

Riverside Energy Park

Applicant's response to London Borough of Bexley Deadline 3 Submission

VOLUME NUMBER:

08

PLANNING INSPECTORATE REFERENCE NUMBER:

EN010093

DOCUMENT REFERENCE:

8.02.36

July 2019 | Revision 0 (Deadline 4)

Planning Act 2008 | Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Contents

1 APPLICANT'S RESPONSE TO LONDON BOROUGH OF BEXLEY'S DEADLINE 3 SUBMISSION..... 2

 1.1 Introduction..... 2

 1.2 LBB requirement for an annual waste tonnage throughput cap..... 2

 1.3 Justification for Air Quality Monitoring..... 8

 1.4 Cap on Transport Movements..... 11

 1.5 Justification for Noise Requirements..... 14

 1.6 Statement of Common Ground 15

 1.7 Appendix A: Written Summary of Oral Submissions on Environmental Matters 16

 1.8 Appendix B: Written Summary of Oral Submissions on Draft DCO 20

1 Applicant's Response to London Borough of Bexley's Deadline 3 Submission

1.1 Introduction

1.1.1 The London Borough of Bexley (LBB) made a submission at Deadline 3 of the Riverside Energy Park (REP) Examination, which included the written summaries of their oral representations made at the Issue Specific Hearings (ISH) on Environmental Matters and on the draft Development Consent Order (dDCO), held on 5th and 6th June 2019 respectively. LBB's written summaries are included as Appendices A and B to the LBB's Deadline 3 submission (**REP3-047**).

1.1.2 LBB's response addresses:

- matters raised at the hearings;
- additional documents submitted by the Applicant for Deadline 2; and
- responses to written questions.

1.1.3 In considering the above, LBB have commented on the following topics:

- requirement for an annual waste tonnage throughput cap;
- justification for air quality monitoring;
- cap on transport movements; and
- justification for noise Requirements.

1.1.4 LBB also provided an update on the status of the Statement of Common Ground (SoCG) between LBB and the Applicant.

1.1.5 The Applicant provides comments below on the above matters, in the order set out in LBB's Deadline 3 submission.

1.2 LBB requirement for an annual waste tonnage throughput cap

1.2.1 LBB has set out in its submissions that it considers that there is precedent for annual waste throughput caps to be included in the descriptions of authorised developments in other development consent orders. The cases referred to by LBB are the East Northamptonshire Resource Management Facility Order 2013 and the Whitemoss Landfill Order 2015 and are both related to hazardous waste landfill proposals.

1.2.2 The Applicant does not accept that these hazardous landfill cases are relevant or justify the inclusion of throughput caps on all applications for energy

recovery facilities considered from 2015 onwards. Whether a cap is required should be considered on the merits of each case.

- 1.2.3 In respect of the merits of this case, the primary consideration must continue to be whether an annual waste throughput tonnage cap is appropriate in policy terms and in the specific context and merits of the particular project. As is explained in the paragraphs below, there is no policy requirement for a throughput cap to be imposed – paragraph 2.5.13 of EN-3 makes it clear that throughput volumes are not a factor in the Secretary of State decision making and there is no other relevant policy that requires it in this case. It is the environmental impact of the scheme that is relevant and which should be controlled by requirements, such as **Requirement 14** of the **draft Development Consent Order (dDCO) (3.1, REP3-003)**, on heavy commercial vehicles bringing waste to both the Energy Recovery Facility (ERF) and Anaerobic Digestion facility. Furthermore, LBB has pointed to two examples of development consent orders that do include throughput caps, however these are in respect of hazardous waste landfills which are not comparable to REP. The Applicant is able to point to more relevant energy generating examples for DCOs where no such throughput cap was proposed by the Applicant or imposed. Those precedents include, for example, The Rookery South Resource Recovery Facility Order 2011 and The Ferrybridge Multifuel 2 (FM2) Power Station Order 2015. This emphasises that a requirement on throughput should only be imposed where the particular circumstances and merits of the case warrant it.
- 1.2.4 LBB's first example comprises a hazardous waste facility whose main purpose is the treatment of hazardous waste, and which is the reason why the facility was classed as a NSIP. The Developer proposed a control on quantities from the outset in their draft Development Consent Order. It was concluded that if a limit was not imposed on 'Low Level Waste', then the total throughput could consist of LLW which would result in the facility being consented under the Planning Act 2008 yet not being used for the purpose which triggered the NSIP threshold. Hence a cap in these circumstances is acceptable, but is not a reason for a cap on REP.
- 1.2.5 In the case of the Whitemoss Landfill Order, the Applicant is not aware of the reasoning for an annual waste throughput cap (which was included from the outset in the Developer's Application draft Development Consent Order). However, it is noted that this specific case was for construction of a new hazardous landfill void, not a waste combustion or digestion facility, and was for the same range of hazardous waste as an existing hazardous landfill with an accompanying extension of time for an already operational interceptor waste treatment facility. So, the project is completely different to REP.
- 1.2.6 Therefore, it is the Applicant's view that the two cases referred to by LBB do not justify a cap on throughput in this application for development consent. To do so would be contrary to the NPS policy (Paragraph 2.5.13 of EN-3), which is the primary basis upon which the Secretary of State must make his decision. There is no justification for a cap as the draft Development Consent Order for REP will adequately control the areas of likely environmental impact.

Any throughput restriction would therefore be superfluous, would not satisfy the planning tests for the imposition of a DCO Requirement and would be counter-productive in respect of maximising low carbon energy generation.

- 1.2.7 The principle of including a Requirement within the dDCO was discussed at the ISH on the dDCO on 6th June 2019. As set out in the **Applicant's Oral Summary for the Issue Specific Hearing on the draft Development Consent Order (8.02.20, REP3-028)**, the dDCO, in combination with the Environmental Permit (EP), restricts potential impacts that might result in environmental effects (e.g. **Requirement 14**, transport movements of the **dDCO (3.1, REP3-003)**), but the actual annual throughput is an arbitrary number which itself does not give rise to any environmental effects.
- 1.2.8 The same principle applies to why the REP dDCO does not propose to restrict annual waste throughput volumes. National Policy Statement (NPS) EN-3 at paragraph 2.5.13 makes it clear that throughput volume in itself is not a factor in decision making as there are no specific minimum or maximum fuel throughput limits for different technologies or levels of electricity generation. Paragraph 2.5.13 then goes on to state that the increase in traffic or any changes in air quality should be considered by the Secretary of State. This goes to the Applicant's point that it is the potential impacts that result in specific environmental effects that need to be managed or constrained, rather than through a general requirement restricting overall electrical output or waste throughput. Therefore, as explained further below, the Applicant will include additional requirements in Rev 3 of the dDCO to be submitted at Deadline 5 to insert controls to manage the air quality and noise effects arising from the Proposed Development.
- 1.2.9 Whilst LBB has referred to two examples of development consent orders that do include throughput caps, the Applicant is also able to numerous, and more relevant, examples where no such throughput cap was imposed:
- Rookery South Energy from Waste Generating Station;
 - Ferrybridge Multifuel (FM2) Power;
 - South London (Beddington) Energy Recovery Facility;
 - Sustainable energy plant to serve Kemsley Paper Mill;
 - Avonmouth Resource Recovery Centre, Bristol;
 - East Tullis Energy from Waste Facility, Aberdeen; and
 - Lostock Sustainable Energy Plant, Northwich, Cheshire.
- 1.2.10 It was also explained at the ISH on the dDCO that the waste throughput of both the ERF and Anaerobic Digestion elements of REP will be a condition in the Environmental Permit (EP). **Section 5** of the **Environmental Permit and Air Quality note (8.02.06, REP2-057)** submitted at Deadline 2 explains how

the Environment Agency (EA) will consider throughput during the determination of the EP application and that the EA will review the capacity of both the ERF and Anaerobic Digestion plants and constrain them accordingly. Further environmental assessment would be required under the EP should a variation be sought. Therefore, there is a separate regulatory regime that will cap the waste tonnage throughput, and the NPS is clear that throughput is not a matter for the planning regime.

- 1.2.11 The Applicant therefore disagrees with LBB's assertion in paragraph 2.10 that *"...failure to limit or cap the throughput of waste could lead to the operational impacts of the development being greater than those assessed in the Applicant's ES"*.
- 1.2.12 Notwithstanding the above, the Applicant has considered the relationship between the EP and the ES in respect of air quality. Whilst the EP would robustly ensure that emissions levels are at, or below, those used in the EIA, the Applicant is willing to introduce a Requirement in respect of air quality management. This draft Requirement will be included in Rev 3 of the dDCO to be submitted at Deadline 5. Notwithstanding the evidence presented in the ES, this revised version of the dDCO will also include a new Requirement in respect of noise emissions, which was also a matter of some residual concern to LBB. In light of the robust inclusion of additional limits in the dDCO, the Applicant considers that sufficient environmental controls are in place. These are identified in **Table 1** below, to ensure that any potential effects on the environment would not exceed the parameters of the assessments presented in the ES.
- 1.2.13 Assessment scenarios used in **Chapter 7** to **14** of the **ES** are derived from a range of maximum parameters/numbers associated with the likely upper throughput of waste (805,920 tonnes per annum (tpa)), as reported in **Paragraph 3.3.5** of **Chapter 3 Project and Site Description (6.1, REP2-013)**. The parameters have been derived from 805,920 tpa as this represents a reasonable worst case basis for the ES when compared to the likely nominal scenario of 655,000 tpa. It is these maximum parameters, e.g. maximum number of vehicle movements, maximum noise levels of operational plant, that form the fundamental basis for the ES, not the assumed waste throughput figures from which they were notionally derived. Applying a limit to waste throughput would impose an onerous and unnecessary burden on the Applicant without environmental justification, as the key likely impacts are addressed through controls identified in **Table 1**, below.
- 1.2.14 Further information on the assumptions on factors that feed into the nominal and upper throughput scenarios at the Proposed Development (such as calorific value and operational hours, as set out in LBB's Paragraphs 2.13-2.17) can be found in **Paragraphs 1.7.2** to **1.7.6** of this response.
- 1.2.15 **Table 1** below sets out the relevant controls in place for each environmental topic which will ensure that any variation in throughput will not breach the parameters assessed in the EIA.

Table 1: Controls secured to ensure environmental effects are limited to the assessment within the ES regardless of waste tonnage throughput

Environmental Topic	Control
Transport	Requirement 14 of the dDCO (3.1, REP3-003)
Air Quality	Within Environmental Permit and new Requirement to be included in the next revision of the dDCO to be submitted at Deadline 5
Noise	Within Environmental Permit and new Requirement to be included in the next revision of the dDCO to be submitted at Deadline 5
Townscape and Visual Impacts	Requirement 2 controls the detailed design of the Proposed Development and secures the design principles of the dDCO (3.1, REP3-003)
Historic Environment	Requirement 7 – Archaeology of the dDCO (3.1, REP3-003)
Terrestrial Biodiversity	Direct impacts – Requirement 5 of the dDCO (3.1, REP3-003) Air Quality impacts – Environmental Permit and new Requirement to be included in the next revision of the dDCO to be submitted at Deadline 5 Noise impacts – Environmental Permit and new Requirement to be included in the next revision of the dDCO to be submitted at Deadline 5
Hydrology, Flood Risk and Water Resources	Requirement 9 -Surface and foul water drainage of the dDCO (3.1, REP3-003)
Ground Conditions	Requirement 10 – Ground conditions and ground stability of the dDCO (3.1, REP3-003)
Socio-economics	Requirement 18 – Community Benefits of the dDCO (3.1, REP3-003)

- 1.2.16 In summary, it is the potential effects arising from reasonable worst-case assessments which are the appropriate measurements and, where appropriate, the basis of, controls for limiting any potential effects on the environment, not the general overall waste throughput scenario which was used to derive them.
- 1.2.17 LBB's comments in paragraphs 2.18 - 2.19 of its Deadline 3 submission, on whether particular waste throughputs could actually be achieved in their view are irrelevant in the context of the above explanation, as the environmental effects of the ES worst case parameters have been demonstrated as being acceptable once appropriate mitigation is incorporated. Whether or not LBB can foresee at this stage the extent of any potential efficiency improvements or technological innovations in the future that could influence waste throughput in the future is of no consequence to the Applicant's case for not including a waste throughput restriction within the dDCO.
- 1.2.18 The Applicant also refers the Examining Authority (ExA) to the Applicant's response to First Written Question Q1.0.2, which can be found in **Section 1.2 of Applicant Responses to First Written Questions (REP2-055)** where the derivation of the upper throughput of the ERF for the purpose of the EIA is further explained.
- 1.2.19 In respect of LBB's paragraph 2.20 of its submission at Deadline 3, it states that the Applicant has suggested air quality and transport to be the issues of concern to the planning regime. The Applicant clarifies that, at **Paragraph 1.2.10 of its Response to the First Written Questions (8.02.04, REP REP2-055)**, it states that "...*environmental effects are primarily air quality and transport*". This statement does not exclude the consideration of other issues of concern which are subject to comprehensive assessment within the ES.
- 1.2.20 LBB's paragraph 2.20 also states that if there was no restriction on waste inputs and the plant was to increase the throughput of waste, it would lead to the release of more NO_x giving rise to air quality and ecological impacts that would not have been assessed or reported in the ES. The EP places appropriate controls on the volumetric rate of emissions, which are lower than those assessed and reported in the ES. Furthermore, the Applicant now confirms that it will include a new Requirement in Rev 3 of the dDCO at Deadline 5 for air quality. Regardless of this new commitment, the EP will ensure that potential air quality and terrestrial biodiversity effects would be within that reported in **Chapter 7 Air Quality of the ES (6.1, REP2-019)** and **Chapter 11 Terrestrial Biodiversity of the ES (6.1, REP2-023)**. The Applicant considers the above approach particularly robust considering paragraph 4.10.3 of NPS EN-1, which states "...*The [Secretary of State] should work on the assumption that the relevant pollution control regime and other environmental regulatory regimes...will be properly applied and enforced by the relevant regulator. It [the Secretary of State] should act to complement but not seek to duplicate them*".
- 1.2.21 The Applicant notes the comments in paragraph 2.23 of LBB's Deadline 3 submission in relation to limiting capacity through both the planning and

permitting regimes. However, as set out above, the Applicant notes that there are numerous similar projects (both DCO and Town and Country Planning Act) which include an ERF element which have been granted consent without such a restriction.

1.2.22 In conclusion, it is clear that likely adverse significant environmental effects of REP can be controlled adequately without the imposition of LBB's suggested cap on waste throughput and that this approach is consistent with policy as set out in the NPS.

1.3 Justification for Air Quality Monitoring

Justification for Financial Contribution by the Applicant

1.3.1 LBB's submission at Deadline 3 (paragraphs 3.1 to 3.5) makes a request for a financial contribution from the Applicant in respect of air pollution emissions.

1.3.2 LBB's response states that any emission of NO_x, PM₁₀, PM_{2.5} and other pollutants contribute to overall health impacts, even if air quality conclusions within the REP ES are Negligible.

1.3.3 LBB's submission at Deadline 3 refers to a February 2019 "Air Quality damage cost update 2019" and states in relation to this that "*...this calculation may be used to provide the basis for discussion with the Applicant, and may be subject to revision: however, it confirms that a financial contribution in respect of these costs is justified*".

1.3.4 LBB has previously referred to DEFRA "Damage Cost" guidance as a matter to inform its proposed air quality monitoring costs. As set out in **Paragraphs 5.6.21 to 5.6.23** of the **Applicant's Response to Written Representations (8.02.14, REP2-055)**, submitted at Deadline 3, DEFRA's Air Quality Damage Cost Guidance states in its opening first paragraph that "*...this damage cost guidance is designed for policy appraisers, to guide in assessing the air quality impacts of a policy*" and on the same page "*...this guidance is intended to provide a clear understanding of how the updated 2019 damage costs should be applied in practice*".

1.3.5 The Applicant considers that neither this nor other DEFRA Damage Cost Guidance suggests that the DEFRA guidance is an appropriate basis for imposing or discussing a financial contribution in respect of costs on a specific project. Notably, the Air Quality Damage Cost update 2019 quoted by LBB states in its Executive Summary that "*...they [damage costs] can be combined with forecasts of emission changes to provide an approximate valuation of the aggregate external impacts of a policy*".

1.3.6 Furthermore, **Paragraphs 5.6.16-5.6.19** and **5.6.22-5.6.23** of the **Applicant's Responses to Written Representations (8.02.14, REP3-022)** reports that there is no evidence linking health effects with energy from waste plants; this is evidence from the Government's own advisors (Public Health England from their specific study into health outcomes around existing UK energy from

waste facilities presented in 2018 and 2019 papers¹ & ²). In addition, the effects of any project must be weighed against its benefits, which, for the Proposed Development, include:

- low carbon electricity generation in the UK (together with renewable generation and battery storage);
- moving waste up the waste hierarchy and reducing landfill;
- providing the ability for London to become self-sufficient and not incurring the carbon costs of transporting waste abroad;
- the potential for waste heat to be utilised for local residents and/or businesses;
- job creation; and
- a biodiversity net gain of a minimum of 10%.

1.3.7 As part of REP, the Applicant is opting to invest heavily in modern NO_x abatement technology in respect of both the waste ERF and the Anaerobic Digestion facility, the details of which are included within the **Environmental Permit and Air Quality Note (8.02.06, REP2-057)** and the **Anaerobic Digestion Facility Emissions Mitigation Note (8.02.42)** submitted at Deadline 4).

1.3.8 In any event, the Applicant already provides a contribution to additional monitoring within the locality in respect of RRRF, which is addressed in detail below. In addition, the assessments reported in **Section 7.12 of Chapter 7 Air Quality** of the **ES (6.1, REP2-019)** do not identify any significant adverse effects. DEFRA's Damage Costs Guidance is not planning policy, is not supported by the NPSs and, for the reasons set above, is not applicable to individual projects including REP.

1.3.9 In conclusion, the Applicant therefore considers that it is not justified, reasonable, necessary or appropriate for REP to make a project specific financial contribution based on DEFRA's Damage Costs Guidance for policy appraisal as suggested by LBB in their D3 submission.

Need for Investment in Air Quality Monitoring in Bexley

1.3.10 As set out above, the Applicant is opting to invest heavily in modern NO_x abatement technology in respect of both the waste ERF and the Anaerobic Digestion facility, the details of which are included within the **Environmental**

¹ Ghosh RE, Freni Sterrantino A, Douglas P, Parkes B, Fecht D, de Hoogh K, Fuller G, Gulliver J, Font A, Smith RB, Blangiardo M, Elliott P, Toledano MB, Hansell AL. Fetal growth, stillbirth, infant mortality and other birth outcomes near UK municipal waste incinerators; retrospective population based cohort and case-control study. Environment International. 2018

² Freni-Sterrantino, A; Ghosh, RE; Fecht, D; Toledano, MB; Elliott, P; Hansell, AL; Blangiardo, M. Bayesian spatial modelling for quasi-experimental designs: An interrupted time series study of the opening of Municipal Waste Incinerators in relation to infant mortality and sex ratio. Environment International. 128 (2019) 106-115.

Permit and Air Quality Note (8.02.06, REP2-057) and the **Anaerobic Digestion Facility Emissions Mitigation Note (8.02.42)** submitted at Deadline 4). Neither of the abatement technologies (on the ERF or the Anaerobic Digestion facility) is required to make the development acceptable in planning terms, since all effects in respect of the 'reasonable worst case' were found to be not significant in the ES. The Applicant has taken the proactive step, as an investment in setting a very high standard of air quality controls, to commit itself to even lower levels of NOx emissions.

- 1.3.11 As noted in paragraph 3.10 of LBB's submission, the Applicant already has a legal agreement with LBB in relation to the RRRF's Environmental Permit requirement for ongoing air quality monitoring³ and associated funding support. This emphasises that the air quality monitoring was not required by virtue of the section 36 consent and planning permission for RRRF, but rather the Environmental Permitting regime, being the appropriate regime to deal with air emissions. This agreement requires the implementation of an extensive ambient air quality monitoring programme which includes seven monitoring locations throughout Belvedere, Slade Green, Erith, Havering and Barking and Dagenham. Pollutants monitored at each location include NO₂, CO, SO₂, PM₁₀'s and PM_{2.5}'s.
- 1.3.12 Through consideration of the REP EP application, the EA may require the adoption of an ambient air quality monitoring programme in relation to REP. It is unknown at this stage whether the programme, if required, would replicate the RRRF monitoring programme, require some additional monitoring or replace some of the existing equipment. In any event, the Applicant accepts the imposition of requirements within the REP EP to demonstrate ongoing compliance with environmental regulation. The Applicant considers it appropriate that LBB are consulted on the air quality monitoring scheme developed through the EP process and will therefore include a requirement to this effect in the dDCO to be submitted at Deadline 5. The Applicant considers the additional monitoring sought in paragraph 3.12 of LBB's submission should be considered during the consultation secured in the new requirement to be inserted at Deadline 5, which would also link into the EP conditions to ensure consistency of approach.
- 1.3.13 As detailed above, the Applicant does not accept that ongoing monitoring requirements should be determined through applying the DEFRA Damage Cost Guidance, nor is this approach promoted in National or Development Plan policy. Whilst the Applicant will be proposing an air quality management Requirement to the dDCO at Deadline 5, this is without prejudice to the above position on air quality monitoring.

³ Air Quality Monitoring Deed (23 June 2011) between The Mayor and Burgesses of the LBB and RRRL and Bexley Business Academy Ltd.

1.4 Cap on Transport Movements

- 1.4.1 In order to minimise potential effects of road traffic during the operational phase of REP, the updated **dDCO (3.1, REP3-003)** submitted at Deadline 3 includes a Requirement (**Requirement 14**) which restricts the number of two-way vehicle movements made by heavy commercial vehicles delivering waste to both the Energy Recovery Facility and the Anaerobic Digestion plant.

HGV Figures as Presented in the Applicant's ES

- 1.4.2 LBB quotes a number of figures from the Applicant's ES and Transport Assessment which it uses in the following sections and to which the Applicant makes the following response.

Proposed Transport HGV Movements Contained in the Tracked Changed DCO's Provided by the Applicant and LBB

- 1.4.3 The ERF element of REP will be able to serve the residual waste needs of commercial and industrial and household waste producers. Whilst RRRF serves the needs of LBB's local authority collected waste, there is a significant amount of commercial waste generated within the local area which requires treatment. REP will help recover value from this waste, moving it up the waste hierarchy and avoiding the need for landfill. Commercial and industrial waste located in the more immediate surrounding area to REP, where it would not be efficient to divert via a river-based transfer station, would be more efficiently transported to site directly by road, avoiding likely treatment at more distant facilities. **Section 6.13 of Chapter 6 Transport** of the **ES (6.1, REP2-017)** reports that the '100% by road' scenario results in Not Significant operational effects in respect of HGV movements. Despite there being no basis for a restriction with respect to potential adverse environmental effects, the Applicant (at Deadline 2) included a restriction to "90-in, 90-out" in respect of Heavy Commercial Vehicle movements to the ERF to demonstrate a substantial commitment to a high proportion of waste arriving by river. This has subsequently been amended to include Heavy Commercial Vehicle to/from the Anaerobic Digestion plant as well.
- 1.4.4 The Applicant considers that a further arbitrary restriction of 10% of the nominal waste throughput scenario, as proposed by LBB, would be unnecessary, unreasonable and entirely unjustified in relation to any potential environmental effects and would unfairly restrict the commercial operation and opportunities for REP. The key is the number of vehicle movements, and that is what has been restricted in **Requirement 14** of the **dDCO (3.1, REP3-003)**.
- 1.4.5 As explained by the Applicant during the Issue Specific Hearing on the dDCO, and as provided in the **Applicant's Oral Summary for the Issue Specific Hearing on draft Development Consent Order (8.02.20)**, the current ash storage area has never been used by RRRF, with the bottom ash being exported via river barge to storage at the Port of Tilbury. The Applicant clarifies that this storage area is however used for the storage of empty ash containers. Bottom ash comes off the boiler line and goes directly into the ash

bunker where it is stored. Typically, there is a week's storage capacity in the bunker and this is sufficient to store ash should there be a jetty outage. It is therefore considered that the Applicant's proposal is more appropriate and sufficient.

- 1.4.6 Further the Applicant has agreed to the requirement for all bottom ash to be sent from the site by river. At Deadline 2, **Requirement 14** of the **dDCO (3.1, REP3-003)** was updated to include such a requirement, save where there is a jetty outage.

Schedule 2 Requirement 14

- 1.4.7 The Applicant confirms that, as secured in **Requirement 14** of the **dDCO (3.1, REP3-003)**, the number of two-way Heavy Commercial Vehicle movements during the commissioning and operational period must not exceed a maximum of 90 per day (that is 90 vehicles in and 90 vehicles out, equating to 180 individual movements per day).
- 1.4.8 The Applicant has set out above in **Section 1.2** why a waste throughput restriction is unnecessary and unreasonable in respect of Heavy Commercial Vehicle movements.
- 1.4.9 Waste carriers and their hauliers have a commercial imperative to use larger vehicles where possible to move waste with fewer vehicle movements. However, the use of particular vehicles by a waste haulier is determined by numerous factors including the manner in which waste is collected, (i.e., the waste collection location including accessibility by larger vehicles, and the composition of the haulier's fleet). The assessment findings reported as Negligible and Not Significant in **Section 6.13** of **Chapter 6 Transport** of the **ES (6.1, REP2-017)** are not affected by the size of the normal road-going vehicle that is utilised, except that the assessment assumption is that the maximum possible vehicle movements are assumed, based on use of the smallest waste capacity vehicle. This is wholly in accordance with the assessment of a 'reasonable worst case' and the assessment findings show that all residual operational transport effects are Not Significant. In respect of monitoring, the Applicant considers that a restriction on Heavy Commercial Vehicle movements is entirely appropriate and enforceable without the need to artificially link this to waste throughput.
- 1.4.10 **Table 6.6 Chapter 6 Transport** of the **ES (6.1, REP2-017)**, describes the nominal and reasonable worst case scenarios. The assessments reported in **Chapter 6** are based on the reasonable worst case scenario and therefore encompass both the nominal scenario and the much lower restriction of '90 in/90 out' movements, as secured through **Requirement 14**, of the **dDCO (3.1, REP3-003)**. **Section 13** of **Chapter 6 Transport** of the **ES (6.1, REP2-017)** reports that transport effects are Not Significant and therefore the Applicant considers that there is no basis, in terms of the assessments undertaken, to impose a restriction which is below the reasonable worst case assessment numbers.

- 1.4.11 For clarity, the Applicant confirms that the '90 in/90 out' restriction is not intended to align with the vehicle movements for a 25% by road scenario. In LBB's paragraph 4.18, it asserts that the Applicant has "*vastly overinflated*" the waste traffic movements needed to serve REP. The Applicant rejects this assertion. The establishment of a 'reasonable worst case' is at the heart of a 'Rochdale Envelope' approach to assessment and the derivation of the highest number of vehicles based on a 7 tonne Refuse Collection Vehicle is an entirely reasonable assumption. In any event, the 90 in and 90 out applies to both the ERF and the Anaerobic Digestion plant, such that the vehicle movements have to be shared between the two facilities in REP. These principles were agreed with LBB via the Transport Assessment scoping note (**Appendix B to Appendix B.1 Transport Assessment** of the **ES (6.3, APP-066)**).
- 1.4.12 The revised **Requirement 14** included in **dDCO (3.1, REP3-003)** does limit the number of vehicles movements by reference to the ERF plant (work 1A) as well as the Anaerobic Digestion facility (work 1B). The Applicant expects this amendment to satisfy LBB's request.
- 1.4.13 The revised **Requirement 14** included in **dDCO (3.1, REP2-003)** does impose a limit on the number of vehicles movements delivering waste to the energy recovery facility and the anaerobic digestion system both during the commissioning and operational phases of REP. The Applicant has therefore already amended the requirement as requested by LBB.
- 1.4.14 During the ISH on Environmental Matters (5th June 2019), the Applicant confirmed that the sharing of surplus traffic movements between RRRF and the Proposed Development would not be progressed. The only exception to the vehicle movements restriction is in the event of a jetty outage. This is reflected in the updated **dDCO (3.1, REP2-003)** submitted at Deadline 3.
- 1.4.15 The Applicant has amended **Requirement 14(3)**, which is now **Requirement 14(2)**, in the **dDCO (3.1, REP3-003)** submitted at deadline 3. The amendments made substantively follow the suggested amendments made by LBB in its mark-up of the DCO submitted at Deadline 2 (**REP2-081**). The Applicant therefore expects LBB to be content with the changes made.
- 1.4.16 The Applicant confirms that, as secured in **Requirement 14** of the **dDCO (3.1, REP2-003)**, in the event of a jetty outage, the number of two-way vehicle movements made by Heavy Commercial Vehicles delivering waste to the ERF and the Anaerobic Digestion Facility must not exceed a maximum of 300 per day (ie. 300 vehicles in and 300 vehicles out, equating to 600 individual movements per day) subject to the restrictions imposed by **Requirement 14 (2)(a)** and **(b)** of the **dDCO (3.1, REP3-003)**.
- 1.4.17 The restrictions imposed by **Requirement 14 (2)(a)** and **(b)** of the **dDCO (3.1, REP2-003)** limit the two-way movements between 0730-0900 and 1630-1800 to 30 (i.e. 30 vehicles in and 30 vehicles out, equating to 60 individual movements during each of the defined periods).

- 1.4.18 The Applicant has prepared supplementary evidence, submitted at Deadline 3, which provides an assessment of the potential effects of the simultaneous operation of RRRF and REP at full throughput during a jetty outage scenario. This evidence, reported in **Temporary Jetty Outage Review (Simultaneous Operations - Riverside Resource Recovery Facility and Riverside Energy Park) (8.02.31, REP3-036)**, demonstrates that the effects on the local road network would continue to be Not Significant.
- 1.4.19 As stated at the ISH on the dDCO and confirmed in the **Applicant's Oral Summary for the Issue Specific Hearing on the draft Development Consent Order (8.02.20, REP3-028)**, records of vehicle movements kept by the Applicant will be made available on request to LBB. This is reflected in the updated **dDCO (3.1, REP3-003)**.

Delivery and Servicing Plan

- 1.4.20 In respect of LBB's request for a Delivery and Servicing Plan (DSP) at Deadline 3, a response is provided in **Applicant's Response to the Local Impact Report by London Borough of Bexley (8.02.17, REP3-025)** which confirms proposed restrictions in respect of operational waste movements in **Requirement 14(1)** of the **dDCO (3.1, REP3-003)**. Ancillary movements, relating to typical deliveries such as lime (2 HGVs per day), ammonia (2 HGVs per day) and Powder Activated Carbon (1 HGV per month), are small in comparison to other movements, and the overall movements (including waste import and export in the 100% by road scenario) are found to be Not Significant in **Chapter 6 Transport** of the **ES (6.1, REP2-017)** and **Appendix B.1**, the **TA to the ES (6.3, APP-066)**. It is considered that there is no justification for a DSP to be implemented for the operational phase of REP, particularly in addition to the existing proposed controls through **Requirement 14** of the **dDCO (3.1, REP3-003)**.
- 1.4.21 During the construction of REP and the Electrical Connection, details of delivery planning and management of the movement of construction materials and plant will be set out in the final submitted and approved CTMP(s) which will be in accordance with the **Outline CTMP (Appendix L of Appendix B.1 Transport Assessment to the ES (6.2, REP2-064))** and provisions in the **dDCO (3.1, REP3-003)**.

1.5 Justification for Noise Requirements

Whilst the conclusions of the Environmental Statement are that there are no likely significant effects as a result of operational noise on sensitive receptors, the Applicant proposes to include a new Requirement to be included in the next revision of the dDCO to be submitted at Deadline 5 for consideration by the ExA.

- 1.5.1 As set out in the **Applicant's Response to Written Representations (8.02.14, REP3-022)**, the baseline sound survey was undertaken following discussion and agreement on survey locations and timings with the Environmental Health Officer at LBB. The measurements were undertaken

during the middle of the night between 01:00 and 03:00 which are considered to be the quietest periods of the night. Therefore, it is considered that the measurement intervals are suitable to inform the assessment.

Night-Time Construction Noise Impact Validation Assessment

- 1.5.2 The Applicant welcomes LBB's confirmation that the slipform working is not likely to give rise to significant effects at the closest receptors.
- 1.5.3 The night-time assessment is based on specific night-time working activities as described in Table 4 of the **Night-time Construction Noise Impact Validation Assessment (8.02.12, REP3-063)**. These activities have different operating assumptions (e.g. % working time) than the daytime assessment presented in the ES. Due to these operating assumptions, the calculated noise level during the night-time is lower than the daytime assessment presented in the ES.
- 1.5.4 'Good quality' windows have not been assumed in the assessment. Instead the assessment considers a notional façade with conventional glazing with a typical sound reduction of 30dB. This is considered to be indicative of the attenuation provided by a façade made up of conventional construction types (e.g. brick/block cavity walls, conventional glazing, etc.).
- 1.5.5 With respect to openable windows it should be noted that the Electrical Connection route is typically located along main roads. It is expected that the guideline internal night-time noise levels detailed in BS8233:2014 would be exceeded in nearby dwellings, with open windows, overlooking the roads as a result of the existing traffic noise. It is therefore a reasonable assumption to consider that windows would be closed in bedrooms overlooking the roads (and the proposed route of the Electrical Connection).
- 1.5.6 The Applicant notes that the levels detailed in BS8233:2014 are not 'requirements' but are guideline levels.
- 1.5.7 Notwithstanding the above, the Applicant confirms it is the intention that the Electrical Connection works will be installed during daytime wherever possible. Any night-time works would only be considered in exceptional circumstances, where agreed with the relevant highway authority as being a necessary and proportionate mitigation approach to address adverse transport effects.
- 1.5.8 The construction of the Electrical Connection route would affect receptors over a very limited period (typically 7 days at each receptor sited within a given 200m length of works). Therefore, the potential effects are considered to be Minor and therefore Not Significant and, as set out above, night-time works would only be carried out in exceptional circumstances.

1.6 Statement of Common Ground

- 1.6.1 The Applicant confirms that it continues to progress towards agreeing a Statement of Common Ground (SoCG) with LBB. Whilst LBB has quoted

some sections of the draft SoCG in its Deadline 3 response, the Applicant was requested not to submit a draft to the ExA at that stage. Both parties continue to work towards the submission of a draft or signed SoCG at Deadline 5.

1.7 Appendix A: Written Summary of Oral Submissions on Environmental Matters

Agenda Item 3 – Waste Management

- 1.7.1 Although not addressed in the LBB's Deadline 3 submission or oral summaries, the Applicant has considered previous representations made by them and other Interested Parties in respect of residual waste. The Applicant therefore confirms that it is its intention to include a new Requirement in the dDCO at Deadline 5 in respect of the ERF element of REP only receiving residual waste.
- 1.7.2 The Applicant refers to the Applicant's Response to ExA Written Question Reference Q1.0.2, which can be found in **Section 1.2 of Applicant Responses to First Written Questions (8.02.04, REP2-055)** where the derivation of the upper throughput of the ERF is further explained.
- 1.7.3 In summary, the nominal throughput of the ERF (655,000 tonnes per annum (tpa)) is based on the anticipated throughput of residual waste at an assumed (design) calorific value, with both lines of the ERF operating for 8,000 hours across the year (8,760 hours).
- 1.7.4 The design calorific value is derived from operational data of waste which is currently processed at the existing Riverside Resource Recovery Facility (RRRF), with adjustment made to account for regional policy drivers which intend to reduce the quantity of plastics arising in the residual waste stream, leading to a consequential reduction in residual waste calorific value. The availability figure is based on the guarantee offered by the preferred construction contractor for the ERF and is widely adopted during due diligence for funding such facilities as a realistic and conservative figure.
- 1.7.5 The upper throughput (805,920 tpa) is based on the maximum throughput of residual waste which could be processed at the lowest calorific value which the ERF has been designed to accept and with both lines of the ERF operating continuously (i.e. 100%) across the year (8,760 hours). This approach to deriving upper throughput is widely adopted in planning and permitting regimes as it ensures that operational impacts of the proposed developments are adequately assessed.
- 1.7.6 To account for waste variability, a high degree of flexibility has been designed into the ERF such that it would be capable of processing wastes with net calorific values ranging from 7 to 13 MJ/kg. This range represents a high level of flexibility but is entirely proven for the combustion technology which is proposed for REP, and the preferred construction contractor has a demonstrable track record of delivering projects on this basis. Specifying this

range ensures that a wide range of residual wastes types can be accepted such that the project benefits are delivered.

- 1.7.7 As noted by the LBB in paragraph 2.11 of its submission, the upper throughput figure of 805,920 tpa has been applied consistently in the Environmental Impact Assessment (EIA), Environmental Statement (ES) and supporting analyses, in addition to what has been proposed within the Environmental Permit (EP). The figure adopted has been consistent used and represents a set of operational variables which provide a notional basis for topic-specific parameters for a 'reasonable worst case', i.e. the assessment is conservative.
- 1.7.8 In paragraph 2.13 of its submission, LBB notes that the Applicant has suggested that its justification for there being no cap on the waste throughput is that due to future efficiencies in ERF operations it may be feasible for the ERF to accept more waste than currently predicted, which LBB is not seeking to restrict. However, LBB fails to recognise that it is the thermal input of the ERF, rather than the waste throughput, which is important in assessing the ERF's operational impacts.
- 1.7.9 The ERF will be operated on the principle of maintaining a relatively constant thermal output from the boilers to ensure high levels of efficiency and stable combustion parameters for optimised emissions performance. This means that waste will be processed at differing rates as the calorific value of the waste varies. Any megawatt restriction and/or tonnage restriction would not control the level of environmental effects, which is the concern of the planning regime.
- 1.7.10 In paragraph 2.17 of its submission, LBB asserts that the assumptions underpinning the nominal and upper throughput figures are not followed through in the ES, and that further details on the viability of these assumptions are sought by the LBB. The Applicant maintains strongly that the conservative upper throughput figure of 805,920 tpa has been used consistently to derive topic-specific parameters in all environmental assessments within the DCO and the EP applications and supplementary submissions. The Applicant considers that **Paragraphs 1.7.2 to 1.7.5** of this response document, and the **Applicant's Response to ExA Written Question Reference Q1.0.2 (8.02.04, REP2-055)**, provide a detailed and robust justification for the figures.
- 1.7.11 LBB, in paragraph 2.18 of its submission, correctly notes that it is unlikely that the ERF would process the upper throughput figure of 805,920 tpa. The main reasons for this are that:
- due to necessary maintenance shutdowns, which are implemented as part of a preventative maintenance regime, the operational availability of both ERF lines is highly unlikely to achieve 100% operability throughout the year; and
 - based on operational experience, accepted industry knowledge and safeguards within waste supply contracts, it is highly unlikely that the calorific value of residual waste received at the facility would be at the

lowest value the ERF has been designed to accept consistently throughout the year.

1.7.12 LBB can therefore be assured that the conclusions drawn from environmental assessments are predicated on a conservative throughput basis, which was then used to derive topic-specific parameters. Given that all relevant topic-specific parameters are controlled, LBB can have confidence that operational impacts of the Proposed Development could not be greater than those assessed in the ES, regardless of waste throughput.

1.7.13 **Paragraph 3.3.42 of Chapter 3 Project and Site Description of the ES (6.1, REP2-013)** reports that digestate from the Anaerobic Digestion facility would be handled in line with the waste hierarchy, being first transported off-site for use in the agricultural sector for use as a fertiliser. Should this not be possible, it would be used as a fuel for REP to generate electricity. REP would incorporate a digestate drying, storage and loading room to process (through maturation) suitable solid digestate to meet the standards required for agricultural use.

1.7.14 This approach was confirmed at the Issue Specific Hearing on Environmental Matters, where the Applicant explained that reuse by the agricultural industry is the Applicant's preferred solution. REP is incentivised to use it commercially because, if the material was put through the ERF, the Applicant would not receive a gate fee for the waste and would lose the fee that could be received for its agricultural use.

Agenda Item 4 – Air Quality

1.7.15 During the discussion on Air Quality at the Environmental Matters hearing, LBB was invited to comment on the issue of air quality monitoring and appropriateness of the monitoring points being used. LBB was without an air quality expert, and it was therefore confirmed that a written response would be provided for Deadline 3.

1.7.16 The Applicant has addressed those additional points raised by LBB in its Deadline 3 submission, beyond those raised at the ISH on 5th and 6th June 2019, in its response in **Section 1.3** above.

Agenda Item 5 - Biodiversity

1.7.17 The Applicant acknowledges LBB's supportive comment, in that it expresses satisfaction with the further survey work undertaken in relation to Great Crested Newt.

1.7.18 In relation to LBB's concern regarding a lack of detail about potential offsetting sites, the Applicant refers to **Section 6 of the Biodiversity Accounting Report (8.02.09, REP2-060)**. This sets out the 'next steps' for delivery of the biodiversity offsetting, including the identification of potentially suitable offset projects, based on biodiversity benefits, location, estimate scheme costs and potential delivery timeframes. As set out in **Section 6.3.2** "...the proposed

Offset will be agreed with the relevant planning authority; detailing the design, delivery, monitoring and enforcement provisions necessary to ensure that a net gain for biodiversity will be achieved as a result of the Proposed Development, together with a timetable for delivery”.

1.7.19 Further information was subsequently provided in the **Biodiversity Offset Delivery Framework (8.02.25, REP3-031)** submitted at Deadline 3.

1.7.20 **Requirement 5** of the **dDCO (3.1, REP3-003)** states that the final Biodiversity and Landscape Mitigation Strategy, which is subject to approval by LBB (as the local planning authority), must set out the mechanism for securing the off-setting value. Requirement 5(1)(d) and sub-paragraph (2) then requires the Applicant to implement the approved strategy. Accordingly, the delivery of the offset and net gain requirements is secured through the Development Consent Order.

1.7.21 The Applicant considers that, given the submissions above, the approach secured through the dDCO and the commitment to provide offset site search updates to the Examination, sufficient confidence can be drawn that substantial progress is being made and will be reported, including to LBB. Note that the Applicant met with LBB on 17 July 2019 to discuss potential initial site options that the authority is aware of or wishes the Applicant to consider.

Agenda Item 6 - Transport

1.7.22 In response to LBB's points relating to clarity on the proposed limit of 90 vehicles per day, and in relation to sharing vehicle capacity with RRRF, the Applicant would refer, respectively, to **Paragraphs 1.4.7, 1.4.11 and 1.4.14** above.

1.7.23 The **Applicant's responses to Written Representations (8.02.4, REP3-022), Requirement 8(3) of Schedule 2** to the **dDCO (3.1, REP3-003)**, submitted at Deadline 3, prevent the Applicant from exercising the powers in Article 14(1) (Permanent stopping up of streets) unless and until a plan showing the proposed layout for the termination of the highway has been submitted to and approved by the relevant highway authority (ie LBB). It is considered that this provides satisfactory control for the highway authority over the turning arrangements. The Applicant's **Illustrative Circulation Plan (2.6, APP-013)** shows how one such arrangement could be achieved, which represents an improvement on existing turning arrangements at the end of Norman Road. The Applicant notes that this illustrative layout would accord with LBB's suggestion that *“...it could be accommodated by a slight repositioning of the southernmost gate to the site on the eastern side of Norman Road and by adjusting the kerb radii proposed in front of that gate”*. LBB refers to a *“...forward side-turn manoeuvre”*, which the Applicant interprets to mean a T-shape turning head or similar which can be used to turn a vehicle in forward and reverse gears.

1.8 Appendix B: Written Summary of Oral Submissions on Draft DCO

Agenda Item 3 – Schedule 1 (definition of Authorised Development)

- 1.8.1 In response to LBB's request that the DCO has a cap on the throughput capacity for the ERF and the Anaerobic Digestion plant, please refer to **Section 1.2** of this document.
- 1.8.2 In response to LBB's request for a restriction on traffic movements which relate to the Anaerobic Digestion plant please refer to **Paragraph 1.4.1** of this document which confirms that such a restriction was included at Deadline 3.
- 1.8.3 The Applicant does not consider LLB's requested limit on river movements necessary. Noise and air quality impacts at residential receptor locations would only result from very substantial increases in river movements which would not be feasible. The ability to significantly increase river movements beyond those notionally assumed to marry with a throughput of 805,920 tpa is restricted by tidal shifts, jetty capacity and the processing duration at waste transfer stations. On this basis, the artificial restriction of river movements would have a negative effect on the flexibility to deliver more waste sustainably by river if efficiency improvements are secured over time at the plant. Furthermore, the jetty has an existing unrestricted consent for 24/7 working in respect of RRRF and neither the Port of London Authority or the **Navigational Risk Assessment (6.3, REP-067)** identified any issues in respect of river movements.
- 1.8.4 The Applicant refers to **Section 1.2** above and also to the Applicant's Response to ExA Written Question Reference Q1.0.2, which can be found in **Section 1.2 of Applicant Responses to First Written Questions (REP2-055)** where the derivation of the upper throughput of the ERF is further explained.
- 1.8.5 The Applicant addresses the matter of bottom ash storage in **Paragraph 1.4.5** above.

Agenda Item 4 – Articles (changes proposed by the Applicant and by Interested Parties)

- 1.8.6 **Article 6(3)** – The Applicant has sought to limit the extent of Article 6(3) to those matters where the Applicant envisages that there may be conflict between the terms of the planning permission for RRRF and REP. It has therefore responded to the concerns raised by LBB and is seeking to agree the wording of the revision to **Article 6(3) (dDCO (3.1 REP3-003))**
- 1.8.7 **Article 13** – The Applicant maintains that there is no need for **Article 13** (Temporary prohibition or restriction of use of streets and public rights of way) to be amended for the protection of statutory undertakers. The necessary protection is already included in the **dDCO (3.1 REP3-003)** by virtue of **Article 34**.

1.8.8 **Article 21** – The Applicant does not accept the amendments suggested by LBB to **Article 21(2)**. The reasoning for this is set out **Oral Summaries for the Issue Specific Hearing on draft Development Consent Order (8.02.20, REP3-028)**

1.8.9 **Article 27** – The Applicant awaits LBB's comments on the redrafted **Article 27** of the **dDCO (3.1 REP3-003)**.

Agenda Item 5 Schedule 2 Requirements (changes proposed by the Applicant and by Interested Parties)

The Applicant has revised the wording to **Requirement 4** in the version of the **dDCO** submitted for deadline 3 (**3.1 REP3-003**). The Applicant considers that the revised requirement is sufficiently precise without the need for definitions to be included.

1.8.10 The Applicant refers to the responses in **Paragraphs 1.7.18** and **1.7.21** above in respect of information relating to progress on Biodiversity Offsetting matters. The Applicant met with LBB on 17 July 2019 to discuss potential initial site options that the authority is aware of or wishes the Applicant to consider.

1.8.11 The Applicant acknowledges LBB's point in paragraph 4.3 of Appendix B and refers to the response in **Paragraph 1.7.23** above in respect of the Norman Road turning head. **Requirement 8(3)** has been amended in the latest version of the **dDCO** submitted for deadline 3 (**3.1 REP3-003**).

1.8.12 The Applicant acknowledges LBB's positive point in paragraph 4.4 of Appendix B, that LBB agrees to the amendment to **Requirement 10(3)** of the **dDCO (3.1 REP3-003)** proposed by the Applicant.

1.8.13 In relation to LBB's request for contributions for ongoing operational monitoring or air quality, the Applicant refers to the response provided in **Section 1.3** above.

1.8.14 Following the Issue Specific Hearing held on 5th June 2019, the Applicant revised the Requirement securing a Code of Construction Practice so that it also applies to the pre-commencement works for the authorised development. The **dDCO (3.1 REP3-003)** submitted at Deadline 3 incorporates this amended Requirement.

1.8.15 Most of the matters set out in paragraph 4.6 of the LBB response are addressed in **Section 1.4** above.

1.8.16 **Requirement 14** has been amended in the latest version of the **dDCO** submitted for deadline 3 (**3.1 REP3-003**). The length of the jetty outage has been defined as a period whereby the jetty cannot be used in excess of 48 hours

1.8.17 Amendments have been made to **Requirement 14** to the **dDCO (3.1 REP3-003)** to address comments from LBB in respect of the maximum number of

vehicle movements, the ability for LBB to inspect vehicle movement records and the application of the requirement during commissioning as well as operation.

- 1.8.18 The Applicant will seek to agree the terms of the requirement in the Statement of Common Ground with LBB.
- 1.8.19 The Applicant remains in discussions with the EA regarding the suitable wording of a Requirement in respect of repairs to the River Thames flood embankment.
- 1.8.20 The Applicant acknowledges LBB's confirmation in paragraph 4.8 of its response regarding agreement of wording for **Requirement 18** of the **dDCO (3.1 REP3-003)**
- 1.8.21 The Applicant awaits LBB's comments on its updated Requirement on Combined Heat and Power, which has sought to address the various comments from LBB and from the LG on Combined Hear and Power.