting of the Hertfordshire Waste Development Framework Waste Core Strategy and Development Management Policies DPD 2012, the Hertfordshire Minerals Plan Review 2007 and the Broxbourne Local Plan 2005;

5. The proposed development constitutes an inefficient and unsustainable form of energy recovery in that it fails to provide for a Combined Heat and Power Network.

6. The constrained site results in a facility that by reason of its bulk and height would lead to the delivery of an unacceptable design solution that fails to contribute positively to the character and quality of the area, contrary to the terms of the NPPF, the National Planning Policy for Waste 2014 and the Development Plan;

7. The proposed development would exacerbate unacceptable and unsustainable levels of severe congestion on Essex Road, contrary to the terms of the National Planning Policy Framework and the Development Plan;

8. The applicant has failed to put in place an acceptable framework for the management of traffic to the facility in relation to the constraints of Ratty's Lane and the residual impacts on the local highways network, contrary to the terms of the National Planning Policy Framework and the Development Plan;

9. The proposed development would have a significant unacceptable visual impact on the wider character of Hoddesdon and the surrounding area;

10. The proposed development would have a significant unacceptable impact on the Green Belt contrary to the NPPF and the Development Plan;

11. The proposed development would have an unacceptable economic impact on local businesses in terms of traffic congestion and business perceptions, contrary to the NPPF;

12. Insufficient/misleading information has been submitted by the Applicant in respect of:

    1. Views of the development
    2. The assessment of traffic impacts
    3. De-commissioning
    4. The ability to meet the required operating temperatures;
    5. The polluting impacts of the development
    6. The storage of ammonia

B Further raise concern that the County Council has failed to conclude an assessment of options for a suitable network of facilities to deliver sustainable waste management and to recommend to the County Council that it instigates immediate work to commence a Waste Local Plan that provides a suitable network of facilities to deliver sustainable waste management, as recommended by national policy.

C. In the event that planning permission is granted, this Council seeks the inclusion of the following conditions:

1. Facility not to come into use until the Essex Road Bridge improvement scheme is in operation;
2. Combined Heat and Power requirement;
3. Chimney height limitation;
4. De-commissioning strategy;
5. Delivery vehicles management plan;
6. Construction Management Plan;
7. Lighting control strategy.

D. In the event that planning permission is granted, this Council seeks mitigation of the effects of the development through the following Heads of Terms for a Section 106 Agreement:

1. financial contribution towards Hoddesdon Town Centre;
2. financial contribution towards the mitigation of congestion on Essex Road;
3. financial contribution to environmental enhancement of Hoddesdon Business Park;
4. financial contribution towards the regeneration of the Rye Park area.

Broxbourne Borough Council – Environmental Health

We have the following comments to make.

Air Quality

The Borough of Broxbourne commenced monitoring of nitrogen dioxide levels, at 2 locations along Essex Road and Burford Street/Dinant Link Road in May 2016.

The Bias Adjusted results for both the Essex Road and Burford Street/Dinant Link Road locations were above the 40 µg/m3 annual mean objective for nitrogen dioxide in 2016 and the monthly results for the Burford Street/Dinant Link location in 2017 has continually been above the 40 µg/m3 threshold.

Based on the elevated results, it is likely that an additional AQMA will be declared along this route in the future.

There are serious concerns with this proposed development, which is proposing an additional 300 vehicle movements per day. The environmental statement does not provide any data on the emissions standards of the vehicles or any proposals on mitigation measures to reduce nitrogen dioxide, PM10'S & PM 2.5s for example hybrid vehicles, anti-idling policy and retrofitting older vehicles with Selective Catalytic Reduction technology.

In fact Paragraph 7.8.38 within the Section 7 (Air Quality) of the Environmental Statement Volume 1 concludes,

"*The effect on local air quality of the combined impacts from road traffic emissions and emissions from the facility is not considered to be significant*."

We disagree with this statement as the additional vehicle movements associated with the ERF will inevitably compound the poor Air Quality along these routes and affect members of the public and residential receptors.

Odour

The Borough of Broxbourne previously provided comments to the Environment Agency with respect to an environmental permit application, reference: EPR/SP3038DY/A001, where the following concerns were raised.

"*The Council notes that the installation proposes to use ammonia solution injection in the SCC for NOx abatement. Ammonia can be highly problematic to handle and store and has a high odour impact potential if released. This potential does not appear to have been examined in detail within the application. It is not clear where the applicant plans to store ammonia. It is not clear if the odour impact potential on local receptors has been sufficiently considered."*

Noise

The results from the previous noise monitoring which was carried out between 17/11/11 and 24/11/11 and supplementary monitoring between the 15/01/12-16/01/12 and the 06/03/12-07/03/12, are not be representative of local conditions due to the amount of time which has elapsed.

This Planning Authority has received an Application for residential development at Oaklands Yard, Essex Road, Hoddesdon. There are also residential receptors on Colthurst Gardens, Fishermans Way and Village Close and it was previously recommended that these locations also be taken in to account in any future noise monitoring within Environmental Health's response to the 2016 Scoping consultation. The Applicant has had the benefit of a large timeframe in which to carry out additional monitoring, but has chosen to rely on outdated monitoring results which do not provide a representative analysis of conditions around the vicinity of the proposed site, thus making it difficult to determine the correct level of mitigation at the site.

Land Contamination

Section 11 (Land Contamination) within the Environmental Statement Volume 1, refers to an initial ground investigation carried out by Campbell Reith. The document provides an overview of the investigation. However it does not constitute the full report and it is possible that details pertinent to the site investigation may have been omitted.

Section 11 refers to a site investigation in September 2011 and whereas conditions do not appear to have changed significantly on site, the human health risk assessment criteria has been amended since this time, for example the LQM/CIEH S4ULs.

The baseline summary list several contaminants within a conceptual site model, including PCBs, Asbestos, Metals, PAHs, TPH and Ground Gas, but to name a few. Paragraph 11.10.2 refers to elevated concentrations of PAH with respect to human health guideline values, however these results are not represented. Further monitoring is also suggested, however it is not clear whether this has been carried out.

Results pertinent to Groundwater testing have been included, however the soil strata's around the site do not appear to have been tested for within the investigation as their results have not been included within Section 11, which is concerning as any dust produced during the excavation and construction phases of the development could potentially create a Source Pathway Receptor, Pollutant Linkage with respect to residential receptors and on site workers.

It is therefore imperative all pollutants identified are assessed before a Generic Quantitative Risk Assessment and a Detailed Quantitative Risk Assessment are carried out in order to determine whether remediation is necessary and the details of management within the site. The above should be carried out in conjunction with Model Procedures for the Management of Land Contamination – Contaminated Land Report 11' (CLR11).

Conclusion

To conclude, Environmental Health object to this Application, due to the outstanding matters related to Air Quality, Noise, Odour and Land Contamination. We believe the operation of the Energy Recovery Facility will have a negative impact upon residential receptors in proximity to the facility, in addition to the wider area along the traffic routes, where transport related pollutants such as nitrogen dioxide and Particulate Matter (PM10s) will inevitably increase.

Environmental Health have the following brief points to add with respect to the Dispersion Modelling.

- We believe the proposed facility, has the potential to significantly contribute to existing elevated background levels of several key pollutants, including nitrogen dioxide.

- When taking the impact of road traffic and other proposed developments in to account, the predicted environmental concentrations for nitrogen dioxide at some residential receptors, are close to the air quality standard for this pollutant.

- The Applicant does not appear to have assessed how their model selection may have affected the assessment outcomes, or assessed the sensitivity of their results with respect to the assumed modelling parameters, for example local topography and surface roughness, which are vital as there is limited scope to meet compliance with air quality standards.

There is concern about the Dispersion Modelling's reliability, as such assessments are subject to a variety of uncertainties and with such small margins for compliance, we would have expected these to have been clearly addressed within the modelling report.

East Herts District Council

Original consultation response

East Herts Council wishes to provide the following comments:

Landscape Character and Visual Impact

The main building will be approximately 55 metres wide and 150 metres long, with a maximum height of 48 metres above ground level. Two chimney stacks are proposed, at 86.75 metres high above ground level for flue gases from the combustion process. The River Lee adjoins the site, which lies within the wider Lee Valley Regional Park.

Clearly a development of this scale will have an impact upon the landscape character of the area and the visual amenity of the Green Belt, both within the immediate area and in terms of longer views of the site. East Herts Council would request that the full impact of the development on this sensitive landscape character, and including any longer views of the site from within East Hertfordshire, be assessed. Any appropriate mitigation measures for the building's design/materials and landscaping should be suitably controlled by condition.

Traffic

Road access to the south of the Site is via Ratty's Lane, which leads to the A10 via Essex Road and Dinant Link Road. The A10 runs in a north-south direction approximately 3km to the west of the Site providing access towards Hertford to the north and London to the south. East Herts Council seeks assurances that the implications of traffic generation, highway capacity and highway safety across the surrounding highway network have been fully assessed including any disaster scenarios such as the A10 being closed due to high wind at the viaduct.

Furthermore, the Council would wish to see a thorough assessment of the impact of any additional traffic on the character and amenities of residential areas close to the site, or through which access to the facility might be gained.

Access for construction traffic and the management of the routing of HGV traffic in particular will need to be controlled effectively to avoid any undue impacts on the surrounding area.

Air quality

It is understood that new incinerator facilities are required to have very strict processes in place to remove various gases from the process before any emissions are released into the atmosphere, with constant monitoring to ensure emissions are managed in the correct manner. Air filters and scrubbers are used to clean the emissions and the control room will process material in a way that feeds the process with controlled waste in a controlled way. There is a mix of urban and rural residential, agriculture and many outdoor leisure locations (schools, parks and riverside) in the immediate vicinity of the proposed development and East Herts Council would seek assurances that the development would incorporate appropriate processes and mitigation measures to ensure that there is no adverse impact upon air quality in the area.

I would also comment that other normal planning considerations relating to design, SuDS, biodiversity and the water environment (ensuring that the process discharge to the foul sewer is to have no possible connection to the river) and flood risk and drainage matters should of course also be appropriately addressed.

Stanstead Abbotts Parish Council

Original consultation response

Stanstead Abbotts borders the employment area in Broxbourne Borough where the proposed incinerator would be constructed. It will have an enormous visual impact on the more rural parts of this Parish and the chimneys emitting noxious waste will rise to about the same height as some areas. Residents and visitors enjoy the vistas around the River Lea and the Lea Valley Park as anyone who follows our Community Facebook page can see: many striking photographs are regularly posted there and we have great pride in our environment. The site is very close to the Travelling Showpeople site - a site which our Parish is proud of and we want to see protected from the effects of yet more industry.

The development is alarming in its scale but also because of its siting adjacent to a gas-fired power station. We heard the explosion from Buncefield, Hemel Hempstead here and we want no risk of any similar conflagration from this dangerous mismatch of neighbouring facilities.

We believe that the 4R approach to rubbish is by far the best solution for the environment and not technology which will be out of date by the time the incinerator would be completed. As well as this we are aware that DEFRA made it known to Hertfordshire County Council in 2012 that national targets for incineration of waste were already being met.

The necessary continuity in terms of processing, its vehicular access, and its assumptions made in terms of flood prevention, ash recovery, and river discharge, amongst other issues mean that we OBJECT to the scheme. Our objections are listed below in greater detail:

1 The sheer size of the development is immense: chimneys are 86.75m (over 284ft) high. This is visually intrusive on a grand scale. This will be the tallest building in Hoddesdon. It is claimed that the proposed stack height will allow for dissipation of particulates, but the latter will still settle but on a wider scale. However much is made in mitigation in terms of short distance or long distance views of the scheme, the view will still be intrusive. It is noted that luminaires are to be located at higher levels: this will also be intrusive because the added lighting will be seen over a wider area. It is unreasonable to claim mitigation in respect of spoilt views when trees are in full leaf resulting In "increased density" in foliage - what about the other 6 months?

2 Vehicular access (waste lorries only) is timed to run from 5am to 9pm. The waste lorries run to the plant, but other vehicles, removing bottom ash, run out of the plant (although this is not explained). If rail transport is to be used where will it be taken and along which lines? There is also facility for a 'bus/coach' layby, cars, and facilities for ‘visitors’. Thus, provision for total vehicle access is considerably more than just waste movement. In the application, It is claimed that "it is demonstrated that vehicle movement will not adversely impact on traffic movements" exactly the opposite will actually apply and there will be gross Infringement on residential amenity, the natural environment, and health and safety. There is no clear, reasoned, logical, or reasonable thought given' to the overall extent of nuisance, disturbance, noise, and health deterioration to the public and nearby residents. It is totally inaccurate to claim that, because of there being no significant change in road layout in the area since 2011, noise will not have changed significantly. Increases have already occurred, and continue in the same fashion, due to enlargement of industrial areas and warehousing: heavy lorries are heard constantly after about 4:30am and for the whole of the day, every day. Traffic lights at the top of Pindar Lane already cause traffic to stand still during busy times and log-jams back up towards the roundabout by Morrisons. Fumes will be emitted from numerous vehicles for considerable lengths of time.

3 The (almost) non-stop movement of heavy vehicles, with both weight and constant vibration, will inevitably lead to the rapid deterioration and, perhaps, collapse of the narrow bridge over the new river: this bridge, already, will not allow for free flow of lorries to and from the industrial estate, so the proposal will inevitably lead to massive congestion at this point. In clause 6.5.2, there is the proposal to MAXIMISE vehicle loads so as to MINIMISE vehicle movement, but this is totally unrealistic: existing bridges and roads, locally, are not built to cope with this sort of capacity. It is claimed that transport managers at Waste Transfer Stations will "promote efficient use of the vehicle fleet where practical": this is meaningless jargon. The width of the lorries will prevent them from passing each other at various points along the route - this

is clearly catered for in the application plan. While lorries are forced to wait for on-coming traffic that will again cause traffic flow to stop. Clause 8.5.46 refers to the effect of HGV vibration on "new site roads" but does not allow for vibration on existing roads. The claim that increase in noise is negligible is unrealistic: noise attenuating measures on building sites do not, in real life, generally happen because of cost, labour, or time factors.

4 The lorry movement will add further gross congestion to the A10 link road (particularly with the new roundabout and pedestrian crossing that are planned for that stretch), the Sun roundabout (even allowing for lane improvements), the Hertford Road roundabout (also allowing for lane improvements), and the dual carriageway around Hoddesdon town centre, and will greatly increase the rush-hour traffic through Hertford, Hailey, Broxbourne, Cheshunt, and Ware. Consideration is not given to the likelihood that lorries, in order to avoid the congestion spots mentioned above, will attempt the route through Nazeing and thus the (new) narrow bridge next to the Fish and Eels PH: the road on both sides of this bridge is too narrow (and already suffering from congestion). Congestion caused by two-way lorry movement, at the Rattys Lane roundabout, will be non-stop. At present, waste is delivered to various sites, most of which are outside the County: the generation of ALL, WITHIN the County, will severely add to congestion. Added to this there will be a new cemetery creating vehicle movements and much new development in and around Broxbourne.
With greatly increased traffic congestion, access for emergency vehicles will also be severely constrained. IEA suggest that adverse effects will be comparatively low, but this is based upon surveys carried out in the EXISTING condition. A professional judgement only advises that this will be satisfactory overall, but the reverse will be actually true.

5 Reduced level ponding for flood relief is suggested, but there is no evidence to show that reinforced earth banks around the ponding will appropriately deal with a flood. There is obviously a limit in the design for flood accommodation, but there is nothing to show how this is determined.

6 There is insufficient evidence to show that there would be suitable and appropriate cleansing to waste water where it discharges to the River Lee, what effect this might have on plant growth, fish, bird life on the water, insect life, and algae. There is no indication of the timing or rate of discharge via the waste pipe. There is no indication of what damage, if any, might occur if the cover on the river end of the pipe were to become unworkable and thus what provision would be made for measurement, permanent cleansing, and maintenance at this point. There is no detail of the discharge facility itself. There is nothing to indicate or clarify the meaning, in terms of waste discharge, of the term "under other legislation and land agreements" does this mean, therefore, that agreements have already been reached for this and, if so, why are we not informed? It is proposed that a Klargester will be installed to cleanse foul waste, but there is no evidence to illustrate facilities for servicing, cleansing, and maintenance. Despite the flooding limitations identified in Clause 11.4,11.4.31 advises that there have been five previous pollution incidents to controlled waters within 500m of the site: the closest, at

300m, was described as "miscellaneous" and "...a minor incident" : this is indicative of the fact that waste transfer to the River Lee, with this development, could display the same adverse effect again. Contrary to claims made in Clause 12.6.12 where the River Lee is identified as a receptor in terms of groundwater movement, the receipt of any discharge (contaminated or not) is not static since the water in the river is constantly moving, thus allowing hazards to move over long distances: it is not, therefore, necessarily "of a local and temporary nature." "Ongoing groundwater monitoring" will not necessarily alleviate leakage, contaminated or otherwise, all the time.

7 Prior to any site commencement or completion, there is no indication of, or suitable consideration for, the logistics involved in getting the huge amount of all plant and materials to and from the site - further congestion on this scale is inevitable. Whereas waste is indicated as being from all corners of the Borough, plant and materials might well be from all corners of the country as well as from abroad. What accommodation will there be for the many workers who will be employed to construct the site?

8 There is no indication as to what is meant by a 24.7m x 32.6m 'storage area'.

9 There is no indication as to what is meant by 'healthcare waste', or whose health is, was, or could be, at risk. Clause 13.5.10 advises that waste water from washing down of equipment associated with concrete or cementing processes may be removed by tanker, but to where and in what quantity? In these days of care in the community there can be little checking that healthcare waste will not be placed in the black household rubbish bags and thus added to the fuel for the incinerator with unknown emissions.

10 There is no indication as to what, precisely. Is contained within the 'fuel bund', the extent and volume of the storage, the delivery facilities for the 'fuel', facilities to counter any possible fuel spillage, cleaning should spillage occur, and no indication of essential and requisite safety factors involved in this storage.

11 There is no evidence as to the nature of "flue gas treatment" or "water treatment". Where does Flue Gas Treatment residue get transported to?

12 Information is essential to show how and when, and how frequently, bottom ash is collected, the extent of it the vehicles used to collect it, the place(s) where it might be dumped, the effect of such dumping on any local environment, and the effect of such dumping on local residents. Dust will inevitably accumulate, and what adverse effect will this have? Bottom ash, if exposed at all in transportation from on-site storage to rail wagon or truck, will result in adverse dust emission.

13 The application advises that it will seek to accommodate municipal, commercial and industrial waste, but there is no indication as to the offensive nature, mix, extent, industrial content or flammability of the wide variety of waste that could or would be expected to be transported around the county.

There is reference to locations of "strategically located Waste Transfer Stations", but no indication as to their locality, their size, their capacity, numbers of vehicles using them, noise, health and safety hazards, or effects on nearby residential areas. There is reference to the movement of 250,000 tonnes of waste per year, but no indication as to the number of vehicle movements involved or any, if at all, of pre-determined routes.

14 There is provision for "rail sidings improvements", but there is no indication of the extent of the improvements, the precise location of the improvements, any effect this might have on train travel in or out of rush hour times, train scheduling, changes to signalling and marshalling facilities, additions (if any) to train station staffing and monitoring, and how the ‘improvements' would be managed on site, by whom, during what times, or the type of shunting facility used to move the waste.

15 Buncefield oil storage depot was considered as an appropriate option for this development. Although considered suitable, it was abandoned due to a response not having been received from the land owners: how can this alone be sufficient ground for investigation and adoption abandonment? Why wasn't the site at Westmill followed up as it would have been more accessible and affected fewer residents?

16 There is no indication regarding safety measures concerning site working where power lines cross the site including use of craneage. There is no indication as to how the gas pipeline to Rye House Power Station would or could be protected.

17 Clause 6.2.6 in the Transport and Movement Statement states the goals of the development to be (i) improved transport opportunities for all, (ii) enhancement of quality of life, health and natural, built and historic environment of all Hertfordshire residents, (iii) improve safety and security for residents, and (iv) reduce transports contribution to greenhouse gas emissions. NONE OF THIS WILL HAPPEN - choice, quality of life, and environmental benefits will deteriorate, and greenhouse gas emissions will be enhanced. Furthermore, in Clause 11.4.76, where would "hazardous waste" be discharged to, at what distance, at what times, with what protection, whether within the Borough, whether close to any residential areas, and what other risks are involved. Clause 11.4.80 refers to the destruction and removal of Japanese Knotweed and Giant Hogweed, but there is no indication to show how this will be done safely and without risk to neighbouring properties, where any such plantation would be transported to, and how it would be destroyed.

18 Clause 6.2.10 lists reasons why development will NOT be permitted under the terms of current Local Plan - these have not been resolved but, quite the reverse, will be exacerbated.

19 As per Clause 6.2.19, the applicant has not satisfactorily demonstrated that traffic measures, traffic management, conditions of the road network, highway safety, natural environment, and vehicle movement, are all adequately, effectively and satisfactorily detailed.

20 In clause 6.6, it is claimed that, for construction purposes, "the total number of HGV's required from the programme is known." This is a totally inaccurate and fatuous claim to make: this cannot be pre-determined and contractors know it. In Table 6.7, changes in vehicle movement, according to the time of day, in both construction and working phase, where vehicle volume increase in all critical places is deemed to be negligible, is totally unrealistic. Survey results are based on vehicle movements between the hours of 8:00am and 9:00am, 1:00pm and 2:00pm, and 5:00pm and 6:00pm, but this also is unrealistic: traffic flows are already heavy during, and either side of, these times. In clause 6.6.23, it is claimed that the majority of construction vehicle movement to the site will be prior to 8:00am and after 6:00pm. What sort of a 'majority' does this mean? This is impossible to accurately predict - there will be inevitable delays, delivery changes, changes in routes, breakdowns - reality is not considered. HGV operational movement is expected between 7:00am and 11:00pm, with doors to tipping hall being open, and with the bottom ash conveyor being operational between 11:00pm and 5:00am. This will create noise. These particular times relate to vehicle movement ON SITE, but this does not allow for vehicle movement OFF SITE for those vehicles getting to and from the site.

21 Pollutants listed are considerable. Clause 7.3 specifically addresses the applicant's 'desire' to separate local authority planning policy framework from the pollution control authorities. This is an attempt to tell the local authority that they can't interfere in pollution issues despite B.C.C.'s inclusion of such consideration in its current Draft Local Plan. This claim is unrealistic, immoral, and adverse to basic common sense and wellbeing. Precisely the same impact will be felt at the decommissioning stage in 40 years' time. Trade will suffer at the Fish and Eels PH due to settlement of dust and particulates. Local schools could suffer in the same way. There is nothing to show that school children, where undertaking physical activities outside ie sports day, may not have breathing difficulties.

22 In Part 8 (Noise and Vibration) there is no assessment of (potential) damage due to dramatic temperature change as a result of fire, blast, or explosion. I've seen instances where buildings have literally fallen apart in this sort of instance.

23 It is pointless in endeavouring to claim any benefit, or even discussing beneficial effects, of the removal of the facility at the end of its anticipated life span.

24 There is no actual proposal for monitoring, or the actual responsibility for, the works at the 15 year mitigation planting process.

25 With regard to Clauses 10.1.5 and 10.2.18, there is no indication that Countryside Management Service (within Hertfordshire County Council) have been consulted regarding any potential effect the development could have on the S.S.S.I. within Hoddesdon Park Wood. Nor is the Ramsar wetland site addressed which is a very particular habitat.

26 How can a desktop assessment be considered adequate or appropriate (OR SAFE) where the existence of unexploded ordnance is considered possible? There is no indication at all as to how safety measures could be put in place to protect others over a wide area. Clause 11.5.4 refers to the adoption of solid driven piling, but this can only lead to a greatly increased risk regarding any undiscovered ordnance. Clause 11.6.6 advises that earthworks could potentially disturb ground contamination, asbestos, or unexploded ordnance, and Table 11.12 identifies this risk as "very low/negligible - not significant": this is a ridiculous claim and fails to address the full extent of the risk – the potential for widespread damage could be immense If such risks were to be 'struck' during construction or ground clearance.

27 Clause 12 advises that there has been much discussion regarding groundwater, policy, legislation, NPPF and methodology and related tables, soil nature and water quality surface water runoff during construction, being managed through "temporary drainage network strategy", but deliverance of this is unclear, being "subject to change". It also needs to be identified as to how and where Thames Water could alleviate over-capacity of the sewer network should the need arise. With regard to the sewage works - several large areas of proposed housing In the East Herts local plan will be sending sewage to the Rye House works giving them a huge increase and yet it has been noticeable in Stanstead Abbotts that its capabilities have sometimes been overstretched and sewage in pipes have been backed up and raw sewage deposited on open ground.

28 With regard to Clause 14.2, details need to be provided to show how receptor of dust, dirt, noise, etc would be compensated or the results mitigated - these are seen within the application as being "not significant", and this is a totally unrealistic assessment.

29 Table 14.2 in Clause 14.3.3 list effects on Stanstead Abbotts as being insignificant, but this is totally impractical and unrealistic - the change in volume of traffic, with its associated increase in noise, will be instant and intense: noise from lorries is heard in the Stanstead Abbotts Parish from about 5:00am until 7;00pm every day. In Clause 14.3.9, it is claimed that, with noise and vibration, this factor would be no worse when taken cumulatively with operating plant in the area: this is a nonsensical claim because any increase will be for the worse. In Clause 14.3.10, it is similarly fatuous to claim that increase in noise effects from the increase in traffic will be negligible.

30. There is no evidence to show mitigation or handling of risk in terms of use of ammonia, the movement of "oversize items and ferrous metal".

31. The incinerator would be situated in a valley where the air is not immediately dispersed as it is sheltered. However, some of the emissions from the chimneys are likely to be blown towards the higher parts of the parish rather than being dispersed well above the whole parish in spite of their height. There is no consideration given to the site where the Travelling Show-people live between the railway line and the sewage treatment works. The

residents have been there for a considerable time and their site is a permanent one. Such sites are difficult to allocate and no similar size of site is proposed in the local plan for East Herts. In fact, it was very challenging for the council to locate pitches in the proposed plan.

32. There are references to the facility having the capability to have a combined heat and power function. Interestingly when I was challenging the Rye House Power Station I suggested that it should be CHP and Broxbourne councillors simply mocked the idea as they could not see who would benefit. How realistic is the suggestion - is it even a serious one?

33. We question the whole idea of Energy Recovery Facilities as there is a strong chance that recycling will have less priority-there will be a need to constantly feed this edifice with rubbish in order to keep up a continuous supply of electricity to the grid. Might this even encourage the transport of rubbish from further afield leading to even more lorry movements within this district and the consequent increase in traffic on-the roads.

34. In the initial review of possible sites in Hertfordshire the County Council rejected Rattys Lane in Hoddesdon as being completely unsuitable so that it did not reach the stage of even being compared to New Barnfield which was the first choice. What has changed?

Roydon Parish Council

Original consultation response

The Parish Council considers that the site proposed is unsuitable and argues that the impact of a facility which handles waste from Hertfordshire should be centrally located within the county, perhaps near a motorway, to avoid unnecessary HGV movements. The proposed location will, in fact, negatively affect the western edge of Essex, where the Parish of Roydon is located, more severely than any area in Hertfordshire.

The Parish Council's objections are as follows:-

Visual Impact/Light Pollution
The proposed building is, by its scale and design, visually intrusive from a large part of the Parish. It will dwarf other buildings in the area, views from adjacent towpaths and footpaths will be completely obscured and the natural, open environment, enjoyed by walkers, cyclists and others, within the Metropolitan Green Belt and Lee Valley Regional Park will be severely impacted. A site of Special Scientific Interest, Rye Meads, is also adjacent to the Veolia proposal.

Light pollution at night is also a concern as the building will be seen for miles around particularly as the Essex side of the site consists of relatively unlit countryside. The nearby settlements of Dobbs Weir and Glen Faba will be adversely impacted by the visual intrusion of such a large building both during

the day and night. Lorries entering and leaving the site via a high ramp will also contribute to light pollution.

Traffic Impact

Traffic movements to and from the plant (both during construction and when the plant is operational) will, we are told, be via the A10 but we are unsure how this could be enforced. The Roydon and Nazeing area is already severely impacted by HGV traffic heading to and from the local glasshouse businesses and these local roads, already the subject of a weight restriction which is difficult to enforce, would be unable to cope with any additional HGV traffic. It would be imperative that vehicles from the plant could not enter Essex via Essex Road/Dobbs Weir Road – roads of choice for vehicles trying to avoid Hertfordshire congestion. The proposal states that waste from other areas, across the South East and the Midlands could be accepted by the facility and this has the potential to increase, unacceptably, HGV traffic though the Roydon area.

Despite comments to this effect, it is unlikely that Veolia would be able to make use of the local rail network. This is already at capacity with the network under pressure to provide additional Stansted Airport express trains. In any event additional train movements would result in the local level crossing at Roydon being closed more often which would contribute to further traffic congestion.

Air Quality

Whilst 'evidence' is provided to show that air quality will not be adversely affected by the facility, these statements are, in fact, quite vague and not reassuring in any way. The Environment Agency appears to have admitted that pollution control devices at such incinerators can do little to prevent dangerous contaminants, in the form of ultra-fine particles, impacting human health. The identification, when waste arrives at the plant, of items which should not be incinerated is crucial to pollution concerns and the Parish Council is not reassured by the statements given.

Additionally the topography of the area – the site is located in a valley – will result is emissions sinking before being carried on the prevailing winds and being deposited on higher ground in locations such as Roydon village. In Chingford in East London, residents report a layer of dust from the Edmonton incinerator being deposited on vehicles when there is a prevailing wind. Related to this is a newspaper report which questions whether a higher than average infant mortality rate is linked to these emissions.
http://www.thisislocallondon.co.uk/news/1592749.concerns_over_infant_death_rates_in_chingford_green/

Emissions from lorries entering and leaving the site via a high ramp will also contribute to air quality issues.

Conclusion

As recently as 2015 Veolia had stated that the Ratty's Lane site was unsuitable for an incinerator facility and this site was not included in

Hertfordshire CC's waste plan. This research resulted in an application being made at a site at New Barnfield, Welywn Hatfield but this was subsequently refused by the Secretary of State. It appears that this decision re-focused attention back onto Ratty's Lane, a site already discounted for very legitimate reasons.

The Parish Council is concerned that Hertfordshire CC is not independent enough to determine this application bearing in mind its contractual obligations with Veolia and its urgent need to find a suitable waste site. In fact, the decision to re-visit a site that was deemed wholly unsuitable just two years ago is quite astounding and completely illogical. The Parish Council would like to see the Secretary of State 'call-in' this application for independent determination.

Should a decision be made to approve this application then the Parish Council would insist (S106 or similar), at Veolia's cost, on pollution monitoring equipment being installed at ground level at an agreed location in Roydon village. The information from this is to be examined on a regular basis by an independent assessor, again at Veolia's cost, and any adverse findings brought to the attention of the Environment Agency and local councils (including Parish). Veolia should then take the necessary steps to rectify the problem within a specified time or be forced to take the plant off-line.

Nazeing Parish Council

Original consultation response

At a meeting of the Full Council on 23/02/17, the Council considered its response to the above planning application.

Nazeing Parish Council strongly objects to the proposal for the following reasons:-

1. **The likely detrimental traffic impact upon Nazeing's road network.**
2. **The unsuitability of the proposed location for the facility**
3. **The health risks associated with the functioning of waste disposal incinerators**

1. Impact on Nazeing's roads

There have long been concerns about the high volume of HGV traffic using routes unnecessarily through Nazeing. Some of these vehicles have a legitimate purpose within Nazeing, as they are connected to the horticultural and nursery industry. Often however they do not, and routes through the village are used as a short cut or misdirected via Sat Nav devices from M25, M11. This traffic travel via the B194, through the centre of Nazeing, North St and via Dobb's Weir Road in order to reach Essex Rd / Pindar Rd / Rattys Lane i.e. the road location of the proposed incinerator. Nazeing's road network is of rural narrow roads, which are mainly residential, totally unsuitable for this type of traffic. Significant traffic flow problems are also

frequent along the M25, at Waltham Abbey J26, or J25 Enfield, causing diversions through Nazeing.

The planning documents state that the vehicles associated with the incinerator (almost 300 per day and night) will use Essex Rd/ A10, to reach the M25/ M1. The documents state that a 7.5 tonnage restriction is in place along the route described via Dobb's Weir Road + via Nazeing. (AECOM Trip distrib. P7.2.2.)

The documents describe the route of choice i.e. A10, A1170 out of Hoddesdon as being subject to a 'routing agreement', which is expected to be formalised as part of a S106 agreement. However, it doesn't say how on a day to day basis this would be enforced. There are already in place an environmental restriction for the route via Dobbs Weir Rd and Roydon, but Nazeing residents will be acutely aware that this arrangement has long been in place, with virtually no enforcement whatsoever. The document also says that there would be exceptions to this 'agreement' for journeys involving RCVs and local (BBC) waste.

The situation is likely to become much worse with the predicted 300 lorries travelling to and from the incinerator. Additionally, a waste facility is already in place and due to be started up (Trent) adjacent to the proposed incinerator. We understand that this will generate up to 80 lorries per day. (PL/0287/10) Summary doc.

2. Unsuitability of the Proposed location

Rattys Lane, Hoddesdon is in our view, a most unsuitable location for the incinerator. It is on the southernmost point in Hertfordshire, adjacent to the Essex border. And as such will generate the travelling of vehicles collecting and delivering waste to feed the facility from the length and breadth of Hertfordshire, when a more central location within the county, adjacent to a major motorway network is needed. This point was noted by the inspector during the examination into the hearing re the New Barnfield site in 2014 (P969).

The rationale for the proposed facility appears to be flawed i.e. it is argued that this will be the means by which
a) Hertfordshire deals with its own waste, rather than transporting it outside of the county, thereby incurring unnecessary journeys. And that the proposed arrangements will reduce vehicle kilometres by not travelling outside of the county (AECOM P6.1.6) and
b) Remove the need for landfill. Whilst land fill is not to be encouraged, surely incineration will discourage higher rates of recycling?

However, we understand from the documents that Hertfordshire alone will not generate enough household residual waste to keep the facility 'fed' 24/7, at least in the early years and possibly beyond, necessitating journeys to and from locations such as Colchester, Cambridge, Northampton and Basildon. Three of these locations at least have the potential to generate HGV traffic

with a more direct route through Nazeing. There is nothing in the documents that describe how this scenario would be avoided.

The potential to transport waste/ residual waste by rail rather than road also appears to be a ‘red herring’. The inspection report into the New Barnfield application mentions that ‘the site itself does not have direct access to the rail network’ (P971).

Whilst the D+A document (Dec2016) describes a smooth picture of rail access, (P50). The Environment Statement (also Dec 2016) (4.5.11) it is stated that ’Due to temporary unavailability of rail services, it may be necessary to transport IBA waste by road during the lifetime of the incinerator! (ERF)’. Additionally, it is understood that the railway sidings at the site are earmarked for the Crossrail extension into Hertfordshire. This is not encouraging if we are to be optimistic about the potential to reduce road journeys generated by the incinerator.

Whilst the location is in Hertfordshire, the Essex Road highway is a frequent nearby route for residents of Nazeing travelling to Hoddesdon. The traffic and transport documents in the application acknowledge that the road network local to the site is problematic i.e. (AECOM 10.1.11/12/13 Page 59 that during consultations for the application, concerns were raised regarding capacity and resilience issues. And that HCC highways agency advised that this is a long standing capacity and resilience issue of which they are aware, for which HCC are likely to request funding towards a solution. But are not able to make commitments based on any such funding as to the road networks suitability to support the application.

Other documents within the application use a methodology that result in figures such as 2.5%, 2.2% and 1.7% as predicted increases in traffic movements along the main sections of the vehicles travelling to and from the incinerator. And conclude that despite these concerns, ‘the results show that the proposed development specifically will have only a very small impact on the highway network over and above the existing capacity issues (AECOM 10.1.11) Or (AECOM 6.1.11p11) the development is considered unlikely to significantly increase delays experienced by drivers’. This is not the traffic condition that regular travellers along this route, particularly during morning and afternoon peak times are likely to be confident about. And considering that the majority of vehicle movements will take place between 7am and 7pm (HCC summary) this is also not encouraging.

HGV movements via Rattys Lane and the northern roundabout are predicted to increase by 270%. Given that this route is used currently by HGV vehicles within this area, it is difficult to see that there will not be traffic congestion / ‘backing up’ issues to this roundabout. With this point on the vehicle route into the incinerator depot, the likely congestion, backing up and vehicles waiting, these vehicles are likely to be prone to leakage of their contents on to the highway, resulting in conditions that are conducive to the presence of insects and other hygiene hazards.

Also, the site is adjacent to Lea Valley Regional Park Green Belt land, Rye Meads, a site of Special Scientific interest and residential buildings and the nearest residential building being 20m from the site (lock keepers house). Whilst the incinerator site is not Green Belt land itself, it is adjacent to the Green Belt areas mentioned above. Much of Nazeing is contained within the Regional Park, with numerous views part of the surrounding landscape. These will be seriously harmed should this proposal takes place, particularly the views from Clayton Hill, where there are views right across Hoddesdon.

3. The health risks associated with the functioning of Incinerators

The arguments against incinerators can be summarised as:-

- Extremely injurious matter needs adequate disposing off. This requires additional miles and need special locations for land fill
- Concerns are still current about emissions of furans and dioxins, the chemicals produced by incineration (and most deadly)
- Incinerators are producers of heavy metals, which are injurious, even in small amounts
- The upheld view is to recycle, reuse and waste reduction instead of incineration (wr.found.org.uk/articles/incineration.html)

The incinerator will be sited within a Valley (the Lea) where any pollutants will be encouraged to remain, with the presence of harmful chemicals within the atmosphere, affecting the air quality of the surrounding area. Various documents in the application acknowledge the presence of pollutants from the incinerator, but conclude in various places that the levels are acceptable or well below harmful levels. Eg ' (P22 non tech summary 7.1.7) Emissions to air from the stacks during the operation of the facility would resulting emissions at an acceptable level with regard to existing local air quality and ambient air quality standards' Or, Environment Statement 7-45) the combined impact of road traffic emissions and stack emissions is predicted to have an overall negligible effect on local air quality (7.11.6).

For people in Essex particularly, when the prevailing wind direction is south westerly, as is usual, the pollutants are likely to affect the population of Dobb's Weir, Roydon, Nazeing and Harlow. The incinerator could potentially affect over 100,000 people who live nearby in Hoddesdon and Broxbourne as well as Dobb's Weir, Roydon, Nazeing and Harlow.

The issues around traffic and the pollution caused by HGV diesel fumes is very current, nationally, particularly regarding nitrogen dioxide. Numerous recent studies have concluded that this is harmful to health. It is difficult to believe that the predicted increase in volumes of traffic by HGVs over time will have no significant impact on air quality in the location of the incinerator, and the health of residents. The documents conclude that the levels of any pollutants will be 'negligible' but the WHO states that 'there is not adequate evidence to establish a threshold for either short or long term exposure to Nitrogen Dioxide.(WHO Europe 2003)'.

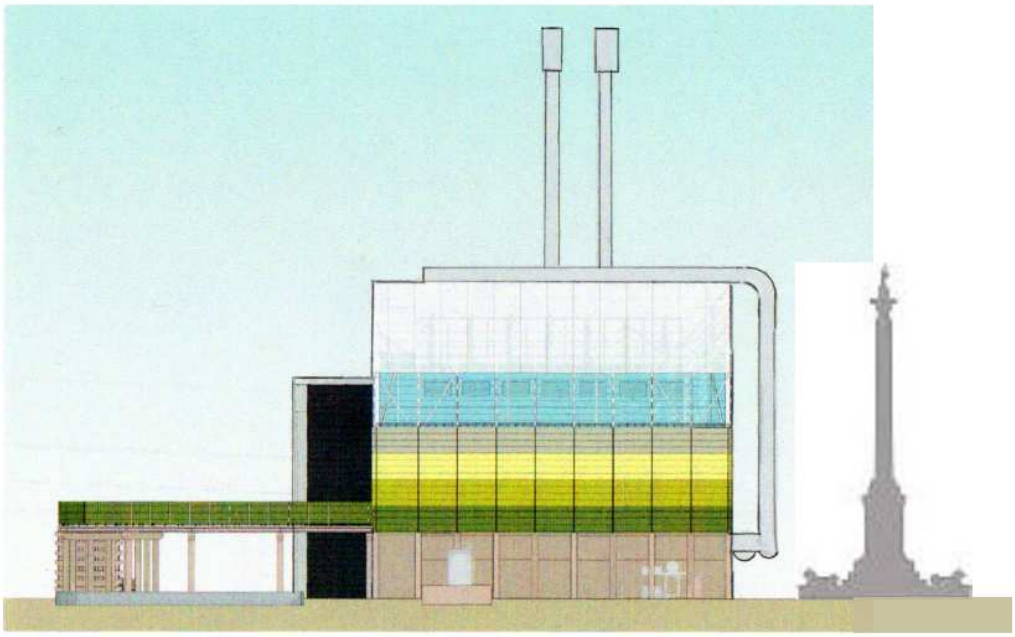
Emissions from incinerators

Incineration, even when it produces energy, burns resources and harms health. Remember; Dioxins are not present in the waste, they are created by the burning process! Studies suggest that there is a statistically significant increase in the risk of dying from cancer in towns near incinerators (http://ukwin.org.uk/resources/health.).

Incineration produces a vast amount of Carbon Dioxide, which plays a significant role in climate change, as a greenhouse gas. It has been observed that almost everything that has carbon in its composition is when processed by incineration evolves out as carbon dioxide. (www.wrfound.org.uk/articles/incineration.html).

Some incinerator emissions are trapped in filter bags. However, the smallest are not (PMs). Information reported by Veolia itself showed that filter bag efficiency was 95% - 99% for PM10s, 65 – 70% for PM2s and only 5 -30% for those smaller than 2.5microns. And sometimes filter bags tear. A major incident was reported by the ‘Sunday Herald’ in 2001, which lead to the Dundee Energy Recycling Ltd filing a report with Scottish Environment Protection Agency. The agency reported that ‘a lot of black dust had poured from the incinerator for an hour after filter bags suddenly burst’. The pollution emission dials went off the scales, so there were no reading for the amounts discharged. The filter bags were reported to be new. (www.netpark-ltd.co.uk/bbac/Press-Cuttings-SH.htm+6).

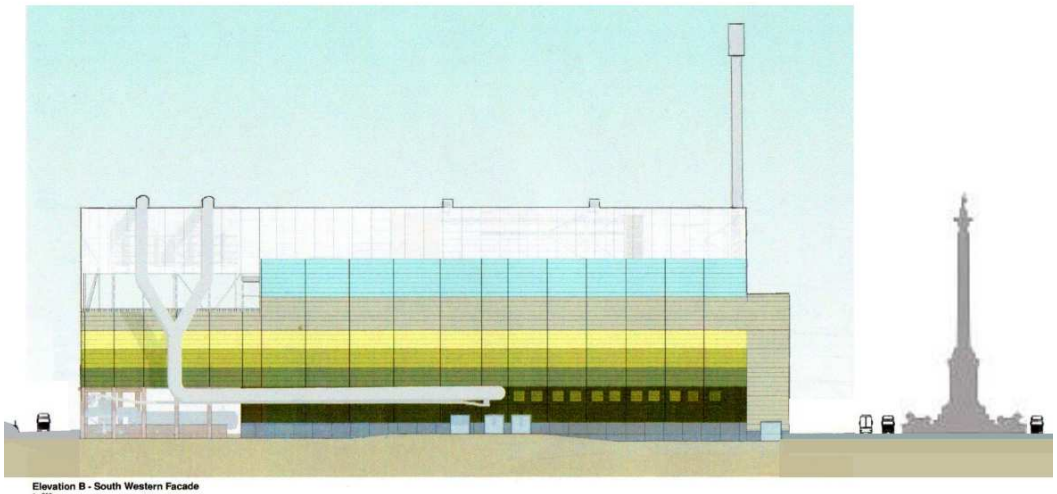
The reasons described above are those upon which Nazeing Parish Council urges HCC to think again, concentrate on industrial scale recycling, or Gasification, and reject this proposal .This response is, obviously from a Nazeing perspective; and it is very disappointing to note that no consideration for Essex residents has been given by this planning application, even though we are on the doorstep of the incinerator and will be greatly affected by it in various ways for years to come.



Elevation C - North Western Facade
1 : 250

VEOLIA - RYE HOUSE ENERGY RECOVERY FACILITY I.E. INCINERATOR

VIEWED FROM THE NORTH WEST (i.e. across the railway line)
AND
COMPARED (at the same scale) WITH NELSON'S COLUMN



Elevation B - South Western Facade
1 : 250

VEOLIA - RYE HOUSE ENERGY RECOVERY FACILITY I.E. INCINERATOR

VIEWED FROM THE SOUTH WEST (with the railway line to the LHS)
AND
COMPARED (at the same scale) WITH NELSON'S COLUMN

Epping Forest District Council

Original consultation response

Epping Forest District Council would like to make the following comments for you to take into consideration in your decision making.

Visual Harm

The building itself is going to be 48m high, which together with its extensive footprint and scale will be a substantial mass of a building that will have a harmful visual impact on the landscape, as seen from the open countryside to the south and east in Epping Forest District Council and the adjacent Lee Valley Regional Park. This land beyond the site is part of the Metropolitan Green Belt and includes a SSSI. The proposal will appear too conspicuous as viewed from the Green Belt and countryside, not only because of its bulky appearance but the night montages and elevations submitted with the application reveal the top portion of the building to be brightly lit. This is because it will be finished in an opaque polycarbonate that will not contain the light inside the building but will allow light to escape and penetrate across the adjacent relatively unlit countryside. There is real concern that it will look like a glowing beacon. The Lock Keepers House is only 20m east of the site!

The proposed two exhaust stacks are significantly higher than the proposed building and at nearly 87m high, will be seen in addition to the two existing stacks at the adjacent power station, which already dominate the skyline. These additions will add further visual intrusion into the surrounding area and beyond to the detriment of the appearance of the area.

The proposal will push the existing substantial built development of Ratty's Lane further towards the comparatively more sensitive outdoor recreation and open countryside to the detriment of that area and this part of Epping Forest DC.
Finally on this light issue, lorries entering and leaving the site would once inside be required to drive up and down a ramp. This ramp is high and lorry headlights at this height will cause further light pollution into the adjacent countryside.

Road Traffic

It is estimated that there will be 300HGV movements a day in addition to the existing adjacent waste facility (Trent Development) that in itself will be generating some 80 lorry movements a day. Assurances that the site will be reached via Essex Road have not, in the experience of Epping Forest residents in this part of their district, been followed in the past , particularly when there is congestion or an incident on the M25 or A10 that forces traffic to come eastwards. There is real concern that the traffic situation will worsen. The village of Nazeing in our district could be hardest hit, when at commuter rush hours, the crossroads are already heavily congested. Local residents have little faith in the assurance that HGV's serving the site will use Essex Road and still could seek instead alternative exits through Dobbs Weir Road through villages and surrounding areas around Nazeing and Roydon. A routing agreement through the use of a Section 106 legal agreement is imperative, should the planning permission be granted, but this is going to be extremely difficult to enforce by the Herts County Council and therefore I question what resources they have available to monitor this.

There is also strong concern that waste may be brought here from other Counties and districts, thereby adding further traffic movement, congestion and fume pollution to that already estimated. There would be no enforceable planning controls to prevent this from happening.

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Finally on this issue, even during the construction period (37 months!) lorry movements and disturbance to residents will be high over a prolonged period. It is important that road signage is required to ensure that HGV traffic does not go through Dobbs Weir to the east, as the road is also not considered to be appropriate for such heavy usage and there is of course a 7.5 tonnage restriction in place via Dobbs Weir Road, which they need to be made well aware of. If this can be done and assured, then HGV traffic movement through Epping Forest District should be avoided.

Train Movement

Removal of the IBA (ash) along the adjacent rail line will result in four train passes a day that will run to Harlow Mill and back. They are likely to be slower trains, but not withstanding this, it will result in further closure of the level crossing to the east at Roydon Station in Epping Forest District. As a result, there will be further undue delays to those currently experienced on the High Street as traffic waits to cross. Cars idling as they wait for the crossing to open will add fume pollution to the detriment of the local residents and frustrating traffic congestion to residents and users of this part of Roydon.

Pollution - General:

Commercial greenhouses, which grow salad crops are located to the east of the application site in our district. These are a sensitive receptor to air pollution, especially to dust as this can destroy crops as well as prevent light getting into the greenhouses, which will retard crop growth. Epping Forest District have considerable concern that the proposal will have a detrimental impact on these businesses.

The Environmental Statement alludes to the dust particles being created by the development being of the larger fraction and therefore not posing a threat to human health. Whilst many of the particles may be of this larger fraction, dust will also include particles within the PM2.5 and PM10 range, and therefore there will be an impact upon human receptors.
It is noted that the operation of this facility will require a permit issued by the Environment Agency in respect of air quality, and this Council would request that it is consulted with regards to the permit at the appropriate time.

Pollution - Construction Phase:

Prior to the commencement of demolition and construction works on site, the name of a contact person and their mobile telephone number (which shall be in use at all times the works are ongoing), should be made freely available to local residents so that they are able to contact a responsible person and get an immediate response in the event of being affected by noise, dust and odour. The contact details should be available on the developer's website, on signage at the perimeter of the development, and should also be contained in a letter sent to the residents that are considered to be impacted by the development.

Dust mitigation measures in the Environmental Statement refer to the deliveries of significantly dusty materials during the construction phase. Any such materials should be kept in enclosed containers so as to avoid wind whipping and potential off site migration.

During the demolition of existing buildings and construction of the new installation, there is increased potential to create dust on site. Due to the close proximity to Epping Forest District Council's area, we would wish to see a condition of the development that prevents any visible dust emissions leaving the perimeter of the site.

We would wish to see off site monitoring to demonstrate that dust has not migrated off site during the development phase of the project. This should be undertaken by the developer and the results provided to the local authority.

In order to obtain a base level for particulate pollution, monitoring should commence at least 3 months prior to the commencement of development.

Also, we would wish to see that all machinery used in the development of this site is chosen to ensure that pollution is reduced to the minimum level by using the best available technology at the time that development is undertaken. All non road machinery used should also be maintained regularly in order that it has efficient operation which will assist in the further reduction of pollutants.

Pollution - Operational Phase:

The closure of the "fast closing doors" to the ERF plant must be completed prior to the tipping of waste so as to contain as much odour and dust within the process building as possible.
The report refers to the Incinerator Bottom Ash being removed from site by covered lorry. Any material that has potential to release dust into the atmosphere should only be taken by road in a fully enclosed vehicle.

Storage of IBA on site should be in enclosed areas so as to avoid dust entrapment and migration off site.

A robust plan should be in place to address any unforeseen breakdown of equipment, and to ensure that emissions do not breach permitted limits.

Operations should be timed so that vehicles do not have to wait on the access roads prior to depositing the waste materials. Otherwise this practice may lead to odour complaints and would also result in the idling of vehicles, therefore creating additional pollution.
Taking into consideration that this installation will not be operational until 2021, it is felt that all vehicles associated with it, both on site and those depositing waste, should have engines thatmeet the requirements of Euro 6 standard or better. Where possible, the on site fleet should consist of vehicles that use sustainable power. Any non road machinery should be selected using the best available technologies and maintained regularly so that it has the smallest possible impact upon the local environment.

The information provided states that the use of diesel power for operations will not be in excess of 200 hours per year. If there is a likelihood of this limit being exceeded in the future, a strategy to reduce the reliance on this method, using sustainable energies should be found without delay.

Summary

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Epping Forest District object to this application. It is not considered that this is a suitable location for the Energy Recovery Facility, being right on the edge of our district, the Green Belt and a SSSI. There is pollution concerns, control on HGV movement that needs strictly enforcing and the building is far too excessive in size such that it causes visual harm to this part of Epping Forest District from where it will be too conspicuous.

It is disappointing that where we are all generally being encouraged to show duty to cooperate between Councils, that there has been no pre-planning application discussion with our authority over this proposal, until now, when the planning application is fully detailed out.

Essex County Council

Original consultation response

Thank you for the opportunity to respond to the above planning application. Please accept this reply on behalf of Essex County Council (ECC) as neighbouring Waste Planning Authority and neighbouring Highway Authority.

ECC as adjoining Waste Planning Authority

From a waste planning position, ECC is a neighbouring and strategic authority within the definition of the Duty to Co-operate S110 of the Localism Act 2012 and Section 30 of the Planning & Compulsory Purchase Act 2008. The proposed development intends to manage Hertfordshire's residual municipal waste remaining after re-use, recycling and composting initiatives have taken place.

You will be aware that ECC and Hertfordshire County Council (HCC) completed a memorandum of understanding (MoU) between the Waste Planning Authorities of the East of England on 19 April 2016. The MoU, amongst other matters, aims to ensure that planned provision for waste management in the East of England is coordinated as far as possible whilst recognising that provision by the waste industry is based on commercial considerations.

The proposed development would allow Hertfordshire to manage its own municipal waste arisings with the county and therefore help meet the ambitions of the MoU for waste planning authorities to become net self-sufficient for their own waste management needs, something that is supported by ECC.

ECC as adjoining Highway Authority

ECC as adjoining Highway Authority has assessed the submitted information and has concluded that, amenity impacts aside, there will be no detriment to highway safety, efficiency or capacity within Essex as a result of the development. The application is very specific that no HGV's will be accessing the site from Essex or vice versa. The only vehicles likely to use Dobb's Weir Road are potential employees which the Transport Assessment (TA)

demonstrates would be negligible, during the construction phases and at full operation of the site.

In terms of specific HGV routeing, Dobb's Weir Road is subject to a 7.5T weight restriction and as such no HGVs will be routed along it – the enforcement of which is the responsibility of ECC. Appropriate signage is currently in place for the above mentioned 7.5T weight restriction and it is not thought any further signage in Essex is necessary as part of this proposal.

The majority of HGVs would arrive from and depart to the A10 (using the A10 spur, A1170 Dinant Link Road, Essex Road and Ratty's Lane). The drivers of the HGVs would either be working for Veolia or obliged to adhere to site rules and a routing agreement which will be in place for them to follow. I would expect this to be formalised as part of the Section 106 Agreement of the planning consent. Further to this a specific construction routeing agreement should also be considered for the same reasons.

Consequently from a highway and transportation perspective ECC as adjoining Highway Authority has no justification in raising an objection to the proposal as it is not contrary to the Highway Authority's Development Management Policies, adopted as Essex County Council Supplementary Guidance in February 2011.

Wider local and environmental concerns

You will be particularly aware that the planning application has provoked considerable local opposition from Essex residents, especially those living in close proximity to the site.

In this respect ECC seeks your assurance that HCC, as Waste Planning Authority, will fully consider the application in detail and assess all the potential environmental impacts before making a decision. Such impacts I have been made aware of include the design, large scale and mass of the facility, including the stack height, and the impact the development would have on the locally sensitive landscape in Essex and Lea Valley Regional Park. Furthermore, the impact of emissions from the facility should be fully considered and assurances provided that there would be no detrimental health impact upon Essex residents. This is especially pertinent given the prevailing winds are likely to disperse emissions towards Essex. I have also been made aware that there are significant local concerns about the impacts of heavy traffic in the surrounding area and the potential adverse impacts on amenity this could have.

It is fully appreciated that your authority will need to balance all relevant material considerations to fully inform your decision. However, I would respectfully request that any harm caused by the development on Essex and its population is given significant weight, including any potential impacts upon health, landscape and local amenity.

I have had sight of the submissions made by district councils in Essex. These identify a range of critical concerns as listed above. Given the range and gravity of these issues we will look for detailed explanation from HCC as to how each are being addressed. While we support the wider planning principle of achieving net self-sufficiency for Hertfordshire's waste we question the ability to shape this plant and location in ways in which ensure these fears are sufficiently allayed.

Canal & Rivers Trust

Original consultation response

The Canal & River Trust (the Trust) is the guardian of 2,000 miles of historic waterways across England and Wales. We are among the largest charities in the UK. Our vision is that "living waterways transform places and enrich lives". We are a statutory consultee in the development management process.

The Trust was consulted at the pre-application stage in 2016, and made comments regarding the proposal. We understood that an earlier EIA had been submitted, but the Trust were not consulted on this.

The Trust has reviewed the application. This is our substantive response under the Town and Country Planning (Development Management Procedure) (England) Order 2015.

The main issues relevant to the Trust as statutory consultee on this application are:
a) Impact on the character and appearance of the waterway corridor.
b) Impact on the water quality of the waterways due to the drainage proposals
c) Impact on the biodiversity of the waterway corridor.

On the basis of the information available our advice is that permission should not be granted due to the impact of the proposed development on the character and appearance of the waterway corridor. However, should the County Council be minded to grant planning permission, suitably worded **conditions and a legal agreement are necessary** to help mitigate against these matters. Our advice and comments are detailed below*:*
The Trust owns and manages the River Lee Navigation, and the adjacent Fieldes Weir Lock, as well as the nearby River Stort, to the east of the site. We also manage some facilities for visiting boats on the towpath here, such as an elsan, fresh water point, and a refuse point.

a) Impact on the character and appearance of the waterway corridor

Scale and Position of the Proposed Building
The development of the new building, its chimney stacks and the raised lorry ramp, will have a significant visual impact as seen from the River Lee Navigation, the River Stort and the towpaths of both watercourses. This location is particularly significant at the downstream end of the Stort, which forms a well-used gateway to the river for visitors (both on the water and the

towpath). It is also recognised in the "Stort Valley Meadowlands" project, a forthcoming Heritage Lottery Fund (HLF) bid, as part of HLF's Landscape Partnership initiative, led by Herts & Middlesex Wildlife Trust in partnership with the Canal & River Trust. Views from this lower section of the Stort are important in setting the river in its valley and landscape context.

The development would also dwarf the adjacent lock cottage and lock, which are valuable heritage features associated with the canalised river landscape of the Lee Valley. Despite there being no formal heritage designations in this location, it is clearly a key focal point on the canal network, and is at a point where there will be a level of 'dwell time' due to boaters having to navigate the lock.

Position of Proposed Lorry Access Adjacent to the River, and Landscaping
The proposed lorry access road, and weighbridge office, are proposed very close to the boundary with the River Lee Navigation and its towpath. A buffer of existing trees and an earth bund helps to screen the site from the river, which helps retain the important character of the river corridor, as a sylvan and rural environment. The proposed Outline Landscape Scheme shows a reduced strip of 'existing woodland' between the boundary and the road and weighbridge structures, which, as the application documents demonstrate, will not be enough to provide sufficient screening, resulting in a significantly adverse impact on the character and appearance of the river environment.

The supporting statement submitted with the application advises that "Although not within the Green Belt, the impact of the proposed ERF building on the openness of the Green Belt has been assessed as part of the EIA. The Landscape and Visual Impact Assessment (Chapter 9 Landscape of the ES) states at paragraph 9.9.3: "Retention of much of the existing tree and shrub belt along the east and north-east boundary, both within and adjacent to the Application Site, would maintain a landscape buffer along the 'Waterway Corridor' identified in the Lee Valley Regional Park Plan, and the Metropolitan Green Belt identified in the Broxbourne Local Plan. The existing buffer combined with additional planting would assist the Rye House ERF to be integrated into the Waterway Corridor and maintain the character and appearance of the countryside of the Lee valley, preserving the openness of the Green Belt."

The Trust does not consider that the retention of much of the existing buffer would be sufficient to protect the waterway corridor from the impact of the proposal. This is illustrated in the photomontage view of the proposed development from the southern end of the River Stort (Figure 9-25). The development stands well above the trees and dominates the landscape.

In our pre-application comments to the applicant, we queried if there was scope for the access road and weighbridges to be moved further north, to allow a better landscape buffer to be created. We consider that this alone is unlikely to be sufficient to overcome the adverse impacts of the proposal but if the Council is minded to approve such a form of development in this location then we would suggest that this may be one way of reducing the impact.

Other means of reducing the impact may include breaking down the overall mass and scale of the building and providing a higher quality exterior appearance. We are highly sceptical that the polycarbonate sheet cladding system would as, the applicant suggests, lead to the building being “perceived as being smaller than it is in reality and, above all, more in harmony with its surroundings… (and) help to erase scale references allowing the eyes to scale the building in the wider landscape". Again, we do not suggest that these amendments would be sufficient to overcome our objection.

Although we do not consider that in its current form, the proposed layout or landscaping scheme would be sufficient to overcome the development’s impact on the river corridor, we have nonetheless suggested a planning condition, below, for details of landscaping to be submitted should planning permission be granted. It is also important that the existing trees be retained, as these are well established and appear tall enough to provide some (albeit insufficient) coverage for the proposal.

In its current form, however, the Trust considers that the proposal fails to comply with Policies HD14, HD17 and HD19 of the Broxbourne Local Plan 2005, and Policies 18 and 19 of the Hertfordshire Waste Core Strategy and Development Management Policies Document 2012, by virtue of the scale and position of the proposed development. Policy HD14 requires development to maintain or enhance the existing character of the area, Policy HD17 requires development to respect existing natural features that contribute positively to the character or appearance of the area, and HD19 states that permission will not be granted for development that would have a materially detrimental impact on the character of waterside green chains. Policy 18 of the Hertfordshire Waste Core Strategy requires that waste management proposals will be permitted where it can be demonstrated that they would not have an irreversible adverse impact on the character, appearance, ecological, geological and amenity value of the Lee Valley Regional Park. The site abuts the boundary of the Lee Valley Regional Park, which includes the waterway corridor. Policy 19 requires that development proposals should protect and enhance existing woodland, trees and hedges through improved management and new planting, so as to recreate a suitable landscape and habitat, and include measures to minimise visual intrusion and any adverse impact on the local landscape and countryside. Substantial changes would be required before the proposal could be said to comply with these policies.

We suggest the following reason for refusal: “The proposed development, by virtue of its scale and position, close to the River Stort and the River Lee Navigation, would have a significantly adverse impact on the character and appearance of the waterway corridor as a valuable landscape feature, and therefore fails to comply with Policies HD14, HD17 and HD19 of the Broxbourne Local Plan 2005, and Policies 18 and 19 of the Hertfordshire Waste Core Strategy and Development Management Policies Document 2012.”

Ratty’s Lane Car Park

This existing car park, close to the application site, is an important facility and focal point for people accessing the River Lee Navigation and the start of the River Stort. The Trust needs to retain access to the lockside with heavy plant for maintenance of the lock structure, but the car park (not owned by the Trust) is in poor condition and is uninviting. Access gates have also been installed across the towpath (not by the Trust) and these should not restrict access for our customers or operational requirements.

Towpath
The Transport and Movement report highlights the convenience of the adjacent towpath for access between the site and Rye House rail station for walking and cycling. If permission were to be granted, despite our objection, the towpath should be enhanced to mitigate for this increased use by employees and visitors to the site, and we have suggested this, below. We would want to discuss the terms of this planning obligation further with the Council if it indicates that it is minded to grant permission for the proposal

Mitigation Improvements to the Waterway Corridor
Should the County Council be minded to grant planning permission for the proposal, we consider that local environmental improvements would be required to help mitigate the impact on the wider waterway corridor. These could be secured by way of a S106 agreement, and should include:
 Improved landscaping screening to the waterway corridor;

 Improvements to the car park adjacent to the Lee Navigation, at the northern end of Ratty's Lane;

 Improvements to the towpath between the Ratty's Lane access and Rye House rail station;

 Improved rubbish disposal facilities on the towpath;

 A financial contribution towards the "Stort Valley Meadowlands" project, a forthcoming Heritage Lottery Fund (HLF) bid, which will be in partnership with the Canal & River Trust.

b) Impact on the water quality of the waterways due to the drainage proposals.

Should planning permission be granted for the proposed development, during the operational phase it appears from the drainage diagram submitted that drainage from the IBA building and associated yard, and wash-down water, will drain to a sedimentation tank, which we assume will then discharge to the foul sewer. Drainage from the roads and yards will drain to full retention Class1 oil separators, and then be discharged to the river. In addition, the fuel delivery area will drain to a forecourt separator, which will drain to the river also. These arrangements appear adequate in principle. The Trust requires that the Environment Agency's Pollution Prevention Guidance 3 on oil separators is followed. Although this guidance has been withdrawn by the Environment Agency, it is still used by the Trust to establish the required standards of pollution prevention for discharges entering its waterways.

We would like to see some further information regarding the proposed site drainage, and ask that the applicant submit confirmation that:
• the selected separators are of the type specified and are sized in accordance with PPG3 (shown via submitted calculations);
• adequate silt storage is provided for;
• sufficient access points in the design is provided to allow for inspection and cleaning of the interceptors' internal chambers;
• the separators are labelled above ground;
• there is an adequate maintenance procedure for the separators;
• the surface water pipework is constructed of material that will prevent the permeation of contaminants from the soil and groundwater into the surface water drainage system.

The Trust will require this information to be submitted before we will agree any discharge of surface water into the River Lee. We would suggest that the Council should, by way of a suitably worded planning condition, also not allow any discharge of surface water into the River Lee until further details of the pollution control systems have been agreed in writing by the Council. We would want to be consulted on any application to discharge such a condition.

The information submitted with the application also highlights that there is soil and groundwater contamination on site. Therefore, we would suggest that the following should be secured in accordance with our proposed condition:
• That no surface water (either via drains or surface water run-off) or extracted perched water or groundwater is allowed to be discharged into the canal during the demolition/construction works;
• Any existing surface water drains connecting the site with the river need to be immediately capped off at both ends for the duration of the demolition & construction works – i.e. at the point of surface water ingress and at the river outfall.

We would also suggest that any stockpiles of soil from the site are located at a suitable distance away from the canal and suitable methods are used to minimise dust emissions from the site during demolition/construction. This should be secured by condition, including through a requirement to prepare a Construction Environment Management Plan, in order to protect water quality of the River Lee.

c) Impact on the biodiversity of the waterway corridor

Lighting
The proposed development will emit more light (during the night time) than the existing building, despite the lighting mitigation measures being made in accordance with 'Bats and lighting' (low level lighting to reduce spill). The development and access road/ramp are only buffered by a narrow corridor of (mostly deciduous) woodland adjacent to the river, which may disrupt species sensitive to light and noise such as bats, which have been recorded on site. A clearer version of the lighting plan in Appendix A of the Lighting Strategy would allow us to evaluate the proposal properly, and we have requested a

condition, below, for a further lighting strategy to be submitted, with further mitigation measures to limit the potential impact on sensitive local species. This could include baffling of external light fittings, and a management plan to require external lighting to be turned off when not in use, potentially with motion sensors, for example, or another method to reduce light pollution when vehicles are not using the access road and ramp.

Other Matters
Waterborne Freight
Policy 9 of the Hertfordshire Waste Core Strategy and Development Management Policies Document 2012 states that support will be given to transport by water, but the Transport and Movement report in the submission does not consider use of the waterway for transport of waste material or residual ash waste.

In addition, the Trust collects river weed from the waterways that blooms in summer and could otherwise adversely affect navigation and amenity of the waterway environment for all customers. This is currently collected in barges and then taken by road to a waste transfer station. Subject to managing pedestrians, cyclists, boaters and anglers on the towpath, there may be opportunities for the Trust to offload this material directly to the proposed ERF from the Navigation.

Moorings
The towpath is open for any boats to moor against for up to 14 days, and these could be occupied as a main residence with a 'continuous cruiser' licence with the Trust. There are other (non-towpath) moorings in this area too. The waterway should therefore be a sensitive receptor in terms of the potential impact on boaters. In particular, boat dwellers can be sensitive to noise, given that boats are not as insulated as a house, for example.

Conclusion
The Canal & River Trust do not support the proposal, which we consider will have a seriously detrimental impact on the character and appearance of the waterway corridor, and we have suggested a reason for refusal, above. However, if the County Council is minded to grant planning permission, it is requested that the Council contacts us to discuss the proposed planning obligation and that the following conditions and informatives be attached to the decision notice:

Conditions

Drainage and Contamination
a) No surface water shall be discharge to the adjacent watercourse until a revised drainage strategy has been submitted to and approved in writing by the Local Planning Authority.
b) Prior to commencement of the development hereby permitted, a Construction Environmental Management Plan, demonstrating, amongst other things, where stockpiles of soil will be stored and how dust emissions from the

site will be minimised, will be submitted and approved by the Local Planning Authority.

Reason: To ensure that there is no adverse impact on the water quality of the adjacent watercourse. The Construction Environment Management Plan is required prior to commencement to ensure that adverse impacts from the demolition and construction phases are avoided"

Landscaping
"Prior to the commencement of the development hereby permitted, details of a landscaping strategy shall be submitted to and approved in writing by the Local Planning Authority, and implemented in accordance with the approved details. Information submitted shall include details of soft landscaping along the eastern boundary of the site with the towpath of the Lee Navigation, and details of any other boundary treatment. Reason: To ensure that the visual impact of the proposal when viewed from the waterways, including the River Stort, is appropriately mitigated."

Lighting
"Prior to the occupation of the development hereby permitted, details of a lighting strategy shall be submitted to and approved in writing by the Local Planning Authority, and implemented in accordance with the approved details. Information submitted shall include details of measures to reduce the use of external lighting when not required, and to reduce light pollution towards the river corridor. Reason: To ensure that light pollution from the site is mitigated and has no significant impact on the biodiversity of the waterways."

Informatives
*"The applicant/developer should refer to the current "Code of Practice for Works affecting the Canal & River Trust" to ensure that any necessary consents are obtained (*https://canalrivertrust.org.uk/business-and-trade/undertaking-works-on-our-property-and-our-code-of-practice)."

"The applicant/developer is advised that any encroachment or access onto the canal towpath or other Trust Land requires written consent from the Canal & River Trust, and they should contact the Canal & River Trust's Estates Surveyor, Jonathan Young (jonathan.young@canalrivertrust.org.uk) regarding any required agreement."

"The applicant/developer is advised that any drainage to the Navigation requires written consent from the Canal & River Trust, and they should contact the Canal & River Trust's Utilities team for more information (nick.pogson@canalrivertrust.org.uk)."

In addition, in order for the Canal & River Trust to monitor our role as a statutory consultee, please send me a copy of the decision notice and the requirements of any planning obligation.

Further consultation response

The Trust has reviewed the amended details, and note that there are no proposed amendments that would change our previous comments. These, therefore, still stand, and the Trust maintains its objection to the proposal. In fact, we note from the 'Outline Landscape Scheme' drawing number 60493630-PA05 rev B, that areas of existing woodland within the site, previously proposed to be retained, are now proposed to be removed and replaced with wildflowers, to create a flood water storage area. This would remove tree cover from around the proposal and we therefore consider the visual impact may be worsened by the amendments.

We also note from the 'Outline Landscape Scheme' that there are some small changes proposed to the entrance to the site and the car park adjacent to the towpath. These appear to obstruct the car parking area further, by moving the boundary treatment to the south of the grasscrete area, rather than alongside the road access within the application site, and a pedestrian gate being installed. The details are not clear, however, but we are keen that the car park facility is not adversely affected, as this is a valuable resource for our customers visiting the river.

The Hoddesdon Society

Original consultation response

The Hoddesdon Society strongly objects to the proposed Rye House ERF and reserve the right to submit further evidence prior to the DCC committee meeting.

Abstract
Our grounds for objection are based on NPPG and NPPF, Herts. CC Waste Local Plan 2012 – 2026, Herts CC Transport Plan, Broxbourne Local Plan and Hoddesdon Business Park Improvement Plan 2013.
National Planning Policy Framework 2012, which is a material consideration in planning decisions [para. 2] acknowledges that your WCS should accord with national policies.

Preliminary objections are as follows: unacceptable impact on the viability and resilience of our town centre; the undermining of the commercial viability of the Hoddesdon Business Park and its future economic potential; unsuitable road access, the Essex Road Pindar Road junction being of particular concern; diminished air quality; visual impact and its effect on well-being; damage to the adjacent green belt and the Lee Valley Regional Park and the effect on biodiversity assets. The Park Authority, has lodged an objection so we will not rehearse the concerns they have expressed and we support.
Inadequate monitoring of adverse environmental impacts, noise, smell and the cumulative impact of 3 facilities on neighboring sites.
The unsuitability of the site, which has been recognized by the planning inspectorate, the SOS, Veolia and Herts CC., this includes physical constraints and its inappropriate location in both terms of waste arisings, its situation in a valley bottom in a Grade 3 flood risk zone. We conclude with

evidence to show that this site does not meet any of your waste site assessment criteria.

1. Unacceptable impact on town centre viablility. We have serious concerns about the socio–economic impacts on the town and surrounding area. We recommended that socio - economic impact be scoped in to the assessment in accordance with NPPF 187.

It was shocking to note that Herts CC has disregarded the NPPF in this and other regards. Hoddesdon town centre is a well recognised Conservation area and a Conservation Appraisal was carried out by Broxbourne Council in 2011. Veolia Feilde's Lock PS application 2012, acknowledged that there are 493 listed buildings within 5 Km of the site and 10 Conservation Areas, the nearest of which is Hoddesdon Town Centre, 1.3Km distant. Although the site appears to have ben renamed since 2012 it remains in the same location and the failure to recognise the existence of this conservation area is disingenuous to say the least.

*Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal [**including the development affecting the setting of a heritage asset**]. [NPPF 129]. As the relevant planning authority we expect that you will be assessing the proposal in these terms.*

The Hoddesdon Society believes that the routing of a fleet of HGVs within metres heritage assets is inappropriate.

Authorities should take account of the positive contribution heritage assets can make to sustainable communities including their economic vitality. [NPPF 131] In view of Hoddesdon's Conservation status with over 200 grade II listed buildings we hope you will observing this directive. Our unique and interesting heritage plays a major role in the resilience of our town and we would be distressed to witness its destruction.

Far from making a positive contribution to the character and distinctiveness of Hoddesdon this proposal would destroy the local setting of this historic market town [NPPF 126]

Further, The NPPF requires that "*The impact of the proposal on town centre vitality and viablility 5 years from the time the application is made. For major schemes where the full impact will not be realised in five years, the impact should also be assessed up to ten years from the time the application is made".* [NPPF 26] **No such impact has been submitted** despite the proposed additional 268 HGV movements per day largely of odourous raw waste rendering our town centre both less accessible and less desirable as a shopping location.

The additional industrialisation and accompanying pollution plus the image as a massive waste disposal area will destroy the viability and vitality of the town and will not comply with NPPF 187.

2. **The undermining of the economic viability of Hoddesdon Business Park which supports 5,000 jobs**

i] **Congestion especially a**t peak hours is already a problem and although Herts Transport Plan 2011 – 2031 says "congestion can have a negative impact on the economy" and "supporting the county's economy is essential to the County Council', the proposal would add to this congestion. **The recent opening of Ambition Broxbourne's Business Centre [300 additional jobs] was omitted from the TIA.**

According to Herts Highways, the Essex Road is the 3rd busiest C road in Hertfordshire and a project of this scale could damage existing transport needs. One of the major hold up points is the Pindar Road/ Essex Road junction. We can see no evidence of mitigation proposal for this.

Local planning authorities should secure developments that improve the economic, social and environmental conditions of the area. [NPPF 187]

Herts LWP Strategic Objective - with regard to existing congestion on the road,[as is clearly the case here] is to "Limit the use of roads already heavily congested"

A failure to do so would undermine the success of our thriving business park and is *not in keeping with Hoddesdon Business Park Improvement Plan Policy EMP 1[i[c*

EMP 1 [ii] g *says any proposals for waste management should be determined against the adopted Hertfordshire Waste local Plan. This proposal is clearly inappropriate in these terms as will be demonstrated below.*

***ii] The siting of incineration adjacent to food producing and distribution industries e.g. Bidvest, Arnaouti and Sainsbury's distribution Centre is of commercial concern** and we question the cumulative impact of Rye House PS, an ATT Plant and the proposed incinerator all emitting to air in the area is a cause for concern. The height of the proposed building [48m], is higher than the ATT stack [40m]creating downwash, undesirable at the best of times but a contamination risk to food supplies.*

Were these companies to move, 1,000s of jobs would be lost. An Incomparable loss when seen in the context of permanent jobs offered by the applicant.

Change of use could not be permitted under the terms of Hoddesdon Business Park Improvement Plan [Appendix B Policy EMP1]
"*Change of use is only permitted in the Hodddesdon Business Park if the proposal would not significantly affect the amenities enjoyed by occupiers of*

properties adjoining the employment area the proposal would not create an unacceptable impact on the local transport network."

3. Unsuitable road access. Both Herts CC and Veolia have already made this case themselves several years ago and since then traffic has increased

"*The site is also very compact and has local highway capacity access constraints that required the need for the rail linked solution. Such constraints do not facilitate the development of an RERF at this site"[Veolia July 2013 P35 ASA report]*

The Pindar Road Essex Road junction is of special concern.

4. Diminished air quality as a result of diesel pollution and its risk to health Diffusion tube monitoring along the proposed access route breaches government guidelines, as the applicant admits in the non technical summary. NPPF 11.109 suggests that authorities should *prevent new development contributing to unacceptable levels of air pollution and the* aim *should be to minimise pollution and other adverse effects on the local and natural environment [11. 110]*

The applicant has not taken into account the cumulative effects of the other facilities in the area, the ATT, AD, Rye House PS together with the Proposed ERF. Nor has the longevity of the proposed plant in causing the loss of general amenity and risk to public health from traffic pollution generated been considered. [NPPF 120, a]

Your policy on Road Transport and Traffic seeks to ensure that waste related development **will only be permitted when conditions of the local highway network are such that the traffic movements generated would not have unacceptable impacts on highway safety, the effective operation of the highway network, residential amenity and the local environment.** It also requires detailed transport appraisals as part of the application. [HCC LWP WCSDM P10 2012 -2016]

There are 4 roundabouts, 3 sets of traffic lights and three pedestrian crossings on the local road network which would have to be negotiated to then access the site via a 5m wide one track lane currently used by pedestrians and cyclists to reach Feilde's Lock. This would have a significant and lasting impact on our amenity and local environment. Any location where HGVs slow, stop and then accelerate creates an additional health hazard for diesel fuel emissions and from the emission of microscopic particles as vehicles break and from tyre erosion. HGVs, up to 27 tonnes, will be entering and leaving a valley with the obvious effects on breaking and acceleration. The valley site itself is a location where pollutants collect exacerbating the well recognised adverse effects on our health.

Temperature inversions occur more frequently in valley locations trapping pollutants at ground level. The cumulative impact of 3 facilities plus other

traffic is unacceptable and dangerous especially to vulnerable groups, the young, elderly and those with cardiac and pulmonary pathologies.

The proposed route passes residential buildings, a nursery and primary school and three pedestrian crossings. Two of these will link schools with their catchment areas. Young children are not only a vulnerable group in terms of air pollution but, whether walking or in pushchairs/prams, are close to the road.

A steep ramp usually not shown on the applicant's 'photos' of the building will generate further pollution and noise adjacent to the Lee Valley Regional Park.

5. Visual impact and its effect on well being

A building of these proportions together with the plume will be seen for miles around from Clayton Hill 4Km to the South and the A414 in the North, The A10 and beyond in the East and Roydon tow path in the West. It will be visible from many significant public places e.g. Hoddesdon Library, Rye House and Broxbourne Station, John Warner School sports fields, residents of Rye House and Lampits will see the incinerator from their streets and bedroom windows daily. A worrying reminder of the toxic emissions, albeit well regulated, so feared by the public at large. Some toxins have no safe limits e.g dioxins and monitoring is very limited. This has a material effect on the well being of local residents in particular. Not only will this proposal have demonstrable physical effects but also impact on the mental well being of our community.

Light pollution from the building and its stacks are also a legitimate concern. The translucent polycarbonate panels are discussed under 7. Below.

6. Adjacent to Green Belt and the LVRP The proposed building almost the height of Nelson's Column will cast a long shadow thus encroaching on the park and green belt in disregard of Herts LWP WSSDM **Policy 18 Protection of the Lee Valley Regional Park.** A development of this scale will have detrimental impacts in terms of visual impact, noise, odour and emissions to air from both diesel engines and incineration. The applicant has not given details of the size nor gradient of the ramp required to access the tipping hall nor taken it into consideration in assessing the environmental impact to the proposal on the LVRP.

7. Effects on biodiversity The applicant has already argued that cumulative impacts on biodiversity would be unacceptable together with the **loss of visual amenity.**

"The site is located in an ecologically sensitive area in a waterside location subject to high flood risk. The wetland nature of the local undeveloped environment makes it rich in biodiversity reflected by the nearby RAMSAR and numerous SSSs within the adjacent Lea Valley Regional Park to the east. Accordingly ***cumulative impact of a major ERF combined with the existing industrial uses is likely to have an impact upon the biodiversity***

interests as well as visual amenity of the nearby Regional Park.
Permission was however granted in December 2011 for a medium scale thermal treatment facility which has a much smaller scale and impact than the scope of the facility tested in the ASA" [NB ERF Alternative Site Assessment Veolia Services 2011].

Translucent polycarbonate panels round the top of the building would allow light to escape during the hours of darkness, a visual intrusion and bearing in mind the high visibility of this massive structure will be seen for long distances contrary to NPPF 125. This will have an adverse impact on wildlife including nocturnal animals such as bats which are protected species.

8. Inadequate monitoring of adverse environmental impacts.
WPPG suggests that the potential impacts from noise, vibration, artificial light, dust and odour must be properly considered for any proposed site. Paragraph: 049 Reference ID: 28-049-20141016 **None of these have been properly assessed** .

The noise assessment apart from ignoring the concrete ramp mentioned above, uses data from 2012 on the basis of the construction of the ATT plant close by distorting the data. However to use data some 5 years extant is a gross distortion. Our industrial estate has expanded since then, there are many more industrial units and an operative AD plant close by.
Odour little is mentioned, yet our members' practical experience tells us that odour is a problem which we have experienced on visits to incinerators [Ardley, Edmonton, SELCHP] and also in the proximity of waste HGVs especially in summer, even more relevant with less frequent waste collection regimes. The proposed access route passes the front entrance of one of our major super markets, Morrisons, past residential buildings and a primary and nursery school. NPPG suggests that Local Planning Authorities should ensure that waste is handled in a manner which protects human health and the environment **through testing the suitability of proposed sites,** both in developing their Local Plans and in considering individual planning applications. This site is not mentioned in your LWP.

9. Unsuitability of the site has been recognized by 2 planning inspectors, [Mr Andrew Freeman [see below] and Mr David Richards,[in his report to SOS p27 NBI], the SOS [16/7/15], Veolia and Herts CC

Report to Hertfordshire County Council
by Andrew S Freeman BSc(Hons) DipTP DipEM FRTPI FCIHT MIEnvSc
an Inspector appointed by the Secretary of State for Communities and Local Governme
Date: 24th March 2014

REPORT ON THE EXAMINATION INTO THE HERTFORDSHIRE WASTE SITE ALLOCATIONS
LOCAL PLAN

Para 41
*requirement is for 276,000 tpa of treatment capacity by 2016. A facility with a capacity of 50,000 tpa would typically require 1.5 ha of land****; those of***

100,000 tpa capacity might occupy 4 ha of land. The largest facilities would require proportionately larger sites.
This site was claimed to be just over 4.5 Hectares [2011 Veolia/Aecom Feildes Lock PS planning application]. It has expanded to 5ha for the ERF application.
.The inspector further says ***Waste developments not served by rail could have a significant impact*** **on the local highway network.**

Para 77. ***Allocation of the sites would not be appropriate. [***one is the proposed site]

From the New Barnfield Committee Report:
"It needs the rail feed because it is a ***compact site which could not accommodate the road based collections needs of this county and so could not accommodate the kind of EfW plant proposed let alone the front-end recycling facility too"***

"Any facility here would be poorly located to deal with Local Authority collected waste (LACW) and commercial and industrial waste arising throughout Hertfordshire being located towards to south eastern boundary of the county. *Travel times from Waterdale would be approximately 40 minutes for example which would be double the travel time compared with the application site at New Barnfield****. It would not present a sustainable site location for dealing with waste from across Hertfordshire*** *compared to New Barnfield"*

In summary, the site is too small, in a flood risk zone, poorly located on the SE edge of the county and unsuited to a road based facility.

10. This site does not meet any of your waste planning criteria
Your criteria are in red our response in black.

General Criteria for Assessing Waste Planning Applications Herts. CC WSA Document (adopted July 2014)

Planning applications for proposals for waste management facilities will be granted provided that:

i) the siting, scale and design of the development is appropriate to the location and the character of the surrounding natural and built environment;

Clearly not the case the building is <u>out of all proportion</u> to surrounding buildings being nearly as high as Nelson's Column and longer and wider than a professional football pitch.

ii) the landscaping and screening of the site is designed to effectively mitigate the impact of the proposal;

a building on a scale that dwarfs mature trees cannot be hidden or blend in with the surrounding natural or built environment.

iii) the proposed operation of the site would not adversely impact upon amenity and human health; This site impacts on both

the amenity of reaching the town centre is compromised by the volume of traffic. Smell of raw waste and diminution of air quality will cause loss of amenity.

the amenity of walking. cycling, boating and generally enjoying the LVRP is reduced. Feildes Lock is at the intersection of 2 National Cycle routes N1 and N61 and two long distance walking trails Lee Valley Walk and the Stort Way.

iv) the proposed development would not adversely impact upon wildlife habitats, the natural, built or historic environments;

It adds oxides of nitrogen to the soil which, on unimproved meadowland [Hundon Meads] could enrich the soil which promotes the growth of grass to the detriment of some of the rare meadowland broad leaved species. Our data modelling of emissions [www.plumeplotter.co.uk] reveals that the ambient air quality will be affected over a wide area including the nationally recognised Broxbourne and Hoddesdon Park Woods.

Eutrophication of water courses promotes the growth of surface algae which excludes light and adversely affects lower growing plants this can ultimately lead to an anoxic environment, decay and destruction of biodiversity.

vi) adequate provision is made for the restoration, aftercare and management of the site to an agreed after-use; details of this not included in the application

vii) applications for hazardous waste facilities should satisfactorily address issues of safety and risks to human health wildlife habitats, the natural, built and historic environment;

None of these have been properly addressed and some not mentioned at all. Insufficient detail is given regarding the handling of hazardous waste.

viii) proposals on greenfield sites can demonstrate that no better suitable previously developed land is available; Veolia may be unable to identify another site but perhaps another contractor could. If such a site cannot be found then Hertfordshire should reconsider its strategy. Tax payers money is being wasted in the pursuit of an inappropriate site.

ix) there would not be an unacceptable adverse cumulative impact on the local area; Veolia has already made the argument for adverse cumulative impacts. [See above] which the Hoddesdon Society would support.

x) it is not in conflict with other policies in this document

It is in conflict with Policy 18 of the LWP protection of the Lee Valley Regional Park

None your criteria is met by this application and in the light of this it is expected that you will recommend its rejection.

It beggars belief that the WDA has entered into a contract [RPP] for Veolia to treat Hertfordshire's residual waste on this particular site.

The applicant has not demonstrated how harm resulting from damage to our economy of both our town centre and business park, visual impact, loss of amenity, traffic pollution can be avoided, mitigated or compensated for.

"*if significant harm resulting from a development cannot be avoided, adequately mitigated , or, as a last resort ,compensated for, then* ***planning permission should be refused".*** [NPPF 118]

Further consultation response

The Hoddesdon Society believes this proposal to be deeply flawed and reserves the right to submit further evidence prior to the DCC committee meeting.

The additional information submitted by the applicant does not lessen existing concerns but raises more objections and requests for further information.

Abstract
We draw attention to fundamental information missing from the application. There is no recent Socio-economic Impact Assessment, no Environmental Impact Assessment[EIA] for the Lee Valley Nature Improvement Area [NIA] and no impact assessment of Hoddesdon's cultural heritage.
Issues regarding the protection of water quality, flood risk management, landscape and visual impacts, nature conservation, conserving the historic environment, traffic and access, air emissions are set in the context of the Locational Criteria given in NPPW [*Appendix B of National planning policy for waste]* No mitigation is suggested to compensate for the clear unsuitability of the site. Finally we question the need for this facility because in house treatment at any price is not advised by DC&LG especially if there will be overcapacity in the region.

Further objections
[A response to queries, highlighted in blue, would be appreciated]

***No Socio-economic impact assessment**
Herts CC's requested this but it has not been submitted**.** [Further information 10.1.]
"*full details of new employment that will be created locally by Veolia in operating the ERF were given in Chapter 4 of the ES. Other impacts on the local community in terms of transport, noise, air quality or visual impact are of course assessed in other chapters".* Clearly this is not a socio- economic impact assessment

The Hoddesdon Society requested some time ago that socio-economic effects be scoped into the application in keeping with National Planning Guidance. Veolia claim that an impact assessment carried out in 2012 for the rail based Feilde's Lock Power Station is applicable 5 years later to a road based proposal. This is unacceptable.
Hoddesdon has a thriving economy with full employment and the Lee Valley is home to highly successful glasshouse businesses. Our prosperity is jeopardized by this proposal [as argued in our first letter]
We seek assurance that you will be re-requesting an up to date assessment in keeping with Government Guidance [NPPF187] Without this information, you cannot properly determine this application.

***Inadequate data modelling**
Veolia says "A comment which was made frequently in these meetings [with the community] was that the Application Site was located in a valley, causing concerns about air quality. AECOM altered the air quality model to take account of this comment by including terrain effects, **although the original intention had been to model a flat plain.** Technically this refinement was not strictly necessary as the valley slope is very gentle but AECOM felt that the more sophisticated model was a sensible response to these public comments". [2.2.7 AECOM Reg. 22 Further Information and Post–submission Changes to the Planning Application August 2017] This demonstrates astounding ignorance of the topography. A steep gradient warning sign stands on Low Hill, which marks the descent from Roydon to the valley bottom. {photo attached]. The valley slopes are variable and we would request that modelling is based on the use of a contour map and seek confirmation that appropriate modelling will be expected and assessments derived from this modelling be re- evaluated.

Our air quality monitoring, [www.plumeplotter.com] based on accurate topography, demonstrates that emissions reaching ground level will affect an extremely wide area.

Could you confirm or deny that a rough estimate of the magnitude of NOx emissions from the ATT and the proposed incinerator would be equivalent to **16239** Euro 6 compliant diesel cars driving at 30mph.

The following points are set in the context of Locational Criteria given in NPPW [***Appendix B of National planning policy for waste***

a] protection of water quality
***Contamination of ground water**. The site is in SPZ2 The applicant has discovered that there is contamination arising from the past uses of the site. There is no clear indication of how contamination will be avoided when piling. The applicant intends to pile into chalk basement passing though the upper aquifer and penetrating the lower and large aquifer. Chalk is characteristically fractured and contaminated water would have easy ingress. The fine porous nature of chalk means contaminants are very difficult to remove and the movement of ground water is notoriously difficult to predict. Risk of contamination should be taken very seriously.

b] Flood risk management
***Inadequate detail on how simultaneous pluvial, fluvial and ground water flooding, would be addressed.** We believe this leaves the area wide open to potential contamination of its substantial water courses, polluting the riparian environment and affecting habitat over a wide area.

c] landscape and visual impacts
****No significant mitigation suggested,*** *despite the applicant's claims about tree cover in year 15. Mature trees exist along the River Lee boundary. Impressions of the building released by the applicant clearly demonstrate that mature trees will be dwarfed by and will not hide this proposed incinerator.*

d] nature conservation
***No EIA on the Lee Valley NIA.**
"Considerations will include any adverse effect on a site of international importance for nature conservation (Special Protection Areas, Special Areas of Conservation and RAMSAR Sites), a site with a nationally recognised designation (Sites of Special Scientific Interest, National Nature Reserves), ***Nature Improvement Areas*** *and ecological networks and protected species".*

The lengthy quote below from the Lee Valley Catchment Partnership website illustrates a number of facts about the area of which the applicant appears ignorant.
i] it acknowledges the presence of agricultural land and the greenhouse industry both unacknowledged but significant factors in the determination of this application.
ii] The west side of the valley is described as having a mix of uses including light industry. This large project is clearly out of keeping with this light industrial setting.
iii] A massive waste burner adjacent to green belt is clearly out of keeping with both wild life areas and the 1.3M yearly park users who enjoy the public Rights of Way and national cycle routes. Feildes Lock is a significant junction where eastern and northern routes intersect.

"The upper Lower Lee valley from Hoddesdon to Waltham cross is designated as an improvement area. With 8 SSSIs and DEfRA £100,000 of funding over 2 years.
The northern part is strongly influenced by open farmland, mostly on the eastern side. Here large greenhouses are commonplace, used for growing

vegetables. The west side of the area is bordered by a mix of housing, warehousing and light industry.
Much of the area lies within the Lee Valley Regional Park where management aims to balance the needs of wildlife with public use for recreation. This part of the Park is very well used, with over 1.3 million visits annually. Angling is popular throughout the catchment with carp being the focus within still waters." Lee Valley Catchment Partnership website

e] conserving the historic environment
***No impact assessment on Hoddesdon's cultural heritage**
"Considerations will include the potential effects on the significance of heritage assets, whether designated or not, including any contribution made by their setting." [NPPW Appendix B] This supports the request made in our first letter. Your failure to ask for an impact assessment on the cultural heritage of Hoddesdon calls into question the impartiality of Herts CC toward this application.

f] traffic and access
***Inadequate emergency access**
Spontaneous combustion of waste can and does happen. There are frequent reports of fires at facilities dealing with waste. Access via a narrow one track lane for fire, police and ambulance services may endanger employees, the public and national power lines.

***Plan of traffic movements on site did not appear to show the movement of vehicles transporting the incinerator bottom ash.** We hope you will check this. They should be included if there is no asset protection agreement with Network Rail. Around 1000 tonnes of IBA will be generated and there is **no clear indication of the mode of transport to be used.**

g] air emissions, including dust "*Considerations will include the proximity of sensitive receptors, including ecological as well as human receptors."*

There are over 10 schools within 2km of this site. Angels at Play, in Pindar Road, is under 500m from the site. The applicant minimises the effect on any sensitive receptor and in Veolia's operating permit application it is stated that there are no agricultural receptors within 5KM of the proposed site. This is clearly untrue and another example of a flawed application. Please see view of glasshouses taken from Roydon attached.

odours, noise, vibration light and litter.
Lee valley Park users, residents and workers in the area will all be affected. This incinerator will look like a massive high visibility glowing box during hours of darkness unacceptable in planning terms. The incinerator bottom ash 'shed' is open on the North side and could lead to ash dispersal in the local environment. The shed should be enclosed.

*** No mitigation for site unsuitability**
The unsuitability of the site has been well recognised.

National guidance regarding your responsibility to protect human health and the environment includes testing site suitability. This has been done in alternative site assessments and other contexts on numerous occasions over the past 5 years and consistently found unsuitable. The site is not in your Local Waste Plan.

T**he applicant recognises its unsuitability.**
CLG minutes presented on 28th July 2016 Appendix 1

Q What is Veolia's reaction to its own QC's comments about this being a constrained site, that is "unable to accommodate the road based needs of this county"?

A. "Veolia agrees that the comment was made but that it related to whether this site would offer a viable alternative for the facility proposed for New Barnfield. The current proposal differs."

These comments were made several years ago. During the interim period, traffic has increased as our business park has thrived and is even less able to accommodate a project of this size without compromising the commercial viability of existing businesses.

The site is constrained, and so the current proposal has no front end recycling facility. It is not using Best Available Technology/Techniques to drive waste further up the hierarchy which is a government requirement. To squander recyclable resources in a one off burn is both environmentally damaging and a waste of finite materials.

***In house treatment of waste to the exclusion of other considerations is not supported by DEFRA** *"there is no expectation that each local planning authority should deal solely with its own waste to meet the requirements of the self-sufficiency and proximity principles. Nor does the proximity principle require using the absolute closest facility to the exclusion of all other considerations" DC&LG Waste Planning Practice Guidance* Paragraph: 007 Reference ID: 28-007-20141016.

Herts CC failed to identify a suitable site within the LWP. They justify the RPP and use of the Ratty's Lane site on the basis of self-sufficiency ignoring National Guidance.

Over capacity "*Identifying the existing waste management capacity is important for establishing the baseline against which the need for new facilities will be assessed. However, waste planning authorities should recognise that capacity of waste management facilities may change depending on a wide range of factors, including market conditions."* Paragraph: 023 Reference ID: 28-023-20141016 WPPG

Facilities able to process over a million tonnes of additional waste per annum have planning permission in the area. This includes facilities at South Rookery Pit, Rivenhall, Edmonton and the Hoddesdon ATT plant.

***Lack of community consultation**
"*It is important that waste planning authorities engage and collaborate with local communities in an early and meaningful way when identifying options for managing waste." [*Paragraph: 012 Reference ID: 28-012-20141016 Waste Planning Practice Guidance DC&LG]

Whilst there may have been consultation on the Local Waste Plan the local community were given no alternative options to discuss with regard to this proposal. We were presented with one single inappropriate proposal which does not comply with national or local planning policies and has already been rejected by Herts CC Veolia and government planning inspectors.

This proposal is opposed across a wide area including all Parish Councils, District and Borough Councils, the Lee Valley Regional Park, the Canal and River Trust and Essex CC that have expressed grave concerns.

Hoddesdon is not an appropriate location in planning terms and we expect any bona fide independent planning report would recommend its rejection.

Herfordshire County Council – Highways Authority

Decision
Notice is given under Article 18 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 that the Hertfordshire County Council as Highway Authority does not wish to restrict the grant of permission subject to the following conditions:

CONDITIONS:
1) Before commencement of the development, all access and junction arrangements serving the development shall be completed in accordance with the approved in principle plans, drawing numbers 152030/DC/RY/SW/GA/C/101 Revision D and 152030/DC/RY/SW/GA/C/106/Rev B (both in the revised Appendix 11.1 document) and constructed to the specification of the Highway Authority and the Planning Authority's satisfaction. Reason: To ensure the provision of an access appropriate for the development in the interests of highway safety and convenience.

2) Concurrent with construction of the access, visibility splays as shown on Drawing Number 152030/DC/RY/SW/SK/C/107 Revision A (Transport Responses Letter) shall be provided and permanently maintained, within which there shall be no obstruction to visibility between 600mm and 2m above the carriageway level. Reason: To provide adequate visibility for drivers entering or leaving the site.

3) Before commencement of the development, the proposed signalisation scheme along Ratty's Lane, as shown indicatively on Drawing Number 60493630-PA09 Revision F (revised Appendix 11.1 document) and as outlined in the text of the 'Transport Responses Letter' dated 19th May 2017, shall be completed and fully operational to the satisfaction of the Planning Authority. Reason: In the interest of the free and safe flow of traffic along Ratty's Lane and the wider highway network.

4) Before commencement of the development, the proposed extension to the parking restrictions along Ratty's Lane in the form of double yellow lines and signage, as shown indicatively on Drawing Number 60493630-PA09 Revision F (revised Appendix 11.1 document), shall be completed and fully operational to the satisfaction of the Planning Authority. Reason: In the interest of the free and safe flow of traffic along Ratty's Lane and the wider highway network.

5) Before commencement of the development, additional plans shall be submitted to and approved in writing by the Planning Authority to show the detailed surface improvement works to Ratty's Lane. The works shall be completed to the satisfaction of the Planning Authority before first use of the development. Reason: In the interest of sustainable travel, to ensure a good quality surface for pedestrians walking to and from the site.

6) Unless otherwise agreed in writing in advance by the Planning Authority, there shall be no more than 268 Heavy Goods Vehicle (HGV) movements (134 in, 134 out) at the site in any one working day. Reason: To ensure the free and safe flow of traffic along the public highway is maintained in the vicinity of the site.

7) No HGVs shall travel to or from the site in the direction of Essex Road south / Dobbs Weir Road. All HGVs, other than direct deliveries from the Broxbourne District and the Household Waste Recycling Centre along Pindar Road, shall approach and depart the site via the Dinant Link Road and the A10 (refer to Figure 7-1/01 in the Transport Assessment). Reason: To ensure that HGVs route along sections of the highway which have been modelled and found suitable to accommodate development traffic.

8) Before the development is first brought into use, all on site vehicular areas, including internal access roads and parking spaces, shall be accessible, surfaced, marked out and fully completed in accordance with Drawing Numbers 152030/DC/RY/SW/GA/C/101/D and 152030/DC/RY/SW/GA/C/102/D (both in the revised Appendix 11.1 document) and carried out in a manner to the Planning Authority's approval. Reason: To ensure satisfactory parking of vehicles outside highway limits and to minimise danger, obstruction, and inconvenience to users of the highway and of the premises.

9) The existing public right of way abutting the site shall remain undisturbed and unobstructed at all times unless legally stopped up or diverted prior to the commencement of the development hereby permitted. The alignment of any public right of way shall be protected by temporary fencing/signing in accordance with details first submitted to, and approved in writing by, the Local Planning Authority throughout the course of the development. Reason: To safeguard the rights of the public and in the interest of pedestrian safety.

10) Before commencement of the development, additional plans shall be submitted to and approved by the Highway Authority which show the installation of pedestrian dropped kerbs and tactile paving at the western Essex Road / Pindar Road junction. These works shall be completed to the satisfaction of the Planning Authority before first use of the development. Reason: To ensure the site complies with Paragraphs 32 and 35 of the NPPF, requiring developments to provide safe and suitable access for all people, and emphasising the importance of walking, cycling and public transport opportunities.

11) Best practical means shall be taken at all times to ensure that all vehicles leaving the development site during construction of the development are in a condition such as not emit dust or deposit mud, slurry or other debris on the highway. In particular (but without prejudice to the foregoing) efficient means shall be installed prior to commencement of the development and thereafter maintained and employed at all times during construction of the development, to include cleaning the wheels of all construction vehicles leaving the site. Reason: In order to minimise the amount of mud, soil and other materials

originating from the site being deposited on the highway, and in the interests of highway safety and visual amenity.

12) Prior to the commencement of the development, a 'Construction Traffic Management Plan' shall be submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority. Thereafter the construction of the development shall only be carried out in accordance with the approved Plan. The 'Construction Traffic Management Plan' shall identify details of:

- The phasing of construction and proposed construction programme;
- The methods for accessing the site, including wider construction vehicle routing;
- The numbers of daily construction vehicles including details of their sizes, at each phase of the development;
- The hours of operation and construction vehicle movements;
- Any highway works necessary to enable construction to take place;
- Construction vehicle parking, turning and loading/unloading arrangements clear of the public highway;
- Hoardings;
- The management of traffic to reduce congestion;
- The provision of appropriate warning signage;
- The control of dirt and dust on the public highway, including details of the location and methods to wash construction vehicle wheels;
- The provision for addressing any abnormal wear and tear to the highway;
- Consultation with local businesses or neighbours;
- Any other Construction Sites in the local area;
- Waste management proposals.

Reason: To ensure the impact of construction vehicles on the local road network is minimised.

HIGHWAY INFORMATIVES:

The Highway Authority recommends the inclusion of the following Advisory Notes (ANs) to ensure that any works as part of this development are carried out in accordance with the provisions of the Highways Act 1980 and other relevant processes.

AN1) Storage of materials: The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority before construction works commence. Further information is available via the website https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/highways-roads-and-pavements.aspx or by telephoning 0300 1234047.

AN2) Obstruction of public highway land: It is an offence under Section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence. Further information is available via the website https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/highways-roads-and-pavements.aspx or by telephoning 0300 1234047.

AN3) Road Deposits: It is an offence under Section 148 of the Highways Act 1980 to deposit mud or other debris on the public highway, and Section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving the site during construction of the development are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway. Further information is available via the website https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/highways-roads-and-pavements.aspx or by telephoning 0300 1234047.

AN4) Construction standards for works within the highway: Any works to be undertaken on the public highway associated with this development shall be constructed to the satisfaction and specification of the Highway Authority, by an approved contractor, and in accordance with Hertfordshire County Council's publication "Roads in Hertfordshire – Highway Design Guide (2011)". Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and requirements. Further information is available via the website http://www.hertsdirect.org/services/transtreets/highways/ or by telephoning 0300 1234047.

AN5) Planning permission granted subject to the completion of a Section 106 Agreement between the applicant and Hertfordshire County Council to secure the following:
i) Access Improvement Package Contribution, Essex Road Employment Area, Hoddesdon, of £750,000. Full details are provided in Section 9.2 of this report.
ii) A Travel Plan consisting of a written agreement with the County Council setting out a scheme to encourage, regulate, and promote green travel measures for employees and visitors to the Development in accordance with the provisions of the County Council's 'Travel Plan Guidance for Business and Residential Developments', which is subject to a sum of £6,000 towards the County Council's costs of administrating and monitoring the objectives of the Travel Plan and engaging in any Travel Plan Review. Full details are provided in Section 9.1 (v) of this report.

COMMENTS:

1.0 BACKGROUND AND DECISION

The Highway Authority was consulted on this planning application in January 2017. The applicant first approached the Highway Authority for pre-application advice in January 2015. At that time, the need for a comprehensive Transport Assessment (TA) was outlined to consider the impact of the proposed development on the free and safe flow of all highway users.

This report confirms that the Highway Authority has no objection to the principle of the development, subject to the conditions detailed at the start of this report and a Section 106 agreement under the Town and Country Planning Act to secure a financial contribution to improve highway infrastructure and monitor the Travel Plan.

2.0 OVERVIEW

2.1 Existing Highway and Right of Way Network

The site is located approximately 2 kilometres east of Hoddesdon town centre, and is accessed from Ratty's Lane, most of which is a private road. The western end of Ratty's Lane is double width with footways on both sides of the road. Rye House Power Station is served from this point. The eastern end reduces down in width and serves Trent Developments (an Anaerobic Digester and Advanced Thermal Treatment plant) as well as existing operations at the Lafarge Tarmac aggregates site, which is the subject of this planning application. Ratty's Lane is also used as an access to the River Lea and informal parking at its eastern end, whereupon it ceases.

Ratty's Lane routes onto Essex Road at a roundabout junction. Essex Road is a 'C' classified secondary distributor road subject to a 30mph speed limit. It serves as the main route through the Essex Road Employment Area, and the primary point of access to it is from the A1170 and the Dinant Link Road.

The initial stretch of Essex Road (at its western end) crosses over the New River, and the approach to this bridge is on a sweeping bend. At its eastern end, Essex Road crosses the County boundary into Essex, and there are several possible approach routes from this direction. These approach routes are 'C' classified or unclassified roads, and as such serve as secondary points of access into the Essex Road Employment Area.

Further afield, the A1170 is a three lane urban road with connecting junctions onto Essex Road and the A10 spur Road (Dinant Link Road). The Dinant Link Road is subject to a derestricted speed limit, and routes onto the A10. The A10 is the main north-south strategic route and provides access to the motorway network via the M25 at Junction 25. It is a two lane dual carriageway with grade separated junctions.

In terms of the right of way network, Hoddesdon Footpath No.59 runs alongside the eastern boundary of the site and is the main towpath along this section of the River Lea. This is around 1.2 metres wide, made up of a compacted mud surface, and is unlit. Hoddesdon Footpath Nos.53 and 54 are accessible directly from Essex Road at the location of the bridge as described above. They form the towpath to the New River, and are of similar makeups to the River Lea towpath.

2.2 Collision Analysis

Section 4.6 of the TA outlines recorded collisions over the past 3 years on the highway in the vicinity of the site, up to February 2016. There are 15 recorded collisions at junctions in the study area, 13 of which were 'slight', and 2 serious. It is clear that these collisions were driver error with no obvious shortcomings in highway design contributing to them. In addition, whilst any collision is regrettable, given the volume of traffic along the sections of highway described above, the statistics do not demonstrate a level or severity of collision which are disproportionate to the amount and type of vehicles using them.

2.3 Application Details

The site is currently an aggregates rail head and depot, owned by Lafarge Tarmac, producing asphalt and concrete. It gained planning permission for this use in 1983 and this included a conditional limit of 100 HGVs visiting the site per day (i.e. 200 two-way movements). The site is currently operating below full capacity with 79 two-way HGV movements recorded in surveys undertaken in June 2016.

This application will see the existing use cease, and the processing of municipal residual waste to produce electricity, up to a maximum of 350,000 tonnes per annum. Waste is to be transported to the site by road, and the bottom-ash transported off site by rail. The Transport Assessment has however included the impact of this should it be transported by road.

2.4 Policy Framework and Technical Guidance

The National Planning Policy Framework requires all developments that generate significant amounts of movement to be supported by a Transport Assessment (TA) or Transport Statement (TS). The applicant has submitted a detailed TA in accordance with Department for Transport guidance, along with detailed plans of the proposed site and surrounding highway works.

These documents have been assessed against the transport elements of the following national/local policies and technical guidance documents:

- National Planning Policy Framework (NPPF) March 2012;
- Hertfordshire Local Transport Plan (LTP) 2011-2031;
- Broxbourne Borough Council's Local Plan 2005;
- Design Manual for Roads and Bridges;

- Manual for Streets and Manual for Streets 2; &
- Hoddesdon and Broxbourne Urban Transport Plan.

3.0 PROPOSED ACCESS ARRANGEMENTS

3.1 Main Vehicle Site Access

The site is located towards the end of Ratty's Lane. Its current access is separated into two by a central gate post, effectively forming separate in and out accesses. Beyond the access, Ratty's Lane ceases and leads to a small car park where informal parking takes place. There are no marked bays and the surface is a semi-bound material. This land can accommodate around 12 cars. Although the parking arrangement is informal, it is generally in such a way that the entrance/exit to/from it is clearly visible to drivers exiting the application site.

The proposed site/access plan in the original TA (Drawing Number 152030/DC/RY/SW/GA/C/101 Revision A) shows the access to be of a similar design to the existing, but at a slightly tighter angle to be more parallel with Ratty's Lane and the adjacent car park as described above. A new footway is to be provided alongside the initial stretch of the internal access road, which will be at the back edge of the Ratty's Lane end car park. A small area of grasscrete is shown on the proposed plan at the initial section of the car park, next to the site access.

In addition, a signal controlled system is to be introduced along the eastern section of Ratty's Lane where it narrows in width. This will ensure that vehicles travelling towards the site do not meet those exiting the site, which would otherwise leave no room for larger vehicles to pass by one another. Drawing number 60493630-PA06 Revision C (Appendix C of the TA) shows a 'stop line' immediately outside the access with a signal head nearby, and another 'stop line' some 270 metres to the south-west, again with a signal head nearby. This signalisation scheme is considered in more detail in Section 9.1 (iii), later in this report.

The Highway Authority expressed some concern with the access arrangements proposed and requested clarification from the applicant. These are outlined in detail below.

Firstly, the proposed site/access plan does not make it clear what the level of visibility onto Ratty's Lane at the site's revised access will be, and how this compares to the existing. The Highway Authority therefore requested an additional plan from the applicant to show this. Drawing Number 152030/DC/RY/SW/SK/C/107 Revision A has since been submitted in a Transport Responses Letter dated 19th May 2017, which shows forward visibility of 33 metres down Ratty's Lane from the site entrance, and a clear view in the opposite direction into much of the Ratty's Lane end car park. These levels of visibility are acceptable for the likely speed of vehicles travelling along this section of Ratty's Lane. A copy of this plan has been sent

to the Planning Authority, and a condition is recommended to ensure these visibility splays are retained in perpetuity (see Condition 2 above).

Secondly, the TA included a number of tracking diagrams to show the path of larger vehicles through the access point (Appendix B of the TA). These diagrams showed that larger vehicles tracked over the central point of the access gates, which currently has a vertical central post in place. They also showed larger vehicles which were entering the site overtracked onto the opposite side of the carriageway (i.e. the waiting area / stop line of exiting vehicles). The applicant has since successfully addressed both of these issues in the revised access drawing mentioned above. This now shows that the central gate post will be removed, and a new single sliding gate will be introduced at the access. It also shows the introduction of a yellow box junction at the access (supported by signage) to the front of the signal 'stop line' for exiting vehicles, so they do not route out onto the main Ratty's Lane carriageway unless the signal head shows green. As such, the slight overtrack of larger vehicles onto the opposite side of the carriageway as they enter the site is no longer an issue. This is confirmed in the revised tracking diagrams that have since been submitted, Drawing Number 152030/DC/RY/SW/GA/C/113 Revision D (revised Appendix 11.1 document).

3.2 Pedestrian Access

In terms of pedestrian access to the site, this will be through the main site access with pedestrians routing onto the new footways to be provided within the site. The Planning Authority may want to request that more detailed plans of these footways are submitted to show the provision of pedestrian dropped kerbs / crossing points over the internal access roads. However, this is an internal site layout matter with no direct impact on the public highway.

Pedestrians can approach the site from Ratty's Lane itself, which is to have its surface improved and become signalised to better control traffic (see Section 9.1 of this report). This will create a somewhat more pleasant environment at this location for those travelling to and from the site on foot.

Alternatively, pedestrians can approach the site from the River Lea towpath. An existing connecting link is provided from this onto the Ratty's Lane end car park.

4.0 TRIP GENERATION

4.1 Calculation Methodology

The TA presents the following three scenarios for comparison:
i) Existing/measured vehicle trips to and from the site [Table 6-1 of the TA];
ii) Consented vehicles trips to and from the site (i.e. the maximum amount of vehicles that would be allowed to travel to and from the site if it was brought into full use, as covered under the current 1983 planning permission) [Table 6-2 of the TA];

iii) Proposed vehicle trips to and from the site as a result of the planning application currently under consideration [Table 6-8 of the TA].

The specialist nature of the proposed development is such that a standard TRICS assessment would not accurately reflect the number and type of vehicles travelling to and from the site. The applicant has instead examined existing residual municipal and commercial/industrial 'top-up' waste generated within Hertfordshire by type and source, and calculated a bespoke trip rate profile.

A detailed methodology has been provided in Section 6.4 of the TA. This includes consideration of the amount of waste currently brought into the various waste sites across the county, and how this translates into vehicle types and numbers when transporting that waste. It should be noted that some of the commercial/industrial top-up waste to be brought to the site is sourced from outside the county (Basildon, Cambridge, Northampton). Table 6-6 of the TA considers additional large vehicle movements beyond direct waste imports, such as vehicles required to service the technology at the site. Alongside this, bottom ash vehicle movements are included for the sake of robustness, even though this will be transported off-site by rail.

In order to establish an hourly vehicle frequency/type profile throughout a typical day, each different waste type has been considered individually and assumptions made on the spread throughout the day. Table 6-7 provides commentary on the assumptions made. Whilst these assumptions are not considered unreasonable, the Planning Authority should be confident that the information presented in this table is accurate.

4.2 Heavy Goods Vehicles

Tables 6-1, 6-2 and 6-8 have been compared to establish the difference between HGV numbers currently operating at the site with those that could operate at the site if it was brought into full use under the 1983 planning consent, as well as those which are expected to operate at the site under the proposed development.

This shows that the total number of HGVs expected to visit the proposed development each day is 134, which equates to a total of 268 HGV movements. Although this is 189 total HGV movements above the existing/measured use of the site, it is only 68 HGV movements above the current consented 200 HGV movements (as permitted by the existing 1983 planning condition at the site).

When breaking these daily figures down into hourly figures, the key hours to consider are the morning peak (8-9am), the evening peak (5-6pm), and the Busiest Operational Hour (12-1pm).

In the morning peak hour (8-9am), the total number (i.e. two-way flow) of HGV movements expected as a result of the proposed development is 14. Although this is 7 total HGV movements above the existing/measured use of the site in

this hour, it is 4 less than if the current operations at the site were brought into full use (as permitted by the consented 1983 planning permission).

In the evening peak hour (5-6pm), the total number of HGV movements expected as a result of the proposed development is 4. This is 4 total HGV movements above the existing/measured use of the site in this hour, and 4 above the consented use of the site.

In the Busiest Operational Hour (12-1pm), the total number of HGV movements expected as a result of the proposed development is 36. Although this is 17 total HGV movements above the existing/measured use of the site in this hour, it is 13 less than the consented use of the site.

4.3 Light Vehicles (Cars and vans)

Again, tables 6-1, 6-2 and 6-8 have been compared to establish the difference between light vehicle numbers currently operating at the site with those that could operate at the site if it was brought into full use under the 1983 planning consent, as well as those which are expected to operate at the site under the proposed development. It should be noted however that no conditional limit has been placed on light vehicles as part of the 1983 planning consent. As such, the TA has taken the existing light vehicle movements and applied this directly to the consented level.

This shows that the total number of light vehicles expected to visit the proposed development each day is 45, which equates to a total of 90 light vehicle movements. This is 7 total light vehicle movements below both the existing/measured use of the site, and the consented 1983 planning permission.

As with Section 4.2 above, when breaking these daily figures down into hourly figures, the key hours to consider are the morning peak (8-9am), the evening peak (5-6pm), and the Busiest Operational Hour (12-1pm).

In the morning peak hour (8-9am), the total number (i.e. two-way flow) of light vehicle movements expected as a result of the proposed development is 28. This is 21 total light vehicle movements above both the existing/measured use of the site, and the consented 1983 planning permission.

In the evening peak hour (5-6pm), the total number of light vehicle movements expected as a result of the proposed development is 22. This is 8 total light vehicle movements above both the existing/measured use of the site, and the consented 1983 planning permission.

In the Busiest Operational Hour (12-1pm), the total number of light vehicle movements expected to visit the proposed development is 2. This is 6 total light vehicle movements below both the existing/measured use of the site, and the consented 1983 planning permission.

4.4 Trip Generation Summary

Paragraph 6.4.14 of the TA summarises the trip generation assessment as follows: “In total… 179 vehicle arrivals to the Energy Recovery Facility (ERF) are expected each weekday comprising 134 HGVs, 40 cars (staff trips) and 5 vans (deliveries). For clarity, the equivalent number of vehicles is expected to depart the ERF”.

In terms of HGVs, the figures show that the number generated by the proposed development each day will increase by 34 (i.e. 68 two-way trips), when compared to the current consented use of the site. They also show that HGV trips will be spread more evenly throughout the day compared to the consented use, with the proposed development resulting in fewer HGVs in the morning peak hour (8-9am) and only slightly more (4 two-way trips) in the evening peak hour (5-6pm).

In terms of light vehicle movements (cars and vans), there is predicted to be a reduction of 7 two-way trips each day as a result of the proposed development. These trips will however be more concentrated in the morning and evening peak hours, meaning those hours experience an increase compared to current and consented levels.

5.0 TRIP DISTRIBUTION / TRAFFIC ASSIGNMENT:

The TA includes a plan (Figure 7-1/01) to show the proposed routing of HGVs to and from the site.

The majority of HGVs will arrive from and depart to the A10 using the Dinant Link Road. The exceptions will be direct deliveries from Broxbourne District and Pindar Road Household Waste Recycling Centre (HWRC) deliveries. No HGVs will be routed along Dobb’s Weir Road and this has been included as a condition above.

Cars (employee trips) have been distributed on the network by applying Census 2011 journey to work dataset. This is a standard approach and is an acceptable methodology. 10% will route to/from the Dobbs Weir direction, 46% along the A10 / Dinant Link Road, and 44% along the north or south sections of the A1170.

Vans are all assumed to route to/from the A10, via the Dinant Link Road.

The routes overall are considered reasonable and sensible. These routes should be secured by condition, and as such Condition 7 at the start of this report is recommended for inclusion in the grant of any consent given.

6.0 HIGHWAY CAPACITY / IMPACT ON NETWORK:

6.1 Scope of Junction Assessments

The applicant has collected traffic / turning count data at 5 key junctions and undertaken capacity modelling at each. The traffic data was collected in school term time and has been factored up to the busiest months expected to be experienced for each peak hour. This has been established by examining seasonal volume count data. The process is explained in detail under Section 4.4 of the TA, and makes sure the outputs represent a worst case scenario. The models have then had trip generation/distribution of the proposed development routed into them. The junctions that have been modelled are as follows:

- J1 = Ratty's Lane / Stephenson Close / Essex Road / Essex Close;
- J2 = Pindar Road / Essex Road / Maple Park / Bingley Road;
- J3 = Essex Road / Charlton Way / Dinant Link Road;
- J4 = Dinant Link Road / Amwell Street / A10 Spur;
- J5 = Ware Road / Duke Street / Amwell Street / Hertford Road.

This scope of assessment was agreed at the pre-application stage.

6.2 Model Details and Committed Developments

As the routing of the majority of vehicles travelling to and from the development will be known, it is not necessary to use 'driver-behaviour' modelling software such as Paramics, and therefore standard Arcady (roundabout junctions) and Linsig (signalised junctions) software is sufficient to accurately assess the impact of the development on the capacity of the above key junctions. The applicant has included within the models the additional traffic arising from committed developments in the vicinity. Therefore, 3 scenarios are set out in the TA:
1) 2016 Baseline (based on the observed traffic data);
2) 2021 'Do Minimum' (assumes ERF is not present but other committed developments are in place);
3) 2021 'Do Something' (assumes ERF is developed and it is in its first full year of operation). For the sake of robustness, only the observed Tarmac trips have been deducted from the proposed trips, rather than the consented level.

Three committed developments have been identified and included in the model runs:
i) Trent Developments – Anaerobic Digestion and Advanced Thermal Treatment plants, located off Ratty's Lane to the south of the proposed ERF;
ii) High Leigh – 535 dwellings, commercial/leisure units;
iii) Oaklands Yard – 71 dwellings.

As the committed development quantums exceed those contained within the TEMPRO database, and are included in the models, the future year growth rates have been adjusted to 1.0000 as outlined in table 8-1 of the TA.

Three time periods have been modelled: the standard morning (8-9am) and evening (5-6pm) peak hours, plus a 'Busiest Operational Hour' (BOH, 12-1pm) when traffic movements to/from the development will be at their highest.

6.3 Outputs of Junction Capacity Models

The outputs show that under the 2021 'Do Minimum' scenario (i.e. no development in place), the Dinant Link Road / Amwell Street / A10 Spur roundabout (J4) is predicted to have some arm approaches which exceed capacity (RFC of 1) during at least one of the peak hours.

Some other approach arms at other junctions are predicted to exceed a Ratio to Flow Capacity (RFC) of 0.85. This figure is commonly accepted as that above which the free flow of traffic at a junction starts to build up to a point that causes difficulties. A figure below 0.85 suggests that the junction can generally cope well with the amount of traffic routing through it. The outputs have been presented as a 'RAG' (Red, Amber, Green) table in Table 9-6 of the TA.

For the 2021 'Do Something' Scenario (i.e. with the development in place), a comparison with the above demonstrates the following headline outputs at each junction:

Junction	Maximum queue length increase (passenger car units)	Approach arm of maximum queue length	Qualitative assessment of impact
J1 – Ratty's Lane / Stephenson Close / Essex Road / Essex Close	1 in morning peak	Essex Road (West)	Negligible
J2 – Pindar Road / Essex Road / Maple Park / Bingley Road	<1 in all time periods	All approach arms	Negligible
J3 - Essex Road / Charlton Way / Dinant Link Road	5 in morning peak hour	A1170 Dinant Link Road	Moderate
	4 in evening peak hour	Essex Road	
J4 – Dinant Link Road / Amwell Street / A10 Spur	3 in morning peak hour	A1170 Amwell Street	Moderate
	5 in morning peak hour	A10 Spur	
	5 in evening peak hour	A1170 Dinant Link Road	
	2 in evening peak hour	Amwell Street	
J5 - Ware Road / Duke Street / Amwell Street / Hertford Road	1 in morning peak hour	A1170 Ware Road	Negligible

Table 9-12 in the TA provides a summary of the 2021 'Do Something' scenario. Table 9-13 goes on to provide an overview of the change to capacity at each junction between the three different scenarios. The maximum increase in queueing evident is 5 vehicles in the peak hours on some approach arms at Junctions 3 and 4. This represents a modest increase and could not be considered as having a severe impact to the free flow of traffic, as stated in Paragraph 32 of the NPPF. Bearing in mind the fact that the increases in queuing range from negligible to a modest amount of 5 at the modelled junctions, the applicant is not proposing any mitigation measures at these points. This is considered acceptable, however, the models do not capture the constraints which are evident at the point where Essex Road crosses the New River bridge. This is considered in more detail under Section 9.2 of this report, and mitigation for this in the form of a Section 106 contribution is justified.

The modelling files have been requested by the Highway Authority, and these have been sent by the applicant. Our Traffic Data and Modelling team have checked these and found that they are robust.

6.4 Limiting the Impact of Development Traffic

Whilst the models have demonstrated that the predicted vehicle traffic associated with the development will not have a severe impact on highway capacity, it is important that this level is not exceeded unless further modelling work is undertaken to show that any additional traffic can continue to be accommodated on the network, and mitigation measures proposed if necessary. To this effect, a condition has been included at the start of this report limiting the development to the predicted and modelled 134 HGVs per day (268 total / two way trips). Section 4.5.3 of chapter 4 of the Environmental Statement (titled 'The Proposed Development') states that Automatic Number Plate Recognition will be used to monitor vehicle entry to the ERF and will maintain records of registration details of all vehicles using it. The Planning Authority should ensure they are content that this monitoring method is suitable and enforceable.

7.0 SITE LAYOUT

7.1 General observations

The layout of the site has been designed to accommodate the number and type of vehicles expected each day, as outlined in Figure 6-1 of the TA. The Planning Authority may wish to consider requesting additional information to show how pedestrians / workers travelling on foot across the site can be safely accommodated alongside the routine movements of large vehicles. However, that is an internal site layout matter and not a fundamental issue in relation to the free and safe flow of public highway users.

Internal access roads vary in width and general design, but the tracking diagrams submitted show that they safely and conveniently accommodate the vehicles which will be using them. There is a separate dedicated route for employees and visitors on arriving at the site. The Design and Access Statement makes a commitment to this being clearly signposted.

7.2 Vehicle Parking and Turning Areas

Tracking diagrams have been submitted to show vehicles of various sizes routing through the site. These demonstrate that all vehicles can fully turn around within the site and therefore enter and exit Ratty's Lane in forward gear.

In terms of on-site parking, 42 spaces for employees are to be provided, along with 3 motorcycle spaces. There are 6 RVS (refuse collection vehicle) spaces and 1 coach space / layby. The Highway Authority requested further details on the number and type of vehicles likely to be at the site at any one time, to ensure that the parking provision is sufficient and will not result in overspill onto Ratty's Lane. It has since been confirmed that the maximum time any HGV will spend at the site is 20 minutes, and therefore the Busiest Operational Hour (which experiences 18 HGV arrivals) can be accommodated by the HGV spaces provided on the site.

All parking spaces meet technical standards in terms of dimensions.

Overall, the on-site parking and turning areas appear to be sufficient to accommodate the number and types of vehicles accessing the site on a daily basis, with no routine overspill parking or turning activity onto Ratty's Lane or the wider public highway.

8.0 ACCESSIBILTY / SUSTAINABLE TRAVEL

The nature of the proposed development is such that it is primarily vehicle based, and opportunities to maximise sustainable travel for its daily operations will understandably be limited. However, it is important that the site still provides a degree of accessibility for employees who are based regularly at the site. With this in mind, an overview of the existing sustainable transport infrastructure is provided below.

It should be noted that the new facility will process all of Hertfordshire's waste meaning there will be less total vehicle kilometres travelled (much of it is currently transported out of the county). Therefore the development will help sustainability in a wider highways context.

8.1 Bus Services

Essex Road is not served by a bus route. The nearest bus stops are located along Old Highway, off Rye Road. They are a 2km walk along Ratty's Lane, Pindar Road, and Farm Lane, which is a hard surfaced, lit route. Alternatively,

the River Lea towpath can be used which routes onto Rye Road. This is an unlit route made up of a compacted mud / MOT type 1 material, but is shorter at around 1.2km. The southbound stop has a shelter. The northbound stop is a simple flag/pole. Bus services stopping here are every half an hour, serving Harlow, Hoddesdon, Broxbourne and Waltham Cross.

The next closest set of stops is in Hoddesdon town centre, by Sainsbury's. This is a walk of just over 2km. Bus services stopping here are regular and serve wide parts of the Borough and beyond, including Waltham Cross, Broxbourne, Hertford, Hatfield and Harlow.

8.2 Pedestrian & Cycle Routes

Much of the public highway in the vicinity of the site benefits from footways which generally meet technical standards in terms of width and surface quality. All key points where pedestrians have to cross junctions have pedestrian dropped kerbs (most with tactile paving) with the exception of the western Pindar Road / Essex Road junction. The footway width around the Essex Road Bridge reduces down to 1.4 metres, which is slightly below standard.

Much of Ratty's Lane itself is not public highway and there is no segregated footway to accommodate pedestrians. It is however long and straight with good forward visibility, and its constricted width slows down vehicles using it. This is confirmed by the outputs to the speed/volume survey which shows that the vast majority of vehicles travelling along it do so at less than 15mph. It is therefore not a fundamentally unsafe environment for employees of the site to walk along in order to access the site.

The River Lea towpath, which runs alongside the site boundary, provides and alternative pedestrian route up to the Rye Park area of Hoddesdon to the north and down towards Broxbourne and the Lea Valley Regional Park to the south.

In terms of cycling, there are no dedicated cycle lanes along Ratty's Lane or Essex Road, and the industrial nature of these roads makes them less suitable for cyclists. The rights of way in the vicinity of the site are however more suitable for cycling.

8.3 Rail Access

The closest rail station is Rye House. There are regular trains to Hertford East, and London Liverpool Street. The pedestrian route to this station is broadly the same as the Old Highway bus stops as described above.

9.0 MITIGATION MEASURES AND PLANNING OBLIGATIONS

9.1 Overview of Proposed Measures/Obligations

The applicant proposes the following:

i) Extending parking restrictions along Ratty's Lane in the form of double yellow lines and signage, to ensure large vehicles can pass along it without obstruction.
At its roundabout junction with Essex Road, Ratty's Lane currently has a double yellow line parking restriction which extends for approximately 60 metres. This prohibits vehicles parking near to the junction. Parking restrictions are also present on the adjoining section, which is a private road. The applicant plans to extend the double yellow lines along the full length of Ratty's Lane supported by signage. The Highway Authority requested confirmation from the applicant that they have the necessary access rights to undertake these works, and they have since confirmed that this is the case. Veolia will appoint a contractor to manage and enforce the parking controls accordingly.

ii) Upgrading the surface of Ratty's Lane.
Drawing Number 60493630-PA06 Revision C (submitted in the original TA) states that "existing pavement defect are to be repaired" and the "pavement extended to fenceline to allow full width to be used" along Ratty's Lane. The Highway Authority requested clarification on this as there are no footways along the eastern section of Ratty's Lane. The applicant has confirmed that this actually refers to the carriageway surface, which is to be repaired and brought up to a better standard and widened to the fence line on both sides. No detailed plans of this work have been submitted however. Those travelling on foot to and from the site along this route will require a good surface to freely and safely walk it, and therefore in the interests of sustainable travel, it is recommended that a condition is included to provide such a plan before commencement, with implementation completed before first use. Condition 5 at the start of this report is therefore recommended.

iii) Introducing a signalised scheme along Ratty's Lane.
Signals are to be introduced along the eastern section of Ratty's Lane to accommodate larger vehicles along the narrower section on approach to the site. This will ensure that two vehicles do not meet head on resulting in them being unable to pass by one another. However, the original signalisation scheme did not take into account traffic emerging from other side accesses along the proposed controlled section of Ratty's Lane (e.g. the access points to the Trent AD/ATT facility on the adjacent site). With this in mind, the Highway Authority questioned the feasibility of the scheme, raising concerns that the distance over which some vehicles have to travel from the side entrances/exits are such that an oncoming vehicle along Ratty's Lane may reach the green signal and pass by it when another has already made the exit turn out onto Ratty's Lane. In short, sending traffic uncontrolled onto a long section of a controlled carriageway was likely to cause general confusion to drivers on this stretch of private highway. The applicant has since revised the scheme (Drawing Number 60493630-PA09 Revision F in the revised Appendix 11.1 document) so that side exits to adjacent sites are also signal controlled, under the same red/green timing. A revised Linsig model has been submitted which demonstrates this works, with minimal queueing on all

approaches. The applicant has confirmed that they have the right to undertake these works to Ratty's Lane. Assuming this is the case, this signalisation scheme should be in place before commencement of the development, and included as a condition in any grant of consent (see Condition 3 at the start of this report). The Planning Authority should however be content that the signalisation scheme can be introduced on the adjacent site side accesses with no objections from those land owners.

iv) Introducing footway dropped kerbs and tactile paving at key junction points along Essex Road.
In the interests of sustainability, the Highway Authority has requested the installation of proper dropped kerbs and tactile paving at the western Essex Road / Pindar Road junction. This work will make the entire route from the site to Hoddesdon Town Centre accessible for less able users on foot, and help ensure the site complies with Paragraphs 32 and 35 of the NPPF. These paragraphs require developments to provide safe and suitable access for all people, and emphasise the importance of walking, cycling and public transport opportunities. The applicant has agreed to these works, which are included as a condition at the start of this report.

v) The applicant has submitted a Travel Plan as part of their application to encourage staff to use modes of transport other than the private motorcar. Our Travel Plan team has reviewed this under a standard Red-Amber-Green (RAG) criteria assessment and found that it broadly complies with Hertfordshire's Travel Plan Guidance. A copy of this assessment has been sent to the Planning Authority. Some areas need to be amended, but these are relatively minor, and the Highway Authority is content that it is sufficiently to standard to safely include as a condition within a Section 106 agreement. A £6,000 evaluation and support contribution should form part of this Section 106. Further details can be found in Highway Informative Note 5 at the start of this report.

vi) A Section 106 contribution towards a package of access improvements for Essex Road Employment Area, Hoddesdon.

This is considered in detail in the next section below.

9.2 Access Improvements – Background

Essex Road is the main route that provides access to the Strategic Road Network from the Hoddesdon Business Park. The business park is an important income generator in Hertfordshire and plays a significant economic role in the wider region. The Essex Road Gateway Study (Arup for HCC & Broxbourne) places the economic value (GVA) of the business park at £0.8 to £1.5M per day. The business park is reliant on the existing Essex Road link as this marks the gateway to the Essex Road Employment Area. It does however have a potential capacity constraint on the local highway network due to a poor 'S-bend' alignment. When two large vehicles pass by one another they struggle to do so conveniently as the road bridge is relatively

narrow (5.8 - 6 metre wide single carriageway) over the New River which has a poor vertical and horizontal alignment.

This results in the footway and verges being mounted, which causes damage and overall creates an unpleasant environment for pedestrians. To encourage new and existing employees of this employment area to commute using sustainable modes of transport there is a need to make improvements to cycle and pedestrian facilities. The bridge is also weak at the parapets, although the main structure is sound. Even a relatively modest routine increase in larger vehicles could be considered problematic. This bridge was constructed in 1952 and it should be noted that that the size of the HGVs and their permitted laden weight have significantly increased since 1952.

To resolve the problems along Essex Road, HCC has commissioned various studies to identify design solutions.

Project Objectives:

- Improve and maintain access to employment at the Hoddesdon Business Park;
- Increase the resilience of the transport access to Essex Road to cope with incidents such as collisions, breakdowns and maintenance;
- Improve safety for all road users;
- Improve the quality and connectivity of provision for pedestrians and cyclists. Encourage alternatives to car travel through improvements to the attractiveness of public transport; &
- Support the delivery of objectives in the Essex Road Gateway development brief.

The following package of improvements is considered to resolve the problems of access to Essex Road Employment Area, Hoddesdon:

- Proposed new bridge, associated road (280m long & 7.3m wide) over Woollensbrook and the New River to the south of Essex Road and other improvements to remove the New River Bridge pinch point. A new offline bridge has been identified as the most appropriate long term solution to the issue and future access to the business park following the joint master planning exercise undertaken by Arup for HCC and the Borough of Broxbourne Council;
- On line improvements to Essex Road to improve pedestrian and cycle access along the route;
- On line improvements to Essex Road to smooth traffic flows along the route;
- Construction of cycle route along Charlton Road to link Essex Road to the town centre and residential areas; &
- Improvements to the New River Path Right of Way/permissive route to improve access from Essex Road to Broxbourne Station and residential areas.

Both the Highway Authority and the Borough of Broxbourne Council as the Local Planning Authority is committed to a package of access improvements to the Essex Road Employment Area. Over the past few years, Hertfordshire County Council and Broxbourne Council have collected pooled Section 106 contributions from a number of other developments across the Essex Road Employment Area to go towards upgrading the bridge to overcome the issues described. As this development will increase the number of large vehicles routing across this bridge each day, and there is a need to provide alternatives to ensure the business park is accessible into the future, it is justified to seek a pooled contribution to add to those already collected. The Highway Authority is therefore seeking £750,000 from the proposed development as financial contribution for the above package of improvements.

10.0 CONSTRUCTION

The application includes 5 plans outlining various construction phases. Construction is estimated to last for a total of 33 months. Condition 12 at the start of this report is included to ensure that a Construction Traffic Management Plan is submitted before commencement of the development, and the measures contained within it implemented throughout the construction phase. This will ensure that construction of the development proceeds in a manner which will not adversely affect the free and safe flow of highway users. It is also recommended in Condition 1 that the revised access arrangements are in place before commencement of the development to ensure the safest possible access and egress during construction.

Wheel washing facilities should also be provided throughout the duration of construction, and this is covered under Condition 11 at the start of this report.

11.0 CONCLUSION

The Highway Authority has considered the impact of this development on the local highway network based on a detailed review of the applicant's Transport Assessment and subsequent analysis. In doing so the Highway Authority has taken account of the National Planning Policy Framework (March 2012) which places significant weight on the need to support economic growth through the planning system, and the statement within the policy that "development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe".

The Highway Authority is satisfied that the analysis of the traffic impact of the development is robust and will not have a severe adverse effect on the local highway or primary route network subject to the attached conditions and Section 106 requirements.

Hertfordshire County Council – Public Health Service

Original consultation response

We acknowledge the Health Impact Assessment undertaken for this proposal. This was the requested course of action outlined in our response to the 2016 Environmental Scoping Opinion, and we welcome the fact that this has been undertaken.

In our original response, we stated that having taken advice from Public Health England experts, on the face of the evidence and guidance available, we do not consider it likely there would be a significant impact on human health from the proposal, provided that all identified mitigation measures are in place and adhered to.

We have reviewed the HIA against recommended assessment criteria, and our overall conclusions are as follows:

- We accept the HIA's conclusion that the risks to health from the proposed facility are, on the basis of current available evidence, minimal.
- We note that this is supported by previous PHE advice, which PHE considers to remain valid, and a number of studies including Font et al (2015), which supports the PHE position.

We have consulted with Public Health England and their position, outlined below (and available as email correspondence), supports our advice above:

"*PHE's position is that modern, well managed incinerators make only a small contribution to local concentrations of air pollutants. It is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable. This view is presented in the position statement from September 2009, reissued in February 2010, which is available here: https://www.gov.uk/government/publications/municipal-waste-incinerators-emissions-impact-on-health*

PHE will review its advice in light of new substantial research on the health effects of incinerators published in peer reviewed journals. To date, PHE is not aware of any evidence that requires a change in our position statement.

The PHE funded study by the Small Area Health Statistics Unit at Imperial College and the Environmental Research Group at King's College London investigating the potential link between emissions from municipal waste incinerators and health outcomes is ongoing. It is expected that papers from the project will be submitted by SAHSU to peer reviewed journals in spring 2017 and the papers to be published later in the year. It is important to stress that Public Health England's position that well run and regulated modern Municipal Waste Incinerators (MWIs) are not a significant risk to public health remains valid, and the study is being carried out to extend the evidence base and to provide further information to the public on this subject."

We note that the Health Impact Assessment community engagement undertaken identifies concerns amongst members of the local population in relation to health and wellbeing. Whilst our position sets out the belief that the

risks to health will be minimal, in order to provide assurance to the wider community, should this proposal proceed we advise the following:

1. That air quality monitoring for both the construction and operation of the facility is required as a condition of planning. This should include the monitoring of particulate matter, including PM2.5. This position is supported by the revised EU Environmental Impact Assessment regulations which will be introduced into UK legislation in May, placing a positive duty on the developer to monitor the effects of development.

a. All emissions information and data should be publicly accessible.
b. Monitoring locations should take account of likely receptors in relation to the facility itself and the vehicle movements associated with its construction and operation.
c. Monitoring should be in place in advance of the construction phase.

2. That the developer/operator heed the recommendations made in the HIA in relation to sustained community engagement to enable any wellbeing concerns to be articulated. Should the proposal proceed, this should include:

a. a continued Community Liaison Group,
b. opportunities for regular community meetings
c. establishment of a community complaints procedure as an early action

Broxbourne Borough Council – Environmental Health

We have the following comments to make.

Air Quality

The Borough of Broxbourne commenced monitoring of nitrogen dioxide levels, at 2 locations along Essex Road and Burford Street/Dinant Link Road in May 2016.

The Bias Adjusted results for both the Essex Road and Burford Street/Dinant Link Road locations were above the 40 µg/m3 annual mean objective for nitrogen dioxide in 2016 and the monthly results for the Burford Street/Dinant Link location in 2017 has continually been above the 40 µg/m3 threshold.

Based on the elevated results, it is likely that an additional AQMA will be declared along this route in the future.

There are serious concerns with this proposed development, which is proposing an additional 300 vehicle movements per day. The environmental statement does not provide any data on the emissions standards of the vehicles or any proposals on mitigation measures to reduce nitrogen dioxide, PM10'S & PM 2.5s for example hybrid vehicles, anti-idling policy and retrofitting older vehicles with Selective Catalytic Reduction technology.

In fact Paragraph 7.8.38 within the Section 7 (Air Quality) of the Environmental Statement Volume 1 concludes,

"*The effect on local air quality of the combined impacts from road traffic emissions and emissions from the facility is not considered to be significant*."

We disagree with this statement as the additional vehicle movements associated with the ERF will inevitably compound the poor Air Quality along these routes and affect members of the public and residential receptors.

Odour

The Borough of Broxbourne previously provided comments to the Environment Agency with respect to an environmental permit application, reference: EPR/SP3038DY/A001, where the following concerns were raised.

"*The Council notes that the installation proposes to use ammonia solution injection in the SCC for NOx abatement. Ammonia can be highly problematic to handle and store and has a high odour impact potential if released. This potential does not appear to have been examined in detail within the application. It is not clear where the applicant plans to store ammonia. It is not clear if the odour impact potential on local receptors has been sufficiently considered."*

Noise

The results from the previous noise monitoring which was carried out between 17/11/11 and 24/11/11 and supplementary monitoring between the 15/01/12-16/01/12 and the 06/03/12-07/03/12, are not be representative of local conditions due to the amount of time which has elapsed.

This Planning Authority has received an Application for residential development at Oaklands Yard, Essex Road, Hoddesdon. There are also residential receptors on Colthurst Gardens, Fishermans Way and Village Close and it was previously recommended that these locations also be taken in to account in any future noise monitoring within Environmental Health's response to the 2016 Scoping consultation. The Applicant has had the benefit of a large timeframe in which to carry out additional monitoring, but has chosen to rely on outdated monitoring results which do not provide a representative analysis of conditions around the vicinity of the proposed site, thus making it difficult to determine the correct level of mitigation at the site.

Land Contamination

Section 11 (Land Contamination) within the Environmental Statement Volume 1, refers to an initial ground investigation carried out by Campbell Reith. The document provides an overview of the investigation. However it does not constitute the full report and it is possible that details pertinent to the site investigation may have been omitted.

Section 11 refers to a site investigation in September 2011 and whereas conditions do not appear to have changed significantly on site, the human health risk assessment criteria has been amended since this time, for example the LQM/CIEH S4ULs.

The baseline summary list several contaminants within a conceptual site model, including PCBs, Asbestos, Metals, PAHs, TPH and Ground Gas, but to name a few. Paragraph 11.10.2 refers to elevated concentrations of PAH with respect to human health guideline values, however these results are not represented. Further monitoring is also suggested, however it is not clear whether this has been carried out.

Results pertinent to Groundwater testing have been included, however the soil strata's around the site do not appear to have been tested for within the investigation as their results have not been included within Section 11, which is concerning as any dust produced during the excavation and construction phases of the development could potentially create a Source Pathway Receptor, Pollutant Linkage with respect to residential receptors and on site workers.

It is therefore imperative all pollutants identified are assessed before a Generic Quantitative Risk Assessment and a Detailed Quantitative Risk Assessment are carried out in order to determine whether remediation is necessary and the details of management within the site. The above should be carried out in conjunction with Model Procedures for the Management of Land Contamination – Contaminated Land Report 11' (CLR11).

Conclusion

To conclude, Environmental Health object to this Application, due to the outstanding matters related to Air Quality, Noise, Odour and Land Contamination. We believe the operation of the Energy Recovery Facility will have a negative impact upon residential receptors in proximity to the facility, in addition to the wider area along the traffic routes, where transport related pollutants such as nitrogen dioxide and Particulate Matter (PM10s) will inevitably increase.

Hertfordshire County Council – Local Lead Flood Authority

Original consultation response

Having reviewed the Flood Risk Assessment (FRA) submitted by Veolia to support planning application, ref 7/0067-17(ERF), dated December 2016, and attached as the Appendix 13.1 of the Environmental Statement the LLFA is of the view that this submission does not satisfactorily address how to drain the whole site and mitigate any potential existing surface water flood risk. Therefore the following issues contained within the Drainage Strategy prepared by Doran Consulting dated October 2016 and included as appendix D of the FRA, need to be addressed in order to satisfy the concerns of the LLFA.

The LLFA's main concern is the location of the site in a protected floodplain, and the consequential risk of combined flooding from the river and from surface water.

We acknowledge that the discharge point proposed by the drainage strategy is into the river at the bank wall downstream of fields lock to the south of the site. To accord with the Non-statutory standards for sustainable drainage systems the discharge point should be secured for the 1/30 event return period regardless of the level of the river. The design should also prevent any backflow from the river into the site surface water drainage system.

In order to demonstrate that the surface water flows and volumes will be efficiently managed when the river floods without compromising safe access/refuge, modelling of both the fluvial and pluvial catchments should be undertaken including the combination of high fluvial levels and the worst rainfall event (1/100 year event plus climate change allowance). We note that fluvial modelling results have already been included in the FRA.

As this is a full planning application we would expect to find confirmation within the submitted documentation to support the drainage strategy that the applicant has permission to cross the land adjacent to the site, which is in third-party ownership, to secure access to the proposed discharge point. In addition the applicant should also provide confirmation that they have the necessary permissions and the relevant agreements from the Environment Agency (as the regulatory body for the main river) and from the Canal & River Trust to discharge water to the river.

As the LLFA we have to look at all the elements of the development within the designated red line boundary of the planning application, including the access road. We therefore require clarification as to how the future drainage arrangements for this road will be secured and managed. We note there is no information provided within the application documents on how drainage to this access is to be secured. The details relating to how the drainage will be managed on this access road, including the surface water volumes for all relevant return periods and how this water will be discharged needs to be submitted. If no material change is planned and the applicant intends to keep the existing surface water drainage, a clear statement of the current situation should be provided, including details as to how this water is currently managed.

Overland surface flows from the surrounding area must also be understood to ensure that the best approach to manage them is proposed. We therefore require clarification of the drainage to the wet area of land in the NE corner of the site. This should include details of the contributing catchment and where the water is expected to flow to. The same information is also required for the area associated with the railway sidings at the edge of the site.

A surface water management and treatment train is critical to the system to prevent water quality issues at the outfall to the river. This is to ensure that

any quality issues related to the meeting of Water Framework Directive targets are achieved.

As the proposed discharge is to the River Lee, which is a main river, clarification should be sought from the Environment Agency on any requirements they may have to ensure that water quality for the discharge to the main river is acceptable. This may include pollution prevention measures which will need to be incorporated into the final drainage design and if so these will need to be specified. As the LLFA we would prefer a more natural approach and therefore would recommend that a minimum of three SuDS treatment stages should be provided to manage any potential contaminants from surface water run-off from hardstanding areas and access roads prior to the final discharge point into the river.

In order for the Lead Local Flood Authority to advise the relevant Local Planning Authority that the development will not increase flood risk to the site and elsewhere and can provide appropriate sustainable drainage techniques, the applicant should consider the comments above that are directly linked to the characteristics of the site and also the following information which should be included in the drainage strategy:

- Detailed exceedance routes need to be assessed and identified for rainfall events that exceed the 1 in 100 year + climate change event and combined with any fluvial flooding. In addition any exceedance routes proposed for flood management on the site should be shown on a plan.
- Surface water calculations should take account of the whole site area not just impermeable areas. The runoff rates that are generated by the whole site should be provided, this should include all rainfall events up to and including the 1 in 100 year + climate change event. Permeable areas will generate runoff at greenfield rates, and it will need to be conveyed by the proposed drainage scheme therefore the required attenuation volumes and run-off rates should reflect this.
- As part of a detailed planning application we would expect to review detailed design and engineering drawings for the system and each component of the proposed SuDS scheme.

We therefore wish to be re-consulted with the results of an amended Flood Risk Assessment, which should cover the deficiencies highlighted above to address our concerns. If this cannot be achieved we would reserve the right to object to the grant of this planning application and recommend refusal on surface water flood risk ground.

Further consultation response

Thank you for consulting us to again on the application above for the demolition of the existing building and structures at the site and construction and operation of an Energy Recovery Facility (ERF). Following discussions with the applicant and review of the amended Flood Risk Assessment (FRA)

produced by AECOM and dated August 2017 provided as the appendix 11.2 of the Environmental Statement, the Lead Local Flood Authority have no objection on surface water flood risk grounds. We can then advise the Local Planning Authority that the proposed development site can be adequately drained and mitigate any potential existing surface water flood risk if carried out in accordance with the overall drainage strategy.

The Drainage Strategy prepared by Doran Consulting issue 3 on 01/08/2017 included as appendix D of the FRA aforementioned, does now appropriately address the concerns raised in our previous letter dated 22/03/2017.

The proposed site drainage system makes provision of water storage via a combination of retention basin and cellular storage tanks, prior to discharge into the adjacent River Lee at 8.8 l/s.

Confirmation that all the required permissions or arrangements from third parties have been received is provided within the document ensuring the viability of the system.

An exceedance flow route assessment has been undertaken on a sub-catchment approach to demonstrate that the site drainage system is designed to accommodate all the surface water draining from the whole area contained within the red line boundary.

The provision of a range of SuDS source control measures ensures that any impact from the development to the local environment and watercourse is mitigated appropriately.

A conservative approach has been adopted throughout the design of the proposed site infrastructure to consider the potential impact of a combined river flood event and extreme rainfall event. During such an event water is shown to accumulate within the car park area and internal site road, and the buildings shall remain protected from water ingress.

Detailed and clear surface water drainage calculations have been attached to demonstrate the suitability of the scheme.

As the Lead Local Flood Authority we would therefore consider that there is no significant increase in flood risk to the site and elsewhere as the consequence of the proposed development, subject to detailed design and the outcome from the Environmental Permit Application under determination of the Environment Agency.

However we strongly recommend the Local Planning Authority to seek confirmation of the detailed design of the final surface water drainage scheme to be implemented and final as-built drawings along with a detailed management and maintenance plan through the following proposed planning conditions.

Condition 1

No development shall take place until a full final detailed drainage strategy has been submitted to and approved in writing by the local planning authority. The scheme shall include full detailed engineering drawings of all the proposed SuDS measures in line with the latest edition of the SuDS Manual by CIRIA, and any amendments required to the whole area contained within the red boundary that may affect the surface water management.

The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.

Condition 2

Upon completion of the development a detailed drainage layout supported by engineering drawings of all drainage components as built and a management and maintenance strategy must be submitted. The management and maintenance plan shall include arrangements for adoption and any other arrangements to secure the operation of the scheme throughout its lifetime.

Please note if the Local Planning Authority decide to grant planning permission we wished to be notified for our records. We ask to be consulted on the details submitted for approval to your Authority and on any subsequent amendments/alterations.

Environment Agency

Further consultation response

Thank you for your patience and for allowing us additional time to review and assess the applicant's additional flood risk modelling. We have now reviewed all the additional information and have no objection to the proposed development. However we require the following conditions are applied to the grant of any planning permission. Without these conditions the development would pose an unacceptable risk to the environment and we would wish to object.

Condition 1
The submitted flood risk assessment (FRA); 'Rye House Energy Recovery Facility, Hoddesdon, Hertfordshire; Flood Risk Assessment Final Report, August 2017' prepared by AECOM Infrastructure & Environment UK Ltd for Veolia Environmental Services Ltd, and associated plans demonstrate that finished floor levels of the Energy Recovery Facility (ERF) building shall be set no lower than 29.04mAOD, which ensures a 300mm freeboard above the modelled 1 in 100 year 25% flood level to protect the development from flooding. The development should be carried out in accordance with this FRA.

Reason
To protect the development from flooding.

Condition 2 No development approved by this planning permission shall commence until a remediation strategy to deal with the risks associated with contamination of the site has been submitted to, and approved in writing by, the county council. This strategy will include the following components:
1. A preliminary risk assessment which has identified:

 all previous uses;
 potential contaminants associated with those uses;
 a conceptual model of the site indicating sources, pathways and receptors; and;
 Potentially unacceptable risks arising from contamination at the site.

2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

3. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action. Any changes to these components require the written consent of the local planning authority. The scheme shall be implemented as approved.

Reason To protect groundwater. The site is located in a vulnerable groundwater area within a Source Protection Zone 2 (SPZ2). This condition will ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution in line with paragraph 109 of the National Planning Policy Framework.

Condition 3 Prior to any part of the permitted development being brought into use a verification report demonstrating the 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.

Reason To ensure that the site does not pose any further risk to human health or the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with paragraph 109 of the National Planning Policy Framework.

Condition 4 The development hereby permitted may not commence until a monitoring and maintenance plan with respect to groundwater contamination,

including a timetable of monitoring and submission of reports to the Local Planning Authority, has been submitted to, and approved in writing by, the Local Planning Authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the groundwater monitoring, shall be submitted to, and approved in writing by, the Local Planning Authority.

Reason To ensure that the site does not pose any further risk to human health or the water environment by managing any ongoing contamination issues and completing all necessary long-term remediation measures. This is in line with paragraph 109 of the National Planning Policy Framework.

Condition 5 If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved.

Reason No investigation can completely characterise a site. This ensures that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution from previously unidentified contamination sources at the development site in line with paragraph 109 of the National Planning Policy Framework.

Condition 6 A scheme for managing any borehole installed for the investigation of soils, groundwater or geotechnical purposes shall be submitted to and approved in writing by the local planning authority. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes that need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme as approved shall be implemented prior to each phase of development being brought into use.

Reason To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraph 109 of the National Planning Policy Framework.

Condition 7 Piling using penetrative methods shall not be carried out other than with the written consent of the local planning authority. The development shall be carried out in accordance with the approved details.

Reason To ensure that the proposed piling, does not harm groundwater resources in line with paragraph 109 of the National Planning Policy Framework and Position Statement G1 – Direct Inputs to Groundwater of the Environment Agency's Groundwater Protection: Principles and Practice.

Condition 8 No drainage systems for the 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 Infiltration through contaminated land and soakaways act as preferential pathways for contaminants to have the potential to impact on groundwater quality.

Condition 9
No development shall take place until a plan detailing the protection and/or mitigation of damage to populations of Great Crested Newt, a protected species under The Wildlife and Countryside Act 1981 as amended, The Habitats Directive Annex II, Countryside Rights of Way Act 2000 (CRoW 2000), and their associated habitat during construction works and once the development is complete. Any change to operational, including management, responsibilities shall be submitted to and approved in writing by the local planning authority. The Great Crested Newt protection plan shall be carried out in accordance with a timetable for implementation as approved.
The scheme shall include the following elements:
• Proof of European Protected Species Mitigation Licence obtained from Natural England
• Details of Great Crested Newt trapping methodology
• Method statement for removal of Pond 1 and site clearance
• Protection of existing Great Crested Newt population from NWR1 linear waterbody
• Details of mitigation pond designs and construction, including proposed enhancements
• Details of other mitigation such as hibernacula and migration corridors to ensure habitat connectivity
• Details of buffers (min 5m wide) around ponds, including planting scheme

Reason
This condition is necessary to protect the Great Crested Newt and its habitat within and adjacent to the development site. Without it, avoidable damage could be caused to the nature conservation value of the site. Under the Wildlife and Countryside Act 1981, LPAs should take reasonable steps to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest. Under section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 local planning authorities must have regard to purpose of conserving biodiversity.

Condition 10
No development shall commence until a detailed method statement for removing or the long-term management / control of Japanese Knotweed and Himalayan Balsam on the site shall be submitted to and approved in writing by the local planning authority. The method statement shall include measures that will be used to prevent the spread of Japanese Knotweed and Himalayan Balsam during any operations e.g. mowing, strimming or soil movement. It

shall also contain measures to ensure that any soils brought to the site are free of the seeds / root / stem of any invasive plant listed under the Wildlife and Countryside Act 1981, as amended. Development shall proceed in accordance with the approved method statement.

Reason
This condition is necessary to prevent the spread of Japanese Knotweed and Himalayan Balsam which is an invasive species. Without it, avoidable damage could be caused to the nature conservation value of the site contrary to National Planning Policy Framework paragraph 109, which requires the planning system to aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible.

Condition 11
No development shall take place until a method statement/construction environmental management plan that is in accordance with the approach outlined in the Planning/Environmental Statement, has been submitted to and approved in writing by the local planning authority. This shall deal with the treatment of any environmentally sensitive areas, their aftercare and maintenance as well as a plan detailing the works to be carried out showing how the environment will be protected during the works. Such a scheme shall include details of the following:
• The timing of the works
• The measures to be used during the development in order to minimise environmental impact of the works (considering both potential disturbance and pollution).
• The ecological enhancements as mitigation for the loss of habitat resulting from the development.
• A map or plan showing habitat areas to be specifically protected (identified in the ecological report) during the works.
• Any necessary mitigation for protected species
• Construction methods.
• Any necessary pollution protection methods.
• Information on the persons/bodies responsible for particular activities associated with the method statement that demonstrate they are qualified for the activity they are undertaking.
The works shall be carried out in accordance with the approved method statement.

Reason
This condition is necessary to ensure the protection of wildlife and supporting habitat and secure opportunities for the enhancement of the nature conservation value of the site in line with national planning policy.

The National Planning Policy Framework (NPPF) paragraph 109 recognises that the planning system should aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible. Paragraph 118 of the NPPF states that if significant harm resulting from a development cannot be avoided (through

locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused and that opportunities to incorporate biodiversity in and around developments should be encouraged.
Article 10 of the Habitats Directive stresses the importance of natural networks of linked habitat corridors to allow the movement of species between suitable habitats, and promote the expansion of biodiversity. River corridors are particularly effective in this way. Such networks and corridors may also help wildlife adapt to climate change.'

Advice for County Council and applicant.
Below I have provided more information in regard to specific areas of the development

Flood risk

Modelling Flood risk modelling undertaken by a third party has been used in support of this application and we have applied a risk based approach to the assessment of this model. In this instance a detailed review has been carried out. The modelling was found to be acceptable to inform the site specific flood risk assessment. We have not undertaken a full assessment of the fitness for purpose of the modelling and can accept no liability for any errors or inadequacies in the model.
Design flood level to include the appropriate allowance for climate change

The submitted FRA uses the 'Higher Central' 1 in 100 year 25% climate change allowance throughout. This was agreed in pre-application discussions as the most appropriate climate change allowance given the higher vulnerability receptors off-site. The FRA was informed by site-specific fluvial modelling; 'Rye House Energy Recovery Facility, Hoddesdon, Hertfordshire; Appendix A – Model Build Technical Note, July 2017' produced by AECOM Infrastructure & Environment UK Ltd. AECOM modified the existing River Lee 2D modelling study (CH2M Hill, 2014). Baseline and proposed development scenarios were provided with the 'Higher Central' climate change allowance applied. The site specific modelling was found to be acceptable for the use in the FRA by a detailed model audit. The 'Higher Central' allowance ensures that the FRA adequately assesses the safety of the site for the intended lifetime of the development, and demonstrates that the proposed development will not increase flood risk elsewhere, taking climate change into account.

Floodplain compensation Figures 4-6 and 4-7 in the submitted FRA demonstrate that the footprint of the proposed ERF is outside of the 1 in 100 year 25% flood event. Conventional level-for-level volume-for-volume floodplain compensation is subsequently not required for the development, as flood water is not displaced, and flood risk is not increased elsewhere off-site as demonstrated in Figure 5-1.

Ground lowering is proposed for the new development with a lowered car park and surface water attenuation basins. Figure 4-7 illustrates how the lowered

ground surface will channel flood flows away from the ERF building in a 1 in 100 year 25% flood event or greater. This represents mitigation by design and not floodplain compensation; section 5.2.8 of the FRA suggests that the flows will drain from the application site via the proposed surface water drainage system, however this will need to be agreed with the Lead Local Flood Authority, as the surface water drainage system must be maintained to ensure adequate storage is available for fluvial flood flows. The applicant and the local planning authority should assess the hazard rating for the site, as flood depths could exceed 2m in attenuation basins given the modelled flood level of 28.72mAOD, and attenuation basin levels of 26.60mAOD. Water depths exceeding 2m represent a danger for all including the emergency services regardless of flow velocity according to Defra/EA Technical Report FD2320: Flood Risk Assessment Guidance for New Development.

Bund as a secondary flood defence The earth bund which runs to the north and east of the application site and illustrated in Figure 4-2 of the FRA was subject of a geotechnical assessment; 'Veolia Rye House Site, Hoddesdon; Bund Geotechnical Assessment' produced by AECOM Infrastructure & Environment UK Ltd (project number: 60493630). The conclusions of the geotechnical assessment were corroborated by our catchment engineer, agreeing that the bund would act as an impermeable structure, and therefore as a secondary flood defence structure up to and including the 1 in 100 year 25% flood event. The proposed development includes a wall with a crest height of 30.0mAOD, which will consolidate the existing earth bund. Floodplain compensation is not required for the wall as flood flow and overland flow routes are not affected by the wall. The footprint of the wall will not displace floodwater, while the crest level is already above the 1 in 100 year 25% flood level. It has been demonstrated in Figures 5-1 and 5-2 that flood risk does not increase outside of the development site up to and including the 1 in 1000 year flood event with the wall in place.

Flood evacuation plan Section 4.3.60 of the submitted FRA states that an Emergency Plan will be established prior to the occupation of the proposed development. The Emergency Plan and any safe evacuation and access/egress arrangements must be agreed with the lead local flood authority prior to occupation. Environment Agency flood warnings are available for this site, and the future occupants should sign up to receive flood alerts and warnings.

Flood Zone 3b The Borough of Broxbourne Strategic Flood Risk Assessment May 2016 indicates that the application site is within Flood Zone 3b, identified as the functional floodplain with a 1 in 20 year or greater chance of flooding. However, a precautionary approach has been used in the absence of detailed modelling, assigning all of Flood Zone 3a as Flood Zone 3b. The site specific modelling used to inform this application demonstrates that Flood Zone 3b is not present on site, however as the 3b designation lies with Broxbourne and not ourselves this must be agreed with the local planning authority.

Safe Access/Egress This proposal may not have a safe means of access and/or egress in the event of flooding from all new buildings to an area wholly

outside the floodplain (up to a 1 in 100 year 25% flood event). You are the competent authority on matters of evacuation or rescue, and therefore should assess the adequacy of the evacuation arrangements, including the safety of the route of access/egress from the site in event of flooding, as well as information in relation to signage, underwater hazards or any other particular requirements. You should consult your emergency planners as you make this assessment. If you are not satisfied with the emergency flood plan, then we would recommend that you refuse the application on the grounds of safety during a flood event, as site users will be exposed to flood hazards on access/egress routes. Safe access and egress routes should be assessed in accordance with Defra/EA Technical Report FD2320: Flood Risk Assessment Guidance for New Development.

Contamination & Groundwater (conditions 2-8)
The previous use of the development site as a railway siding and aggregate processing yard presents a medium risk of contamination that could be mobilised during construction to pollute controlled waters. Controlled waters are particularly sensitive in this location because the proposed development site is located over a Principal aquifer.

The *Environmental Statement Report (Aecom, December 2016)* and the *Land Quality Statement (Campbell Reith, August 2012)* submitted in support of this planning application provide us with confidence that it will be possible to suitably manage the risk posed to controlled waters by this development. Further detailed information will however be required before the proposed development is undertaken.

The submitted documents provide confidence that the applicant has considered the potential issues associated with the redevelopment of a potentially contaminated site and the storage and drainage of potentially contaminated liquids close to, or below, the groundwater table. Whilst the information provided partially satisfies the requirements in our condition 2, the information provided is not sufficient to allow the complete conceptualisation of the conditions beneath the site with respect to the proposed end use which is why we have requested the full 4 parts of the condition.

Advice to Applicant We recommend that you should: Follow the risk management framework provided in CLR11, Model Procedures for the Management of Land Contamination, when dealing with land affected by contamination. Refer to the Environment Agency Guiding principles for land contamination for the type of information that we required in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, such as human health. Consider using the National Quality Mark Scheme for Land Contamination Management which involves the use of competent persons to ensure that land contamination risks are appropriately managed. Refer to the contaminated land pages on GOV.UK for more information. We expect the site investigations to be carried out in accordance with best practice guidance for site investigations on land affected by land contamination. E.g. British Standards when investigating potentially contaminated sites and groundwater, and references with these documents:

 BS5930:2015 Code of practice for site investigations;
 BS 10175:2011 A1:2013 Code of practice for investigation of potentially contaminated sites;
 BS ISO 5667-22:2010 Water quality. Sampling. Guidance on the design and installation of groundwater monitoring points;
 BS ISO 5667-11:2009 Water quality. Sampling. Guidance on sampling of groundwaters (A minimum of 3 groundwater monitoring boreholes are required to establish the groundwater levels, flow patterns and groundwater quality.)
Use MCERTS accredited methods for testing contaminated soils at the site. A Detailed Quantitative Risk Assessment (DQRA) for controlled waters using the results of the site investigations with consideration of the hydrogeology of the site and the degree of any existing groundwater and surface water pollution should be carried out. This increased provision of information by the applicant reflects the potentially greater risk to the water environment. The DQRA report should be prepared by a “Competent person” The DQRA should be based on site-specific data, however in the absence of any applicable on-site data, a range of values should be used to calculate the sensitivity of the input parameter on the outcome of the risk assessment
The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation."(http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary/)” Guidance on setting compliance points in DQRAs is provided: https://www.gov.uk/guidance/land-contamination-groundwater-compliance-points-quantitative-risk-assessments
Where groundwater has been impacted by contamination on site, the default compliance point for both Principal and Secondary aquifers is 50m. Where leaching tests are used it is strongly recommended that BS ISO 18772:2008 is followed as a logical process to aid the selection and justification of appropriate tests based on a conceptual understanding of soil and contaminant properties, likely and worst-case exposure conditions, leaching mechanisms, and study objectives. During risk assessment one should characterise the leaching behaviour of contaminated soils using an appropriate suite of tests. As a minimum these tests should be:
 upflow percolation column test, run to LS 2 – to derive kappa values;
 pH dependence test if pH shifts are realistically predicted with regard to soil properties and exposure scenario; and
 LS 2 batch test – to benchmark results of a simple compliance test against the final step of the column test.

Following the DQRA, a Remediation Options Appraisal to determine the Remediation Strategy in accordance with CRL11.
The verification plan should include proposals for a groundwater-monitoring programme to encompass regular monitoring for a period before, during and after ground works. E.g. monthly monitoring before, during and for at least the first quarter after completion of ground works, and then quarterly for the remaining 9-month period.) **Decommission of investigative boreholes (condition 6)** The submitted planning application indicates that boreholes will

need to be installed at the development site to investigate ground conditions. If these boreholes are not decommissioned correctly they can provide preferential pathways for contaminant movement which poses a risk to groundwater quality. Groundwater is particularly sensitive in this location because the proposed development site is located over a Principal aquifer.

Piling (condition 7) Piling using penetrative methods can result in risks to potable supplies from, for example, pollution / turbidity, risk of mobilising contamination, drilling through different aquifers and creating preferential pathways. A piling risk assessment and appropriate mitigation measures should be submitted with consideration of our guidance and Position Statement G1 – Direct Inputs to Groundwater from *The Environment Agency's approach to groundwater protection March 2017 Version 1.0*
https://www.gov.uk/government/publications/groundwater-protection-position-statements
During piling works the weekly groundwater monitoring for insitu parameters and turbidity should be considered.
http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/scho0202bisw-e-e.pdf

Biodiversity (condition 9)
Guidance to assist with the design of the above measures, is provided in the: "Experience in Great Crested Newt Migration: Guidance for Ecologists and Developers"
Natural England's Standing advice for protected species – this Provides basic advice which can be applied to any planning application that could potentially affect protected species.

Invasive Species (condition 10)
The Thames river basin management plan requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. Without this condition, the ecological impact of Japanese Knotweed and Himalayan Balsam could lead to deterioration of a quality element to a lower status class in the Lee Navigation waterbody. The nature and conservation section of the Environmental Statement submitted provides evidence of Japanese Knotweed and Himalayan Balsam are present in the development site. There are actions identified for the wider waterbody regarding control of invasive non-native species which
• Appropriate techniques to prevent transfer of invasive species
• Educate landowners and riparian users on preventing the spread of invasive species

Environmental Permit information

Environmental Permit
The Environmental Permit application for this proposal has been submitted and is currently with our National Permitting Service awaiting a decision.

Flood Risk Activity Permit Under the terms of the Environmental Permitting Regulations a Flood Risk Activity Permit is required from the Environment

Agency for any proposed works or structures, in, under, over or within 8 metres of the top of the bank of the River Lee, designated a ‘main river’. Details of lower risk activities that may be Excluded or Exempt from the Permitting Regulations can be found on the Gov.uk website.

Discharge consent The surface water discharge associated with this development will require an Environmental Permit under the Environmental Permitting Regulations 2010, from the Environment Agency, unless an exemption applies. The applicant is advised to contact the Environment Agency on 08708 506 506 for further advice and to discuss the issues likely to be raised. You should be aware that the permit may not be granted. Additional ‘Environmental Permitting Guidance’ can be accessed via our main website https://www.gov.uk/topic/environmental-management/environmental-permits

Thames Water

Original consultation response

Waste Comments

With the information provided Thames Water, has been unable to determine the waste water infrastructure needs of this application. Should the Local Planning Authority look to approve the application ahead of further information being provided, we request that the following 'Grampian Style' condition be applied - “Development shall not commence until a drainage strategy detailing any on and/or off site drainage works, has been submitted to and approved by, the local planning authority in consultation with the sewerage undertaker. No discharge of foul or surface water from the site shall be accepted into the public system until the drainage works referred to in the strategy have been completed”. Reason - The development may lead to sewage flooding; to ensure that sufficient capacity is made available to cope with the new development; and in order to avoid adverse environmental impact upon the community. Should the Local Planning Authority consider the above recommendation is inappropriate or are unable to include it in the decision notice, it is important that the Local Planning Authority liaises with Thames Water Development Control Department (telephone 0203 577 9998) prior to the Planning Application approval.

Surface Water Drainage - With regard to surface water drainage it is the responsibility of a developer to make proper provision for drainage to ground, water courses or a suitable sewer. In respect of surface water it is recommended that the applicant should ensure that storm flows are attenuated or regulated into the receiving public network through on or off site storage. When it is proposed to connect to a combined public sewer, the site drainage should be separate and combined at the final manhole nearest the boundary. Connections are not permitted for the removal of groundwater. Where the developer proposes to discharge to a public sewer, prior approval from Thames Water Developer Services will be required. The contact number is 0800 009 3921. Reason - to ensure that the surface water discharge from the site shall not be detrimental to the existing sewerage system.

A Trade Effluent Consent will be required for any Effluent discharge other than a 'Domestic Discharge'. Any discharge without this consent is illegal and may result in prosecution. (Domestic usage for example includes - toilets, showers, washbasins, baths, private swimming pools and canteens). Typical Trade Effluent processes include: - Laundrette/Laundry, PCB manufacture, commercial swimming pools, photographic/printing, food preparation, abattoir, farm wastes, vehicle washing, metal plating/finishing, cattle market wash down, chemical manufacture, treated cooling water and any other process which produces contaminated water. Pre-treatment, separate metering, sampling access etc, may be required before the Company can give its consent. Applications should be made at http://www.thameswater.co.uk/business/9993.htm or alternatively to Waste Water Quality, Crossness STW, Belvedere Road, Abbeywood, London. SE2 9AQ. Telephone: 020 3577 9200.

Water Comments

Insufficient information has been provided by the Developer to allow Thames Water to determine the water supply infrastructure needs for the proposed development. In order that the development does not detrimentally effect the water supply infrastructure, Thames Water recommend the following condition be imposed: Development should not be commenced until: a) full details, including anticipated flow rates, and detailed site plans have been submitted to, and approved in writing by, the local planning authority (in consultation with Thames Water) b) Where this development forms part of a larger development, arrangements have been made to the satisfaction of the Planning Authority (in consultation with Thames Water) for the provision of adequate water supplies for the whole of the development. Reason: To ensure that the water supply infrastructure has sufficient capacity to cope with the/this additional demand.

The proposed development is located within Source Protection Zone 1 of a groundwater abstraction source. These zones are used for potable water sources for public supply for which Thames Water has a statutory duty to protect. Consequently, development shall not commence until details have been submitted to and approved by the Local Planning Authority in consultation with Thames Water, of how the developer intends to ensure the water abstraction source is not detrimentally affected by the proposed development both during and after its construction. More detailed information can be obtained from Thames Waters' Groundwater Resources Team by email at GroundwaterResources@Thameswater.co.uk or by telephone on 0203 577 3603. Reason: To ensure that the water resource is not detrimentally affected by the development.

Supplementary Comments

To enable us to provide more specific comments on the site proposal we require details of proposed discharge rates and points of connection to public sewer for foul water. As the development site is positioned in the vicinity to the

River Lee and water drains, we would support the proposal to discharge all surface water into the watercourse.

The proposed development is located within Source Protection Zone 1 of a groundwater abstraction source. These zones are used for potable water sources for public supply for which Thames Water has a statutory duty to protect. Consequently, development shall not commence until details have been submitted to and approved by the Local Planning Authority in consultation with Thames Water, of how the developer intends to ensure the water abstraction source is not detrimentally affected by the proposed development both during and after its construction. More detailed information can be obtained from Thames Waters' Groundwater Resources Team by email at GroundwaterResources@Thameswater.co.uk or by telephone on 0203 577 3603. Reason: To ensure that the water resource is not detrimentally affected by the development.

Hertfordshire County Council – Historic Environment

Original consultation response

Please note that the following advice is based on the policies contained in the National Planning Policy Framework.

I note that we have commented on previous consultations concerning a proposed power station (Fieldes Lock) and a proposed energy recovery facility (Rye House) at the same site.

Previous archaeological assessment of borehole data (etc.) carried out with regard to the Fieldes Lock proposal, in 2011, established that although the site has been truncated to varying degrees, thereby reducing the potential for archaeological remains to be present, organic sediments (peats) are present beneath made ground on parts of the site. These peats have the potential to contain significant palaeo-environmental remains.

This office advised (with regard to both the Fieldes Lock and Rye House proposals) that provision could be made to mitigate the impact of the development on archaeological remains (heritage assets) via the placing of appropriate conditions on any planning consent.

I believe therefore that the position of the proposed development is such that it should be regarded as likely to have an impact on heritage assets of archaeological interest and I recommend that the following provisions be made, should you be minded to grant consent;

1) A geo-archaeological evaluation, in the form of trial pits and/or boreholes (under the supervision of an experienced geo-archaeologist) in areas of potential impact, to sample the environmental and geo-archaeological potential of the proposed development site.

2) Should palaeo-environmental remains be present, the taking of environmental samples (by an experienced geo-archaeologist) and their geo-archaeological analysis, to enable the construction of a detailed deposit model of the site.

3) Such appropriate mitigation measures indicated as necessary by the above programme of geo-archaeological investigation. These may include:

- a programme of limited evaluation via trial trenches, based on the information provided by the geo-archaeological investigation;

- the physical preservation of any archaeological remains in situ, if warranted, via changes to the design of the development, or methods of construction employed;

- appropriate archaeological excavation of any remains before any development commences on the site, with provisions for subsequent analysis and publication of these results;

- the archaeological monitoring of the groundworks of the development, including foundations and service trenches (and also including a contingency for the preservation or further investigation of any remains then encountered);

- the analysis (including geoarchaeological and palaeo-environmental analysis) of the results of the archaeological work with provisions for the subsequent production of a report(s) and/or publication(s) of these results, and an archive of the results of the archaeological work;

- such other provisions as may be necessary to protect the archaeological interests of the site.

I believe that these recommendations are both reasonable and necessary to provide properly for the likely archaeological implications of this development proposal. I further believe that these recommendations closely follow Policy 12 (para. 141, etc.) of the National Planning Policy Framework, and relevant guidance contained in the National Planning Practice Guidance, and the Historic Environment Planning Practice Guide.

In this case three appropriately worded conditions on any planning consent would be sufficient to provide for the level of investigation that this proposal warrants. I suggest the following wording (based on model condition 55 DoE circ. 11/95):

A *No demolition/development shall take place/commence until an Archaeological Written Scheme of Investigation has been submitted to and approved by the local planning authority in writing. The scheme shall include an assessment of archaeological significance and research questions; and:*

1. *The programme and methodology of site investigation and recording*
2. *The programme and methodology of site investigation and recording as suggested by the archaeological evaluation*
3. *The programme for post investigation assessment*
4. *Provision to be made for analysis of the site investigation and recording*
5. *Provision to be made for publication and dissemination of the analysis and records of the site investigation*
6. *Provision to be made for archive deposition of the analysis and records of the site investigation*
7. *Nomination of a competent person or persons/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.*

B** The demolition/development shall take place/commence in accordance with the programme of archaeological works set out in the Written Scheme of Investigation approved under condition **(A)

***C** The development shall not be occupied/used until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition (**A**) and the provision made for analysis and publication where appropriate.*

If planning consent is granted, I will be able to provide a design brief detailing the requirements for the investigations and provide information on professionally accredited archaeological contractors who may be able to carry out the investigations. Please allow 5-10 working days for this document to be issued and a further 5-10 working days for consideration of any submitted archaeological Written Scheme of Investigation.

Further consultation response

Thank you for consulting us on the above additional information.

Our advice remains the same as that dated 9th March 2017.

Hertfordshire County Council – Landscape

Original consultation response

The following comments are given with reference to the submitted Landscape and Visual Impact Assessment (LVIA)[1] and accompanying relevant plans and documents, and are given in line with industry good practice 'Guidelines for Landscape and Visual Impact Assessment, Third edition,'[2] (GLVIA3).

[1] Environmental Statement, Chapter 9
[2] Landscape Institute and Institute of Environmental management and Assessment

1 Limitations of the submitted LVIA methodology

The key role of an LVIA is to represent the 'worst case scenario,' ensuring that judgements regarding the extent of potential landscape and visual effects and their significance are not underestimated, as this could result in a poor quality development and an ineffective mitigation strategy. It is therefore vital that the approach to the submitted LVIA, and its limitations, are fully understood.

1.1 Landscape Policy & Guidelines[3]

The LVIA generally provides a fair summary of the relevant landscape policy and guidance that should be taken into account in shaping the development proposals.

At the scoping stage[4] concerns were raised that there was no reference to the Lee Valley Regional Park Plan. The LVIA has identified some of the relevant policies such as Policy LS1.2 in relation to landscape, however critically, does not acknowledge Policy LS1.6 in relations to views.

Policy LS1.2 A Positive Identity

Proposals for development, or changes of land use within or **on the boundary of the Regional Park** should:

(i) **Not act to the detriment of the landscape and it's amenity value**;
(ii) **Be sensitive to its landscape setting** in terms of location, scale, design and materials; and
(iii) Respect and **contribute to positive landscape character**, retaining existing features where appropriate

Policy LS1.6 Visually Attractive Edges

Visually attractive edges should be protected and **those of less value should be improved** with particular attention to:

(i) The **boundary of the Regional Park** and the valley of the River Lee;
(ii) Approaches to and boundaries of individual sites and facilities which are within the Regional park;
(iii) Main access and **through routes**.

[3] The policy and guidance listed is not exhaustive, refer to NPPF and relevant Local Plans
[4] HCC Landscape Officer Report, dated 6th June 2016

1.2 Study area

For the assessment of landscape and visual effects, a study area of 5km from the centre of the site has been identified. Some explanation has been given[5] for the identification of this area however, as promoted in GLVIA3, it should have been agreed with the Local Planning Authority at the outset.

GLVIA3 states that for the assessment of landscape effects, the study area should be based on landscape character areas, the zone of theoretical visibility, or a combination of both. With regards the assessment of visual effects, the study area should be based on the zone of theoretical visibility. Overall it is not clear to what extent this has been done.

1.3 Landscape and visual baseline

The submitted designation plan[6] shows a large Conservation Area in Epping Forest District (south of Roydon). This area is not referenced in the LVIA policy review; and is not apparent on the current Local Plan proposals map. It would be beneficial to confirm where this designation is promoted as it may have implications on the assessment of landscape and visual receptor sensitivity.

1.4 Landscape assessment methodology

Landscape character area sensitivity

There is concern for the assessment of landscape sensitivity, which appears too low, especially for the landscape character areas (LCAs) that lie predominantly within the boundary and setting of the Lee Valley Regional Park (LVRP).

GLVIA3 states that landscape sensitivity is a judgement based on both the landscape *value*, and its *susceptibility to change*. Indicators of value include landscape designations and policy, and aspects such as notable, aesthetic, perceptual or experimental qualities. Susceptibility to change is a judgement regarding the ability of the landscape to accommodate the proposed development without compromising the achievement of those landscape policies and strategies.

The LVRP is designated for its recreation, leisure and nature conservation value, and the conservation and enhancement of its landscape and setting is promoted in the current and emerging Park Plans and various local development plan policies.[7]

In line with the above[8]it is suggested that all of the landscape character areas that are located predominantly within the boundary of the LVRP should be of higher sensitivity (landscape character areas 4, 5, 6, 7, 8, 15, 17 and18).

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[5] LVIA Paragraph 9.3.3
[6] Figure 9-2 Rev 02
[7] For example refer to LVIA Paragraph 9.2.24
[8] Appendix 9.1

1.5 Visual assessment methodology

Zone of Theoretical Visibility

The 'Zone of Theoretical Visibility'[9] (ZTV) does not represent the worst case scenario (WCS), as it assumes building heights of 10m and woodland heights of 15m. Indeed it should be carried out based on bare earth and should not take account of vertical features.

Viewpoints

At the scoping stage it was requested that *'the location and quantity of photomontages should be agreed on the submission of the ZTV and proposed viewpoints.'*

It is appreciated that the viewpoint/photomontage locations were established in liaison with the Community Liaison Group, which includes Hertfordshire County Council. However, it should be noted that they were not agreed with the Landscape Officer.

The submitted 'Zone of Theoretical Visibility' and 'Location Plan of Representative Views and Verified Viewpoint Montages'[10] do not show public rights of way. This information is important in helping to demonstrate the extent from which there are potential highly sensitive public views of the proposals.

There are no viewpoints from the Registered Parks and Gardens that appear to be within the zone of theoretical visibility e.g. Stanstead Bury and Briggens.

Visual receptor sensitivity

At the scoping stage it was stated that *'The classification of receptor sensitivity…is not supported. The receptors identified as medium sensitivity should be high. It should be clear that users of public rights of way are of high sensitivity.'*

The LVIA methodology has not been amended in line with this and there remains concern for the assessment of visual sensitivity, which is too low, for public rights of way and those that lie within the boundary and setting of the Lee Valley Regional Park (LVRP).

GLVIA3 states that visual sensitivity is a judgement based on both the *value attached to views*, and the *susceptibility of visual receptors to change*. Indicators of value include planning policy designations and the value attached to views by visitors. Susceptibility to change is a judgement regarding the extent to which people's attention is focused on visual amenity.

[9] Figure 9-9 Rev 02
[10] Figure 9-9 Rev 02 and Figure 9-11 Rev 04

The LVRP is designated for its recreation, leisure and nature conservation value, and the conservation and enhancement of views within, into and out of the Park are promoted within the current and emerging Park Plans and in various local development plan policies.[11] In line with the above, *at the very least,* it is advised that users of public rights of way within the LVRP should be of higher sensitivity (receptors 2b, 12, 13, 15, 17, 18, 32a and 38).

With regards receptors 39, 42a, 42b, they are located in the Conservation Area and along a designated heritage trail. It would be beneficial to understand the extent to which the quality of views underpins the purpose of the CA designation as this may influence their sensitivity and the overall significance of effects.

Significance of effects

The LVIA states that *'Effects are generally considered significant (and in need of mitigation) if they are Major.[12]'* This approach is not supported, in line with good practice, landscape and visual effects should be considered significant where they are moderate or above.

It should be noted that where effects are judged to be significant, mitigation should be provided in line with the mitigation hierarchy to avoid, reduce, offset, or compensate, and the significant residual effects that remain after mitigation, should be clearly understood.

1.6 Mitigation

The LVIA states that the landscape proposals and lighting are a response to the need to reduce potential visual impacts and to enhance the character of the landscape;[13] this approach is supported however there is concern for the effectiveness of the following mitigation proposals.

Building design

It is understood that the building design is a response to the limited site area and the layout of the internal processing equipment,[14] resulting in a main building of substantial height with a strong vertical emphasis.

Whilst it is agreed that the principle of industrial development is established at this site, due to its location within a designated employment area; there remains concern for the excessive height (main building 48m, stacks 86.75m), scale and mass of the proposed building in relation to the existing industrial development such as Rye House Power Station (RHPS) (approx. 65m), other large scale infrastructure such as pylons (up to 50m), and the large scale trees up to (35m), especially within this sensitive urban-rural edge location on the boundary of the LVRP.

[11] For example refer to LVIA Paragraph 9.2.31
[12] LVIA Paragraph 9.3.25
[13] LVIA paragraph 9.5.24
[14] LVIA paragraph 9.5.23

The neighbouring Rye House Power Station (RHPS) is currently the tallest structure in close proximity to the proposed development and provides a useful point of reference in assessing the proposed building height, scale and mass.

The submitted information does not state the height of the RHPS main building; however it appears relatively low lying and consistent with similar developments in the employment area, as demonstrated in viewpoint 15. The height of the RHPS stacks is given as approx. 65m. The stacks are highly visible from an extensive area, in a wide range of views towards the proposed development site they are currently the only visible or recognisable feature of the employment area due to their distinct height and form.

There is concern for the height, scale and mass of the proposed main building that is approx.17m lower than the top of the RHPS stacks, and the height of the proposed stacks that are approx. 21.75m taller than the RHPS stacks. Overall the proposed main building and stacks will appear as a new dominant large scale feature compared to the existing large scale RHPS stacks.

With regards to the building design, there appears to be conflict in the approach as highlighted in the following LVIA extracts that state that the proposals seek to *'deliver an iconic facility that is both striking in its appearance but which also sits comfortably within its urban fringe location,'* with regards the selection of materials it seeks '*to be both visually stimulating yet recessive,'*[15] and that the building results in *'the introduction of a new visual landmark that is designed to add interest to existing industrial views.*[16]*'*

There needs to be a clear understanding as to whether the intention is to create a development that responds to its location within this sensitive urban-rural edge location on the boundary of the LVRP, and is therefore is of a more sympathetic deign and materials. Or if it is intended to create a new landmark, and exemplar sustainable development, that is of outstanding historic, aesthetic, or cultural importance.

Existing and proposed planting

Great weight is given to the screening effect of the existing and proposed tree planting. However it should be understood that the existing and proposed planting only provides partial screening to the lower portion of the building and that the upper portion of the main building and stacks remain open to views from the surrounding area. The design of the upper portion of the building is therefore critical in terms of reducing its landscape and visual impact as far as possible in this sensitive urban – rural edge location on the boundary of the LVRP.

[15] LVIA Paragraph 9.5.23
[16] LVIA Paragraph 9.9.11

With regard the height of the proposed tree species, [17] the majority are likely to reach a mature[18] height of up to 20m, whilst the Scots Pine is likely to achieve 35m however with a more transparent habit compared to the native broadleaves. Taking this into account, the upper portion of the main building, roughly between 30m and 48m, and the stacks, remain permanently exposed to views from the surrounding area.

There is reference to the screening effect of existing vegetation within the LVRP, consideration should be given for the weight afforded to landscape mitigation that lies outside the site boundary and is not under the applicant's control.

Lighting strategy

The lighting strategy is critical in this sensitive urban – rural edge location, on the boundary of the LVRP.

All external lighting units should be full horizontal cut off and direct light downwards. The proposed wall/pole mounted MPC150 appears to meet these criteria. There is concern for the proposed euroflood mini SC150H that in the documentation appears to show the lamp unit orientated on a vertical axis, allowing light to shine outwards and upwards. This is not supported, and it should be confirmed that the lamp unit will be orientated on a horizontal axis and only allow light to shine downwards.

At the scoping stage it was stated that *'There is strong concern for the rationale underpinning the complex approach to the building materials. The use of coloured panels to reduce visual impact seems at odds with the proposal to use the transparent panels and animate the façade, especially when it is backlit by internal lighting, which is likely to be highly visible at night time. It is suggested that s simpler approach may be more appropriate in this urban edge location…'* The proposed building design has not changed and this concern remains relevant.

It is proposed to use translucent cladding and glazing designed to minimise internal light emissions, however the extent to which this can actually be achieved is queried. There remains strong concern for the use of transparent cladding in this sensitive urban-rural edge location on the boundary of the LVRP. The submitted night-time photomontage for viewpoint 2 demonstrates how in darkness the building appears as a glowing box.

[17] Rowan, Alder and Field Maple
[18] Within 10 – 30 years depending on speed of growth

2 Findings of the submitted LVIA

2.1 Direct Landscape Effects

The site lies within landscape character area (LCA) 26 'Hoddesdon Urban Area'. The LVIA concludes that the proposed development does not result in any significant adverse landscape effects within this LCA at Year 1 or Year 15.[19]

It is agreed that the principle of industrial development is established at this site, due to its location within a designated employment area; however there is concern for the relative height, scale and mass of the proposed building in relation to the existing industrial development, especially within this sensitive urban-rural edge location on the boundary of the LVRP. (See comments in relation to 'Building design.')

2.2 Indirect Landscape Effects

With regards to the surrounding LCAs, the LVIA concludes that the proposed development does not result in any significant landscape effects on LCAs 6, 7 or 18 within the LVRP, and LCAs 9 and 10 that broadly cover the open landscape to the east, at Year 1 or Year 15.

Whilst it is agreed that the significance of effects is much lower for LCAs 9 and10, it is suggested that the effects on LCAs 6, 7 and 8 are higher, and significant, due to their location within the highly sensitive LVRP.

There is concern for the influence of the proposed development and the extent to which it detracts from the characteristics and qualities that underpin the LVRP designation. The area is designated for leisure, recreation, and nature conservation, and policy objectives seek to ensure that development on the boundary of the Park is not detrimental to amenity value, and contributes positively to landscape character.[20]

There is concern for the negative impact of the proposed large scale industrial building, within this sensitive urban- rural edge location on the boundary of the LVRP, and upon the quality of the visitor experience and the sense of getting away from the urban environment and connecting with nature.

With regards to Year 15, the LVIA concludes that *'The growth of the protected vegetation within and adjacent to the application site, and the continued growth of trees and shrubs further beyond the Application Site would provide increased structure to the proposed development and its surroundings ...'*

Whilst it is agreed that the protection and enhancement of vegetation under the applicants control will contribute to positive landscape change,

[19] LVIA Paragraph 9.6.33
[20] Park Plan 2000, Objective LS1: A Positive Identity, Policy LS1.2

consideration should be given for the weight afforded to landscape mitigation that lies outside the site boundary and is not under the applicant's control.

2.3 Visual Effects

Close distance views (up to 0.5km)

With regards to Year 1 the LVIA concludes that the proposed development has a significant visual effect on receptors 2a, 2b, 12 and 25.[21]

This judgement is supported however it is suggested that there are also significant effects upon receptors 1b due to the high sensitivity of the public right of way, and receptor 3 due to a significance threshold of moderate or above.

In determining the significance of visual effects the excessive height, scale and mass of the proposed building in relation to the existing surrounding large scale development and infrastructure, and the effectiveness of the existing and proposed landscape mitigation measures, have not been given sufficient regard as discussed below.

With regards to scale, the LVIA determines that visual effects are lower where the building is viewed in context with the existing industrial estate and urban area, in particular the neighbouring large scale RHPS and pylons. This judgement is supported to an extent, especially with regards some views from within the urban area and VVM 4 is a good example of this. However there remains concern for the considerable height, scale and mass of the proposed building that exceeds that of the existing large scale development and infrastructure, and introduces a more dominant feature in this sensitive urban-rural edge location on the boundary of the LVRP. (See comments in relation to 'Building design').

With regards to landscape mitigation, the LVIA acknowledges the partial screening effect of the vegetation within the site and along the towpath. This judgement is supported and it is agreed that the existing and proposed vegetation does provide effective partial screening of the lower portion of the building. However, there remains concern for the upper portion of the main building and stacks that remain open to views from the surrounding area. The significance of effects remains high at night-time due to the use of transparent cladding allowing the emission of internal lighting. (See comments in relation to 'Existing and proposed planting' and 'Lighting strategy').

With regards to Year 15 the LVIA concludes that the proposed development has a significant visual effect on receptors 2a, 2b,[22] largely due to *'the continued growth of the retained tree and shrub belt along the east and north east boundary.[23]'*

[21] LVIA Paragraph 9.6.67
[22] LVIA Paragraph 9.6.80
[23] LVIA Paragraph 9.6.77

It is suggested that after 15 years, the existing retained mature vegetation will provide limited additional screening, depending on its age and rate of growth. With regard to areas of new planting, this will provide a higher level of partial screening to the lower portion of the building, however the upper portion of the main building and stacks remain open to views from the surrounding area (See comments in relation to 'Existing and proposed planting.')

Medium distance views (0.5km to 2km)

The LVIA does not identify any significant visual effects on medium distance receptors at Year 1 or Year 15.

This judgement is not supported, it is suggested that there are significant effects upon receptors 7b, 14, 15, 17, 21, 32a and 43 due to the high sensitivity of public rights of way, and a significance threshold of moderate or above.

It is suggested that the proposed development is generally well assimilated within middle distance views where the main building roofline sits below the distant horizon and/or is lower than large scale features in the foreground, such as pylons and other industrial scale rooflines.

However there is concern for the negative effect on views where the proposed development is viewed in isolation of its urban context. Submitted viewpoint 7 is a good example of this and shows a relatively remote rural view interrupted by the discordant features of the existing RHPS stacks and pylon, and the upper portion of the proposed main building and stacks, viewed against the skyline.

Long distance views (2 to 5km)

The LVIA does not identify any significant visual effects on long distance receptors at Year 1 or Year 15.

This judgement is not supported, it is suggested that there are significant effects upon receptors 38 and 44 due to the high sensitivity of public rights of way, and a significance threshold of moderate or above.

Overall it is agreed that the significance of visual effects diminish with distance, the proposed main building is generally well assimilated in views where its roofline sits below the distant horizon, and due the foreshortening effect of features in the foreground, such as vegetation.

3 Submitted Landscape Scheme

The following comments are given with reference to the submitted outline landscape scheme.[24]

[24] LVIA Figure 9.24

- Overall the proposed landscape scheme is constrained due to the lack of available space.

- The areas of proposed tree and shrub planting to the boundaries are supported and provide important mitigation, helping to reduce landscape and visual effects of the proposed development.

- A more formal approach to the landscape areas within the site is supported.

- A significant area of open space is given over to surface water management basins creating dead space; however the proposed wildflower meadow should provide some biodiversity interest.

- There is no outdoor amenity space for staff to use during their breaks. This could comprise some informal outdoor seating.

- With regards to circulation, care should be taken to ensure that staff and guests can take a direct paved route from the car park areas to the main reception, and other key entrances that they are likely to use, without crossing soft landscaped areas. For example the route between the staff parking beneath the ramp and the main reception appears doglegged.

- There does not appear to be any bicycle storage provision.

- The location of the proposed 2.4m fence is not shown on the Proposed General Arrangement or the Outline Landscape Scheme.

4 Summary & Conclusion

Overall it is suggested that the proposed development results in a higher number of significant residual adverse landscape and visual effects than identified in the submitted LVIA for the reasons as discussed in detail above and summarised below:

- Insufficient regard for the relevant LVRP policy and guidelines that seek to ensure that development within the LVRP designation or on its boundary contributes to a positive landscape identity and visually attractive edges.

- Judgements regarding the visual sensitivity of public rights of way, and visitors to the LVRP, are too low and should be high.

- The threshold for significant effects is too low, effects that are moderate or above should be considered significant.

- The excessive height, scale and mass of the proposed building in relation to the existing large scale development and infrastructure, creating a new dominant feature within this sensitive urban-rural edge location on the boundary of the LVRP.

- The limited effect of the proposed mitigation planting above 20-35m.

- The high visibility of the upper portion of the building and stacks, that creates a new dominant industrial feature, especially in highly sensitive views from more rural areas within the LVRP boundary and its setting, and the opposite side of the River Stort valley to the east.

- The high visibility of the upper portion of the building at night-time due to the use of transparent glazing allowing the emission of internal light.

In conclusion the proposed development results in significant residual adverse landscape and visual effects, largely due to its large height, scale and mass within a sensitive urban-rural edge location on the boundary of the LVRP.

Landscape mitigation has been provided along the north eastern site boundary and provides an effective screen to the lower portion of the building, as well as reinforces the character of the river Lee corridor.

However there remains concern for the significant landscape and visual effects as a result of the upper portion of the main building and stacks due to their excessive height, scale and mass, and the use of transparent glazing materials. It is suggested that the opportunity to reduce the buildings vertical emphasis and avoid transparent glazing, would help provide additional mitigation. However, residual landscape and visual effects would remain unavoidable, and under this circumstance industry good practice guidance promotes the consideration of opportunities to provide compensation.

Natural England

Original consultation response

Based on the plans submitted, Natural England considers that the proposed development will not have significant adverse impacts on designated sites and has no objection.

Natural England's advice on other natural environment issues is set out below.

Previous Advice
Natural England has previously commented on development at this location. This proposal has been assessed on its own merits but elements of previous responses may be relevant to this application.

European sites – Lee Valley Special Protection Area and Wormley-Hoddesdonpark Woods Special Area of Conservation

Based on the plans submitted, Natural England considers that the proposed development will not have a likely significant effect on either the Lee Valley Special Protection Area or the Wormley-Hoddesdonpark Woods Special Area of Conservation and has no objection to the proposed development.
Based on the plans submitted, Natural England considers that the proposed development will not damage or destroy the interest features for which the site has been notified and has no objection.

Hunsdon Mead and Rye Meads Sites of Special Scientific Interest

Based on the plans submitted, Natural England considers that the proposed development will not damage or destroy the interest features for which these sites have been notified and has no objection.

Protected Species

We have not assessed this application and associated documents for impacts on protected species.

Natural England has published Standing Advice on protected species. The Standing Advice includes a decision checklist which provides advice to planners on deciding if there is a 'reasonable likelihood' of protected species being present. It also provides detailed advice on the protected species most often affected by development.

You should apply our Standing Advice to this application as it is a material consideration in the determination of applications in the same way as any individual response received from Natural England following consultation.
The Standing Advice should not be treated as giving any indication or providing any assurance in respect of European Protected Species (EPS) that the proposed development is unlikely to affect the EPS present on the site; nor should it be interpreted as meaning that Natural England has reached any views as to whether a licence may be granted.

If you have any specific questions on aspects that are not covered by our Standing Advice for European Protected Species or have difficulty in applying it to this application please contact us at with details at consultations@naturalengland.org.uk

Other advice

We would expect the Local Planning Authority (LPA) to assess and consider the other possible impacts resulting from this proposal on the following when determining this application:
 local sites (biodiversity and geodiversity)
 local landscape character
 local or national biodiversity priority habitats and species.

Natural England does not hold locally specific information relating to the above. These remain material considerations in the determination of this planning application and we recommend that you seek further information from the appropriate bodies (which may include the local records centre, your local wildlife trust, local geoconservation group or other recording society and a local landscape characterisation document) in order to ensure the LPA has sufficient information to fully understand the impact of the proposal before it determines the application. A more comprehensive list of local groups can be found at Wildlife and Countryside link.

Hertfordshire County Council - Ecology

Original consultation response

Thank you for consulting Herts Ecology on the above application, for which I have the following comments:

1. The most important ecological impact associated with this proposal is the potential impact upon the special interest of the international designations – the **Lea Valley SPA and RAMSAR site,** the **Wormley and Hoddesdonpark Woods SAC** and possibly **Epping Forest SAC**. This is fully addressed within the **Habitats Regulations Assessment** at Appendix 10.1, which in any event is a legal requirement given the proximity of these sites. The HRA concluded there would be no likely significant effect on the Lee Valley though disturbance – noise and human activity associated with construction and operation of the ERF (Lee Valley) and air quality (Lee Valley, Wormley Woods and Epping Forest. The existing environment was a factor in this and it is recognised that the parts of the Lee Valley area are already heavily developed and that the SPA is subject to an existing range of threats requiring investigation (5.3.1). There are floodlit speedway and karting tracks and a caravan park between the development site and Rye Meads SSSI which is the closest constituent SSSI (250m) within the SPA /RAMSAR site, so the area is already subject to considerable disturbance.

2. Further investigation into atmospheric nitrogen deposition due to proposed stack emissions was undertaken as this was considered to exceed 1% of the critical load and that the predicted environmental concentration would exceed 70%. Given that the critical load for the European Site is already exceeded, further analysis was required as part of an **Appropriate Assessment**. This concluded that despite a maximum 1.2% increase in nitrogen deposition, there would be **no adverse effect on the integrity of the SPA/Ramsar site** either alone or in combination with other projects and plans (1.1.8). This conclusion was accepted by Natural England in 2012. The issue primarily relates to the impact of nitrogen deposition on the floodplain grasslands and fen, which at Rye Meads is a 'rich' fen with a relatively alkaline pH as opposed to an acid 'poor' fen which is nitrogen limited. In rich fens, it is the availability of phosphorous which will enable any increased levels of nitrogen to have a deleterious impact and so if phosphorous can be controlled the additional nitrogen will have little or no effect. The existing background levels of nitrogen are the result of the Sewage Treatment Works upstream of the SSSI which

discharges into the Tollhouse Stream which backs up into the marshy grassland. This fluvial source of increased nitrogen will always be present due to the sewage works. Phosphorous can be controlled by appropriate treatment of effluent which has been further secured by the recent EA Consent process. Therefore, it is not considered that any increased nitrogen would have any significant impact on the grassland community sufficient to have any effect on the birds for which the site is designated an SPA (bittern, gadwall and shoveler).

3.1 On the basis of the above, I consider the approach to considering the issues relating to the international sites to be reasonable and follows best practice. Consequently **I have no reason to dispute the findings and conclusions of the HRA.**

4. Impacts of the key interests of Rye Meads SSSI should be addressed by the above HRA considerations, although on a more local level the site will have considerable other interests which should not be affected by the proposals. The same would hold true for the adjacent Wildlife Site 'Rye House Power Station' and other local features for which should be avoided where possible. The **mitigation hierarchy** should be followed to ensure **mitigation or compensation is provided** if not. However it is acknowledged that the site is already located within a heavily developed area of the Lea Valley, in close proximity to the existing power station, adjacent to two vehicle racing tracks and subject to considerable leisure use, so the proposals should not increase any further negative impacts on the sites to those which may already being caused. The Wildlife Site is already subject to development from the previous Sustainable Energy Facility so any impacts from the proposed development - **including increased traffic disturbance and fumes** - should be addressed to ensure no additional damage is caused to this site.

5. An appropriate **desk study** was undertaken which highlighted known local sites and species of interest and presented in Appendix 10.2. This provides a **thorough and acceptable review** of available background information. Previous great crested newt information which supported the adjacent thermal treatment plant and anaerobic digestion facility

6. A **Phase 1 habitat survey** was undertaken in May 2015 and updated in April and August 2016. This is provided at Appendix 10.3. It provides a reasonably detailed and acceptable account of the habitats present on the site as well as the adjacent woodland and scrub outside of the application site on River and Canal Trust land and which lies within the Lee Valley Regional Park.

The eastern and north-eastern edges of the site support **broadleaved plantation woodland** on the bund. Woodland is also present adjacent to the railway siding. Whilst mostly planted and dominated by hybrid poplar, I consider some species may have colonised naturally such as ash, crack willow, goat willow, blackthorn and elder. The **railway sidings** support perhaps the most interesting early colonising ruderal flora being characteristic

of such bare, disturbed ground, including St John's wort, stonecrop, Canadian fleabane, mouse-eared hawkweed, great willowherb and weld, where not encroached by buddleia, bramble and elder. **Scrub** either side of the sidings is dominated by buddleia with scattered willow. The **pond** in the southern corner of the site is surrounded by scrub of hawthorn and alder. It is known to dry out seasonally and is dominated by reedmace and common reed. **Two ponds are outside the site** on Network Rail land. Japanese knotweed was previously recorded in 2012 but was not confirmed as still being present in the recent surveys. Otherwise the majority of the site consisted of **bare ground** used for the storage and moving of piles of aggregates. A small number of portable office buildings are present within the site and there is a small strip of **amenity grassland**. The **Canal and River Trust land** is dominated by dense elder, hawthorn, bramble and buddleia, with nettle and hemlock and stands of ash and weeping willow. Indian balsam is abundant towards the northern edge by the River Lee. Overall, this habitat is characteristic of rather redundant, waste ground in this locality. The **River Lee** itself is relatively poor with piled banks, providing for a rather limited riverine habitat although its wetland context and corridor role is more valuable.

The site is considered to be dominated by bare ground. The railway vegetation is relatively species rich but not especially significant being typical of its type, although locally it provides good additional habitat diversity. The ponds on site and off-site are locally valuable – but only probably at the site level. **I consider the Phase 1 survey to be sufficient to provide a basic understanding of the application site.** Whilst the discussion does not place a value on the site, I consider the site's importance is mainly for the fringing habitat features and railway sidings**,** although the adjacent habitat to the north is of greater local significance providing an important larger buffer and additional habitat resource within the Lee Valley locally.

7. **Species surveys** were undertaken for the following:

- great crested newt – pond within site and two adjacent ponds;
- assessment of trees and structures for bats;
- updated reptile survey;
- update breeding bird survey;
- update terrestrial invertebrates;.
- walkover survey of the River Lee for signs of otter and water vole.

The mitigation hierarchy is outlined along with the approach to assessment of ecology, magnitude and significance of impacts, principally following CIEEM and landscape guidance. I consider this approach to be acceptable as a measure of determining impact.

8. **Air Quality** is considered in detail as part of the HRA in respect of the internationally designated sites, as well as 10.6.29 – 10.6.40 which includes impacts on more local Wildlife Sites. The principle issue is the potential increase in nitrogen deposition, and in this respect it is considered that there would be a minor adverse effect on Lee Valley North LWS which is not

significant and an inconsequential impact on Totwelhill Bushes LWS. Both the latter are in Essex.

9. The review of statutory and non-statutory sites is acceptable. The adjacent Wildlife Site Rye House Power Station is being partly developed although parts of this site were already degraded and required boundary changes. Protected species were also included within the desk study. Habitats within the application site are described within the Phase 1 survey as outlined above. It is considered that **the site is of local value** – within it I consider some features are more important than others, such as the **railway sidings and possibly pond**.

10.1 DNA evidence for Great crested newts was obtained from the pond NWR1. No evidence was obtained from NWR2 or the pond on site due to pollution inhibition, but it is considered likely that this pond also supports GCN. Unless there is a good reason, I consider it likely that the NWR2 pond may also support GCN at least on occasion. This use of the application site is consistent with the presence of GCN within the adjacent Wildlife Site for which adequate provision was made for their conservation. I consider that it is likely that all of the suitable terrestrial habitats in the area of the application site are used by GCN. **The site is of local value for GCN.** Given the need for the removal of the pond within the application site, **compensation is required**.

10.2 The ecology rep[ort states there will be a loss of 1.5 ha of terrestrial GCN habitat. Given that – excluding the sidings area which will not be developed – this extent accounts for almost the whole of the remainder of the site, most of which is bare and highly disturbed ground, I cannot see where this figure is derived from, although I acknowledge some of the railway siding land closest to the ERF will be lost. The principle GCN habitat will be the seasonal pond (assuming it stays wet enough to enable breeding), its dry state and the peripheral scrub and railway siding margins to the site. The eastern edge will be retained, leaving a very limited edge to be lost along the northern and north-western edge and relatively small section of sidings, compared to that which will remain. In general, **I consider this impact is likely to be low** and whilst provision for this loss should be addressed, I do not consider the extent to which additional habitat or improvements need to be provided are not as extensive as the ES may suggest, given the existing nature of the majority of the site. However **any barriers to movement to the NWR ponds and railway siding area do need to be addressed through appropriate landscaping**.

10.3 Given the loss of the pond within the site it is considered a licence will be required (despite no direct evidence of GCN from this pond). **Compensation is proposed within the adjacent land to the NE** for which there is an agreement in principle for Veolia to purchase – although this may not be necessary if a suitable agreement can otherwise be secured. **Two ponds are proposed to be created** within this area although not where there are already openings of ruderal vegetation – I am not clear why this is. The proposed capture methodology is acceptable; the GCN is part of a larger

population centred on the adjacent Wildlife Site and all of the existing suitable area is likely to be used to a greater or lesser extent.

10.4 A **permanent GCN fence** is proposed between the application site and the adjacent land to avoid GCN entering the operational site. **I am unconvinced this is necessary**; the existing, active site is fully open to existing GCN access and if included within the 1.5 ha is considered to be GCN habitat (I don't think it is) and no concerns have been raised. To encourage permeability and enable the proposed landscaping to contribute to GCN in the area, the site should remain open; GCN will avoid certain areas as necessary and benefit from others as appropriate, just as they do currently within this operational site – which is likely to be far more potentially harmful for newts given the storage of ballast and other material that newts could possible use for cover in certain areas.

10.5 I consider the **monitoring of GCN for six years is excessive**; I would have though one or two years in say Year 2 and Year 5 would be sufficient given the vagaries of the existing habitat features which may otherwise have been lost to natural succession over time.

10.6 I do not consider the newt population on this site to be of county value although as part of the larger 'metapopulation' associated with the adjacent Wildlife Site it remains of District significance and the **features and permeability of this site** should be retained or **replicated** locally to maintain the **continued ecological functionality of this population**.

10.7 **I consider the proposed methodology for capture and translocation to two new ponds as compensation is broadly sufficient to satisfy the third Habitat Regulations Test concerning European Protected Species**. However more work will be needed in due course to provide further details on this as part of the landscape management plan.

11. **Structures within the application site** were considered to have **negligible potential for supporting bats**. The only tree with moderate potential was subject to emergence and re-entry surveys and no roost activity was recorded. Activity surveys demonstrated some use of the application site but this was low, which is not surprising given the nature of the application site which supports little semi-natural habitat. **The site is of low importance for bats**.

12. **Good populations of common lizard were found in 2016** along with low population of grass snake. The site is generally of **low importance for reptiles**, although I do not consider that Borough value is low as described in 10.4.57. Five reptiles following adequate survey effort is not particularly significant. Where they may be affected by site clearance, **mitigation and compensation is required.** It is recognised that similar suitable habitat for reptiles is present within the application site and beyond along the railway. **Translocation of reptiles from affected areas** to the offsite woodland / scrub and railway sidings is proposed. This is acceptable if open, basking areas are also present.

13. The bird survey report states: '**Much of the application site is of little value to breeding bird species**, being comprised of hardstanding and piles of aggregates. The value of the application site for breeding bird species is limited to perimeter scrub, trees and woodland edge habitats around the application site. The rail corridor along the western edge of the application site has a scrub corridor running parallel, which appears to provide good foraging and nesting habitat. In addition the trees along the north eastern edge of the application site provide for a similar resource'. This would seem a reasonable summary of the bird interest. 13 likely breeding species is of less than local significance, although some species are of conservation concern, such as song thrush and dunnock. However **the site is considered to be of local (very low) interest for birds**. The **usual provisions to avoid harming breeding birds will need to be followed** (avoidance of tree / scrub clearance within the March – Sept breeding period unless assessed by a competent ecologist) and are proposed. **Loss of tree and scrub habitat is not considered to be significant for birds**. Some native planting of shrubs is proposed around the edge of the SUDs feature by the railway siding.

14. An invertebrate survey concluded that the site supported a **diverse assembly of invertebrates**, largely associated with the **railway sidings** and to a lesser extent the **pond**. This is not surprising given the relatively specialised nature of the habitat – two nationally scarce (notable A) and one nationally scarce (notable B) species were recorded on site. Previous 2012 surveys had identified further nationally scarce species associated with the sidings which were not found possibly due to their declining condition. **Management is suggested for the sidings area to remove encroaching scrub**. The **site is considered to be of low (Borough) value for invertebrates.**. Notwithstanding comments above regarding a site of Borough status – I consider the railway sidings to be locally valuable for invertebrates. Loss of suitable habitat along the railway sidings should be compensated.

15. A **badger sett** previously recorded was now **inactive** and partially collapsed although it is used by fox. Rabbits were present and provide some useful grazing function by the sidings. Other than in providing a local management function, there is **no mammal interest on the site**. Habitats are poor offsite for otter and water vole, although the former will move through the wetland landscape to find more suitable refuges.

16. **SUDS features will be used to increase biodiversity** where possible and a **Construction Environmental Management Plan** has been prepared. This should follow best practice and reduce the environmental impacts of the development during construction.

17. Potential impacts of the development have been outlined within 10.6 of the Ecology Report. I consider these represent a reasonable assessment of the issues and measures to address them.

18.1 **Lighting** is potentially disturbing although it appears that parts of the site are already illuminated in the form of security lighting whilst the adjacent

power station is considered to be highly illuminated. Consequently the area is already subject to local levels of light pollution which may have an impact on the ecological resources of the area. **The proposals should not generate any increase in this and seek to reduce any impacts locally where possible.** The external **lighting design** for most of the open hardstanding areas is of a design which **limits glare** and spill given that the luminaires are horizontal. There may be a greater impact where this lamp is used on the ramp given the lamp and column will be positioned at a greater height as the access road climbs higher to enable deposition of waste where necessary. Some additional screening of the lamps here may be helpful to ensure there is limited no spill or glare into the adjacent ground to the north. In respect of the **wall mounted floodlights** proposed for the building, I am concerned that the glare from these will increase the impact of light pollution locally as it could attract insects from the peripheral areas of the site. I consider these lamps **should be positioned in a horizontal plane** to reduce the impact of glare from the luminaire itself given that 12 of these are proposed to face NE mounted on the NE side of the main building, as shown on the proposed external lighting layout (lamps C). **If this is not possible, another design should be considered** which provides sufficient illumination as well as reduces the impact of glare.

18.2 **Internal lighting** of the building may be visible to an extent through any translucent fabric of the building although in my opinion this would not have the same highly intrusive effect of glare, light spill and reflected light associated with external directional illumination, which already may be observed with local floodlights of the race tracks and the power station. The lighting scheme suggests this has been considered and the building designed to reduce any such impacts. Internal lighting is likely to be more muted when seen externally due to the nature of the material used and may only add a limited extent of background light to the building and its immediate environs rather than directly illuminate its surroundings. Additional planting would help to reduce this impact for nocturnal wildlife by providing increased cover around the edges of the site.

19. Measures to deal with potential **pollution** incidents have been outlined. Any **potential impact on the adjacent Wildlife Site is considered to be low**.

20. **Noise** resulting from the proposals is **not considered to present any significant increase to that which is already present**.

21. **No significant impacts from overshadowing** are anticipated and will be restricted to the emissions stacks. Despite the size of the building, the shading from the south / west will possibly affect the amenity landscaping and hardstanding / parking areas, rather than semi-natural habitat.

22. The proposed areas of **green 'sedum' roof on low level buildings are welcomed.** The two **surface water retention basins** and two **flood water storage areas** should be seen as contributing to biodiversity and the **green infrastructure** of the site and where possible, and managed accordingly.

Within the site these will **contribute to providing ecological permeability across the site** linking wider habitats to the railway sidings. As such they will be valuable for GCN and reptiles.

23. An **outline landscaping scheme** has been provided. This demonstrates that a number of the issues considered above can be addressed through proposed planting and habitat creation within the site and off site. It is suggested it will have a minor beneficial impact on breeding bird species which is not significant. The Landscape Chapter of the ES also states a **management plan** will address the **management of the replacement ponds** as well as the retained and proposed woodland and tree / shrub belts around the eastern and north-eastern edges of the site. This plan must be provided to the satisfaction of the LPA.

24. On the basis of the above, I can provide the following summary advice:

24.1 The **Habitats Regulations Assessment** addresses the most important issue of the proposals, that of impacts from the proposed development on the internationally designated sites in the area. It concludes that there are no likely significant ecological effects on the Lee Valley Special Protection Area / Ramsar site, Wormley-Hoddesdonpark Woods Special Area of Conservation and Epping Forest Special Area of Conservation. Rye Meads Site of Special Scientific Interest lies approximately 200m north east of the Application Site boundary and is a component of the SPA / RAMSAR site, designated for its internationally significant populations of overwintering bird species. Notwithstanding other considerations, the key concern would be from air pollution, and I am of the opinion that this has been adequately considered though **Appropriate Assessment** and addressed sufficiently to demonstrate any impacts on the special interests of these sites would not be unacceptable, a view previously considered acceptable by Natural England.

24.2 The majority of the Application Site is hard standing and used for aggregate storage. Scrub and trees can be found on the eastern edge and along the railway line to the north west; grassland, disturbed areas associated with a railway siding and a small pond are also present. The site has a **low, local interest** primarily important at the site level although some features such as the **railway sidings are more valuable** in my opinion given the habitat character which currently survives.

24.3 The **standard suite of surveys** for principle ecological groups have been undertaken - great crested newt, bats, reptiles, breeding birds, also invertebrates and some mammals. These are **thorough and relevant to the site**. Assessments have been made and I generally accept the views on their relative importance and recommendations provided.

24.4 Considerable emphasis is placed upon **great crested newts**, possibly because of the impact on these European Protected Species, the adjacent population in the Wildlife Site and the need to obtain a licence for their translocation. In this **respect I am not convinced that the site should remain an exclusion zone for newts** or other such wildlife given that its

permeability – where possible – will remain important. Translocation of reptiles will also be required where affected, prior to works commencing.

24.5 In my view the **main omission from the ecological work is the lack of emphasis on the railway siding,** which is probably the most important feature within the site. Some of the habitat associated with this will be lost to the development but **the majority will remain**. Whilst it was noted in passing some **scrub clearance** would be beneficial, this is **essential** and should be subject to a **programme of conservation works** to retain and enhance the character of the vegetation for the benefit of reptiles, amphibians, invertebrates and plant communities associated with this characteristic habitat, which is becoming degraded due to scrub encroachment. An appropriate **scrub management programme** may also benefit birds using the existing scrub. I understand the rail link is to be used as part of the operational activity of the development – which may itself help to keep some areas open. However the adjacent ruderal ground will not be affected and so the **opportunity to provide additional habitat enhancement measures within the site must be pursued**.

24.6 **Lighting requirements appear to follow best practice** in use of horizontal lamps or those which can be tilted horizontally to reduce glare.

24.7 It is stated that 'the implementation of the **Construction Environmental Management Plan** and good ecological practice (capture and exclusion of reptiles, check to confirm absence of nesting birds) will prevent any other adverse effects during site clearance'. I have no reason to dispute this view.

24.8 There do not appear to be any measures proposed to deal with any **increase in traffic fumes** on adjacent sites resulting from the increase in traffic using the site on a regular basis. If this is considered to generate an increase in fumes, any **proposals to address this issue**, possibly by using **additional landscaping measures**, would be welcome.

24.9 **All appropriate** l**and management** - to include the new ponds, any open areas and woodland / scrub management of the adjacent land, the retained woodland along the eastern edge, new planting and grassland areas, as well as the railway sidings management - **should all be addressed within a suitable landscape / ecological management plan** as referred to within Chapter 9 of the ES. This should be prepared as a **Condition** if the application is approved and implemented accordingly. This may also require a **S106 agreement** especially if the adjacent Canal and River Trust land is not bought. They are a sympathetic landowner within the Regional park and should support the habitat management to improve the site, although they would not be expected to fund any such works which would be a planning obligation. The plan is essential if the compensation and enhancement sought by NPPF is to be provided to the satisfaction of the LPA.

25. Consequently, **if the above comments can be considered and addressed when determining this application, I do not consider there are any significant ecological constraints on the proposals**.

Further consultation response

Thank you for consulting Hertfordshire Ecology on the above application, for which I have the following comments:

1. For the **principle issues** which have been updated for this application (Transport and Movement, Air Quality, Hydrogeology, Groundwater and Socio-economics) I have **no reason to consider that there will be any significant ecological implications**.

2. I note that outline landscaping has been modified. The proposals no longer require the removal of existing woodland to create the floodwater storage areas which were going to be seeded with a Wildflower mix. Whilst this additional habitat diversity would have been welcomed and enhanced the ecological diversity on the site, the true benefit of such grassland which would have been dependent upon its long term management and water storage function – I consider somewhat debatable. However, I do not object to the retention of existing woodland areas (or new woodland planting) on this part of the site.

3. I also note the new proposal (on the plan at least) to underplant the existing woodland with additional trees and shrubs. Why? Aerial photos already show this to be closed canopy woodland / scrub, and unless there is a significant existing opportunity to plant-up gaps, underplanting seems pointless given that they will not survive beneath existing shade and there is unlikely to be any genuine forestry management that would benefit such planting. In any event this would usually follow a thinning exercise. Consequently unless this can be further justified, I would object to this approach but this isn't a reason for refusal.
Making clearances within the woodland to encourage more structural diversity, open up the ponds and create glades for the Great crested newts would be supported, but this isn't shown on the plan. This could easily be incorporated into a revised detail for the landscaping. However other than considering the licensing issue, according to meeting notes supplied with this application (Reg 22 Misc) NE haven't raised any such habitat improvements as an issue although the existing pond with GCN is in poor condition. Maintaining any such glades in the longer term is another matter – and in reality is never likely to happen unless it is for other reasons. Regular cutting beneath the pylons is already required and so may be the best option for maintaining some open areas.
However, it would be helpful if the applicant could at least be made aware of these views so that this issue can be dealt with or discussed further as necessary.

4. The Submission Changes document includes a Chapter 7 on Ecology. None of the issues addressed which required further information (woodland classification, bats / CEMP and Japanese knotweed) were considered a concern of Herts Ecology. Consequently **I have no reason to consider the new information provided to be anything other than acceptable**.

The main issue I considered had not been sufficiently appreciated was the potential ecological significance of the railway sidings, although this was an observation. Most of it will remain, and management of its habitats can still be achieved through an appropriate management plan.

5. In respect of **changes to the proposed development** – revised flood risk and transport assessments, other than where reflected above within landscaping, **I have no reason to consider there will be any significant ecological implications**.

Network Rail

Original consultation response

As the site is adjacent to Network Rail's operational railway infrastructure, Network Rail strongly recommends the developer contacts AssetProtectionAnglia@networkrail.co.uk prior to any works commencing on site. Network Rail strongly recommends the developer agrees an Asset Protection Agreement with us to enable approval of detailed works. More information can also be obtained from our website at www.networkrail.co.uk/aspx/1538.aspx.

The developer/applicant must ensure that their proposal, both during construction and after completion of works on site, does not:

- encroach onto Network Rail land
- affect the safety, operation or integrity of the company's railway and its infrastructure
- undermine its support zone
- damage the company's infrastructure
- place additional load on cuttings
- adversely affect any railway land or structure
- over-sail or encroach upon the air-space of any Network Rail land
- cause to obstruct or interfere with any works or proposed works or Network Rail development both now and in the future

The developer should comply with the following comments and requirements for the safe operation of the railway and the protection of Network Rail's adjoining land.

Please see below & attached comments,

Future maintenance
The development must ensure that any future maintenance can be conducted solely on the applicant's land. The applicant must ensure that any construction and any subsequent maintenance can be carried out to any proposed buildings or structures without adversely affecting the safety of, or encroaching upon Network Rail's adjacent land and air-space, and therefore all/any building should be situated at least **2 metres (3m for overhead lines and third rail)** from Network Rail's boundary. The reason

for the **2m (3m for overhead lines and third rail)** stand off requirement is to allow for construction and future maintenance of a building and without requirement for access to the operational railway environment which may not necessarily be granted or if granted subject to railway site safety requirements and special provisions with all associated railway costs charged to the applicant. Any less than **2m (3m for overhead lines and third rail)** and there is a strong possibility that the applicant (and any future resident) will need to utilise Network Rail land and air-space to facilitate works. The applicant / resident would need to receive approval for such works from the Network Rail Asset Protection Engineer, the applicant / resident would need to submit the request at least 20 weeks before any works were due to commence on site and they would be liable for all costs (e.g. all possession costs, all site safety costs, all asset protection presence costs). However, Network Rail is not required to grant permission for any third party access to its land. No structure/building should be built hard-against Network Rail's boundary as in this case there is an even higher probability of access to Network Rail land being required to undertake any construction / maintenance works. Equally any structure/building erected hard against the boundary with Network Rail will impact adversely upon our maintenance teams' ability to maintain our boundary fencing and boundary treatments.

Drainage
No Storm/surface water or effluent should be discharged from the site or operations on the site into Network Rail's property or into Network Rail's culverts or drains except by agreement with Network Rail. Suitable drainage or other works must be provided and maintained by the Developer to prevent surface water flows or run-off onto Network Rail's property. Proper provision must be made to accept and continue drainage discharging from Network Rail's property; full details to be submitted for approval to the Network Rail Asset Protection Engineer. Suitable foul drainage must be provided separate from Network Rail's existing drainage. Soakaways, as a means of storm/surface water disposal must not be constructed near/within 10 – 20 metres of Network Rail's boundary or at any point which could adversely affect the stability of Network Rail's property. After the completion and occupation of the development, any new or exacerbated problems attributable to the new development shall be investigated and remedied at the applicants' expense.

Plant & Materials
All operations, including the use of cranes or other mechanical plant working adjacent to Network Rail's property, must at all times be carried out in a "fail safe" manner such that in the event of mishandling, collapse or failure, no plant or materials are capable of falling within 3.0m of the boundary with Network Rail.

Scaffolding
Any scaffold which is to be constructed within 10 metres of the railway boundary fence must be erected in such a manner that at no time will any poles over-sail the railway and protective netting around such scaffold

must be installed. The applicant/applicant's contractor must consider if they can undertake the works and associated scaffold/access for working at height within the footprint of their property boundary.

Piling
Where vibro-compaction/displacement piling plant is to be used in development, details of the use of such machinery and a method statement should be submitted for the approval of the Network Rail's Asset Protection Engineer prior to the commencement of works and the works shall only be carried out in accordance with the approved method statement.

Fencing
In view of the nature of the development, it is essential that the developer provide (at their own expense) and thereafter maintain a substantial, trespass proof fence along the development side of the existing boundary fence, to a minimum height of 1.8 metres. The 1.8m fencing should be adjacent to the railway boundary and the developer/applicant should make provision for its future maintenance and renewal without encroachment upon Network Rail land. Network Rail's existing fencing / wall must not be removed or damaged and at no point either during construction or after works are completed on site should the foundations of the fencing or wall or any embankment therein, be damaged, undermined or compromised in any way. Any vegetation on Network Rail land and within Network Rail's boundary must also not be disturbed. Any fencing installed by the applicant must not prevent Network Rail from maintaining its own fencing/boundary treatment.

Lighting
Any lighting associated with the development (including vehicle lights) must not interfere with the sighting of signalling apparatus and/or train drivers vision on approaching trains. The location and colour of lights must not give rise to the potential for confusion with the signalling arrangements on the railway. The developers should obtain Network Rail's Asset Protection Engineer's approval of their detailed proposals regarding lighting.

Noise and Vibration
The potential for any noise/ vibration impacts caused by the proximity between the proposed development and any existing railway must be assessed in the context of the National Planning Policy Framework which holds relevant national guidance information. The current level of usage may be subject to change at any time without notification including increased frequency of trains, night time train running and heavy freight trains.

Landscaping
Where trees/shrubs are to be planted adjacent to the railway boundary these shrubs should be positioned at a minimum distance greater than their predicted mature height from the boundary. Certain broad leaf deciduous species should not be planted adjacent to the railway boundary as the species will contribute to leaf fall which will have a detrimental effect on the safety and operation of the railway. We would wish to be involved in the approval of any

landscaping scheme adjacent to the railway. Where landscaping is proposed as part of an application adjacent to the railway it will be necessary for details of the landscaping to be known and approved to ensure it does not impact upon the railway infrastructure. Any hedge planted adjacent to Network Rail's boundary fencing for screening purposes should be so placed that when fully grown it does not damage the fencing or provide a means of scaling it. No hedge should prevent Network Rail from maintaining its boundary fencing. Lists of trees that are permitted and those that are not permitted are provided below and these should be added to any tree planting conditions:

Permitted: Birch (Betula), Crab Apple (Malus Sylvestris), Field Maple (Acer Campestre), Bird Cherry (Prunus Padus), Wild Pear (Pyrs Communis), Fir Trees – Pines (Pinus), Hawthorne (Cretaegus), Mountain Ash – Whitebeams (Sorbus), False Acacia (Robinia), Willow Shrubs (Shrubby Salix), Thuja Plicatat "Zebrina"

Not Permitted: Alder (Alnus Glutinosa), Aspen – Popular (Populus), Beech (Fagus Sylvatica), Wild Cherry (Prunus Avium), Hornbeam (Carpinus Betulus), Small-leaved Lime (Tilia Cordata), Oak (Quercus), Willows (Salix Willow), Sycamore – Norway Maple (Acer), Horse Chestnut (Aesculus Hippocastanum), Sweet Chestnut (Castanea Sativa), London Plane (Platanus Hispanica).

Vehicle Incursion
Where a proposal calls for hard standing area / parking of vehicles area near the boundary with the operational railway, Network Rail would recommend the installation of a highways approved vehicle incursion barrier or high kerbs to prevent vehicles accidentally driving or rolling onto the railway or damaging lineside fencing.