

Indaver Rivenhall IWMF DCO

Planning Act 2008

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

## **Examination Documents [PINS Ref:** EN0101038]

# Applicant's Responses to ExQ2

Document Reference: EN0101038/APP/9.4.2

**Revision Number 1.0** 

APFP Regulation 5(2)(q)

09 July 2024 Indaver Rivenhall Ltd

Leading the field in sustainable waste management.

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#### **VERSION HISTORY**

Version no.	Date	Submission	Status	Doc Ref	PINS Ref
1	09 July 2024	Deadline 4	Latest	9.4.2	

## **Glossary**

Abbreviation	Definition
Applicant	Indaver Rivenhall Limited
The Consented	The IWMF as approved by the IWMF TCPA Permission that is
Scheme	currently under construction at the IWMF Site.
dDCO	Draft Development Consent Order. This being the draft Order
aboo	prepared by the Applicant.
DCO	Development Consent Order. A DCO is the form in which the
	Secretary of State grants consent for development applied for
	under the Planning Act 2008.
DSM plant	Dry Silo Mortar plant
ECC	Essex County Council
EfW	Energy from Waste. Treatment processes and technologies used
	to generate a useable form of energy and which also reduce the
	solid volume of residual waste.
EIA	Environmental Impact Assessment. A process for predicting the
	effects of a proposed development on the environment that
	informs decisionmakers in relation to planning permissions,
	consents, licences and other statutory approvals, as required by
	Directive 2014/52/EU (the EIA Directive).
Environmental	Environmental Permit (No.: EPR/FP3335YU), as varied by (No.
Permit	EPR/FP3335/YU/V002, date 03 June 2020), and transferred to
remiii	the Applicant (No. EPR/CP3906LP).
ES	Environmental Statement. The document reporting the process
LO	and outcomes of the EIA. Book 6 of this Application.
ExA	Examining Authority
	The examination of the DCO Application submitted by the
Examination	Applicant by the Planning Inspectorate on behalf of the Secretary
	of State, which began on 9 <sup>th</sup> April 2024.
ExQ2	Examining Authority's second written questions and requests for
EXQE	further information (issued 25 June 2024).
	The relevant planning authorities within which the Proposed
Host Authorities	Development is located, being Braintree District Council and
	Essex County Council.
IWMF	Integrated Waste Management Facility
IWMF Site	The location of the IWMF as approved by the IWMF TCPA
	Permission.
	Planning permission reference ESS/39/23/BTE (as amended and
IWMF TCPA	superseded from time to time, including by permissions granted
Permission	pursuant to sections 73 and 96a of the TCPA 1990), dated 26
	January 2024, for the development of an Integrated Waste
B 43 A /	Management Facility at the former Rivenhall Airfield.
MW	Megawatt of electricity
NIA	Noise Impact Assessment
NSRs	Noise Sensitive Receptors

NSIP	Nationally Significant Infrastructure Project. A project that, by reason of its scale and/or Infrastructure Project (NSIP) importance, needs Development Consent before it can be built or operated.	
PINS	Planning Inspectorate	
Proposed Development	The application for which Development Consent is being sought – the proposed extension to the electrical generating capacity of the EfW component of the Rivenhall IWMF.	

#### 1 Introduction

- 1.1 This document (Doc Ref 9.4.2) has been prepared on behalf of Indaver Rivenhall Ltd ('the Applicant'). It forms part of the application ('the Application') for a Development Consent Order (a 'DCO') that was submitted to the Secretary of State ('SoS') for the Department of Energy Security and Net Zero ('DESNZ') under section 37 of the Planning Act 2008 ('the PA 2008') on 10th November 2023. The Application was accepted for examination by the Planning Inspectorate on 8<sup>th</sup> December 2023, and the examination started on 9<sup>th</sup> April 2024.
- 1.2 The Applicant is seeking development consent for the extension of the electrical generating capacity of the Rivenhall Integrated Waste Management Facility ('the Consented Scheme') at land within the former Rivenhall airfield near Witham, Essex ('the Site').
- 1.3 A DCO is required for the extension as it would result in the onshore generating station having a capacity of more than 50MW and would constitute a Nationally Significant Infrastructure Project ('NSIP') for the purposes of section 14(1)(a) of the PA 2008.

### 2 Purpose of this document

- 2.1 The purpose of this document is to set out the Applicant's responses to the Examining Authority's written questions and requests for information ('ExQ2') issued on 25 June 2024.
- 2.2 The Applicant's responses to each written question is provided in **Section 3** of this document (Doc Ref 9.4.2). The ordering of the responses corresponds to the order in which the topics appear in the ExQ2 document.

# 3 Response to Examining Authority's written questions and requests for information

Ref	Respondent	Question	Response
Q2.1 General and Miscellaneous			
Q2.1.1	Essex County	The ExA asked the Applicant whether	
	Fire and	compliance with the Emergency	
	Rescue	Preparedness and Response Plan [REP1-	
	Service	012] should be secured in the dDCO. The	
		Applicant stated at ISH1 [EV3-004,	
	East of	00:45:18] [EV3-005] that the Construction	
	England	Design and Management Regulations	
	Ambulance	2015 apply, which suitably deal with the	
	Service NHS	matter and there is no need for duplication	
	Trust	in the dDCO. Do ECFRS and EEAST	
		accept this position. If not, please explain	
		fully any remaining concerns.	
Q2.2 CI	imate Change a	nd Greenhouse Gases	
Q2.2.1	Essex County	Both ECC and BDC are of the view that it	
	Council	is unclear what the climate change impact	
		will be from the Proposed Development	
	Braintree	and how this will affect local carbon	
	District	emissions. The Applicant set out at ISH1	
	Council	[EV3-002] [EV3-003] that the carbon	
		emissions of the consented scheme were	
		assessed when it was originally consented.	
		ECC and BDC, explain why the	

Ref	Respondent	Question	Response
		assessment undertaken for the consented	
		scheme does not provide the information	
		sought.	
Q2.2.3	Braintree	BDC has set out [REP3-013] that it will	
	District	reply to points raised by the Applicant on	
	Council	methodological matters at ISH1 [EV3-002]	
		[EV3-003] at Deadline 4. Given the short	
		time remaining in the examination, please	
		provide this information in reply to this	
		question.	
Q2.3 C	onsented Develo	<del>,                                    </del>	
		No further questions in this section at this	
		stage.	
Q2.4 Ct	umulative Effect	<del>-</del>	
		No further questions in this section at this	
	_	stage.	
	evelopment Con		
Q2.5.1	Essex County	The Applicant has provided a Technical	
	Council	Note on decommissioning and the	
		requirements of NPS EN-1 [REP3-001,	
		Appendix 4]. This concludes that due to the	
		limited nature of the	
		works there would be no significant effects	
		during decommissioning and therefore,	
		there is no reasonable basis for imposing a	
		requirement in the dDCO requiring a	
		decommissioning plan to be provided.	
		Further, the Applicant noted that any	
		requirement requiring details of the	

Ref	Respondent	Question	Response
		decommissioning of the consented scheme	
		would not be relevant to the development	
		to be permitted and so cannot reasonably	
		be imposed. Do ECC accept the	
		Applicant's position? If not, explain fully	
		why this is the case.	
Q2.5.2	Essex County	ECC has requested [REP3-014] a change	
	Council	to the dDCO to include a requirement in	
		relation to the Local Liaison Group. The	
		Applicant is of the view [REP3-010] that	
		the remit of the Site Liaison Group under	
		Schedule 3 of the Section 106 Agreement	
		is the Application Site (i.e. the Consented	
		Scheme redline) and therefore	
		automatically includes the Proposed	
		Development. Is this accepted by ECC? If	
		not, explain fully why this is the case.	
Q2.5.3	Essex County	The Applicant has sought to make	
	Council	additions to the dDCO [REP3-004] under	
		the interpretation of the 'TCPA permission'	
		to include: 'any planning permission	
		granted by the relevant planning authority	
		pursuant to planning application	
		ESS/02/22/BTE'. ECC, confirm whether	
		you consider reference to planning	
		application ESS/02/22/BTE to be	
00.5.4	Amplianat	appropriate.	The Applicant theolie the EvA for highlighting this
Q2.5.4	Applicant	The most recent version of the Applicant's	The Applicant thanks the ExA for highlighting this
		dDCO [REP3-004] makes changes to	formatting error in the most recent version of the

Ref	Respondent	Question	Response
		some of the numbering to now include (a)	Applicant's dDCO [REP3-004]. This has been resolved in
		to (g). Explain why this is necessary.	the revised dDCO v3 (Doc Ref 3.1).
		See ExA's proposed Schedule of Changes	Please refer to the responses provided in the <b>Applicant's</b>
		to the dDCO for further Development	Comments on ExA's proposed Schedule of Changes
		Consent Order matters.	to the dDCO (Doc Ref 9.4.3).
Q2.6 No	oise		
Q2.6.1	Applicant	The Applicant has provided a Technical Memorandum [REP3-001, Appendix 2] that considers the cumulative noise effects of the Proposed Development with the Dry Silo Mortar (DSM) plant at Bradwells Quarry. ECC has noted [REP3-017] that the assessment does not include the bagging plant that is also permitted to operate at the same time as the DSM plant. Further, ECC consider [REP3-017] that it is prudent to also consider whether the DSM operating at its consented noise limits, in combination with the Proposed Development, could cause a significant adverse cumulative effect.  a. Provide a revised note that also considers the bagging plant as a source of potential noise.	<ul> <li>a. SLR has requested the original noise assessment for the bagging plant to determine cumulative noise levels, however this has not yet been received. In the absence of this data, a full assessment cannot be undertaken. However, SLR have undertaken an indicative assessment as part of their response to ECC which is included in a separate document (Doc Ref 9.4.4).</li> <li>b. It should be noted that based on the information available, all evidence suggests that the DSM plant is not operating up to its consented limits i.e.: <ul> <li>The approved noise assessment for the extension of hours at the DSM plant predicts a worst-case noise level of 39dB at Herons Farm (3/5dB below the respective 44dB evening and 42dB night-time limit); and</li> <li>The noise from the facility has not been audible during the compliance monitoring exercises.</li> </ul> </li> </ul>
		b. What is the Applicant's reply to ECC's view that the cumulative effects of the consented noise limits for the DSM plant	In addition, Conditions 23 and 24 included within the decision notice (Ref: ESS/20/17/BTE) for the extension of

Ref	Respondent	Question	Response
		and the Proposed Development should be assessed?	hours at the DSM provide measures that would reduce overall noise levels, such as white noise reverse alarms and silencers to be fitted to all vehicles/plant.
			However, SLR have amended the cumulative noise predictions which were included within the Technical Memorandum so that noise levels of 44dB and 42dB are predicted at the closest receptor (Herons Farm) during the evening and night-time (06:00 to 07:00) periods respectively.
			Further to the above, SLR have then predicted the noise levels from the DSM at all other noise-sensitive receptors (NSRs) considered using the same prediction methodology as described in the Technical Memo.
			These predicted noise levels have then been logarithmically added to the predicted evening and night-time noise levels from the Proposed Development to calculate the cumulative level.
			Based on this additional assessment, the cumulative noise levels from the Proposed Development and worst-case DSM operations (when the DSM is working at its limits at the nearest receptor) are within the noise limits at all the Noise Sensitive Receptors during both the evening and night-time period, with the exception of Herons Farm.

Ref	Respondent	Question	Response
			With regards to Herons Farm, the noise limits for the DSM during the evening and night-time are higher than the consented limits for the Proposed Development. By assuming the DSM is operating at its limit at Herons Farm, the consented noise limits for the Proposed Development of 42dB during the evening and 40dB during the night-time is exceeded without any contributions from the Proposed Development.
			Therefore, in conjunction with the magnitude of impact and level of effect matrix included within the ES [APP-033], the cumulative effects associated with the Proposed Development and worst-case DSM operations during the evening and night-time period would still have a 'negligible' level of effect at all assessed Noise Sensitive Receptors, with the exception of Herons Farm, which is not considered significant in EIA terms.
			With regards to Herons Farm the cumulative assessment has shown that there would be a 2dB exceedance in the evening and night-time noise limits, which as a worst-case and in conjunction with the magnitude of impact and level of effect matrix included within the ES [APP-033] would equate to a 'moderate' level of effect which is considered significant in EIA terms.
			However, as previously explained, the exceedance in the noise limits for the Consented Scheme are being caused by the DSM operating at its consented limits which are

Ref	Respondent	Question	Response
			higher than those for the Proposed Development, therefore the limits are already being exceeded without the Proposed Development, which is not having any additional impacts at Herons Farm.
			Following on from the above, although SLR have carried out an additional cumulative assessment of the Proposed Development alongside the DSM and bagging plant at the request of ECC, this is not considered relevant to this DCO application. As set out within the Rivenhall DCO EIA Scoping Report (dated April 2023) and the ES Volume I, Chapter 6: EIA Methodology in the Basis of Assessment sections, the approach applied in the ES was to use a 'Future Baseline Scenario' which assumes 'a future date when the EfW plant in the Consented Scheme is built and with its theoretical operation based on the Consented Scheme' (ES Volume I, Chapter 6: EIA Methodology, paragraph 6.3.5).
			It assesses this future baseline scenario in comparison to 'the incremental change associated with the Proposed Development (i.e. the assessment of any operational changes relative to the Consented Scheme)' (ES Volume I, Chapter 6: EIA Methodology, paragraph 6.3.5).
			Consideration of the present-day baseline, of which the DSM and bagging plant form part of, is not considered

Ref	Respondent	Question	Response
			necessary to understand the change in effect associated with the Proposed Development from the operation of consented EfW as per the Consented Scheme being built and in-situ. Therefore, it is not considered relevant to this DCO application to assess the DSM and bagging plant cumulatively alongside the Proposed Development.
Q2.6.2	Applicant	ECC has set out [REP3-017] that a full review of the noise modelling has not been possible due to the supporting data (such as manufacturer datasheets, noise measurement data and internal room noise level calculations) not being made available. Applicant, explain why these have not been provided.	As a precursor, it should be noted that this question relates to noise generated by the Consented Scheme. It is common ground between the Applicant and ECC that the Proposed Development would not result in any noticeable increase in noise generated by the Consented Scheme.  With regards to the supporting data, the modelling and subsequent assessment was based on the information available, and this level of information was not provided to SLR.
			However, the source noise data has been provided by the EPC Contractor (HZI), and they are design limits for noise sources/buildings, inlets and outlets which cannot be exceeded. The data provided also includes the attenuation/transition loss provided by the claddings to the relevant noise generating buildings and any silencers/acoustic louvres that would need to be fitted to inlets, outlets and stacks.

Ref	Respondent	Question	Response
			Octave band data was then provided for each source/noise generating buildings which were based on HZI's catalogue of data from similar projects and considered the attenuation measures as described above.  These noise levels were then used within the noise model.
			It must be reiterated that the information has been provided directly from HZI who have built a significant number of EfW plants throughout the UK and who have a contractual obligation to ensure that the noise levels generated by the Proposed Development meet the Consented Scheme noise limits at the sensitive receptors, otherwise they cannot hand over the plant to the operator at the contractual takeover date. Therefore, the Consented Scheme has been designed to meet the consented noise limits and these design parameters have been utilised as the basis of the modelling and assessment.
			It is also a contractual obligation for HZI to undertake compliance monitoring as part of their takeover tests, to ensure that the consented noise levels are being met at all receptors assessed for the Consented Scheme (far-field) and the noise limits for the relevant items of noise generating plant are also met (near-field). If the monitoring were to determine that any limits would be exceeded, then HZI would have to mitigate accordingly.

Ref	Respondent	Question	Response
			To conclude, until it has been confirmed that the
			Consented Limits are met by HZI, the Consented Scheme
			would not be handed over to Indaver.
			Based on the above, though the supporting data is not
			available, it is considered that the noise source data
			included within the model is robust and as accurate as
00.00	A l' (	F00	reasonably practicable.
Q2.6.3	Applicant	ECC has considered the information	With reference to reflections on the surfaces of buildings, a
		provided by the Applicant on the source	reflection loss of 2.0dB has been assigned to existing
		noise data [REP3-015] and has some	buildings outside of the Site boundary (i.e. receptors and
		concerns that it may not represent the	associated outbuildings) so as to represent a structured
		reasonable worst-case conditions. The	façade.
		most pertinent concerns that ECC consider	With regards to the buildings of the Cite the reflection less
		could result in an under prediction of noise levels are the level of reflection that has	With regards to the buildings at the Site, the reflection loss
		been assumed from the surfaces of	of Site buildings has been reduced to 0.9dB (0.18 absorption coefficient) in-line with information received by
		buildings within the model and noise source	the EPC contractor and this change has not made any
		directivity, particularly if there are examples	material effect on the assessment.
		of noise source propagation from sources to	material effect off the assessment.
		receivers that are on-axis and consequently	Additionally, as noted within the document, the model
		more likely to result in an increase in	assumes 3 orders of reflection, which is considered to
		prediction noise level at receptors.	represent a robust, worst-case scenario for predicted noise
		Applicant, set out fully why you consider the	levels.
		source noise data assumptions to be robust,	10.0.0.
		responding to each of the concerns raised	With regards to directivity, the model has been reviewed
		by ECC.	and it is considered that at the closest receptors which
			have the potential to experience the greatest impacts,

Ref	Respondent	Question	Response
			there are no sources directly on-axis and therefore no directivity has been assigned.
			Based on the above, it is considered that assuming no directivity represents a robust approach as noise will be propagating from all sources in all directions and contributing to the predicted noise levels at the nearest receptors locations which are off-axis.
			SLR have reviewed all the other comments from ECC regarding the noise modelling and have responded to those queries here and within a separate document (Doc Ref 9.4.4).
Q2.6.4	Applicant	ECC consider [REP3-015] that there is the potential for the over prediction of source noise in the modelling, such as the receiver height at the sensitive receptor known as The Lodge at night and the omission of source directivity for noise sources where the noise propagation path is off-axis. Applicant, confirm if this is the case and if so, set out the implications for the assessment.	With regards to The Lodge, as this has been identified as a bungalow, the night-time receiver height has been reduced to 1.5m and the building height reduced to 4m.  With regards to the noise source which could be considered off-axis, namely the stack, as recommended by Jacobs this has been re-modelled, so the point sources are acting as a Chimney with:  A directivity in the 'Z' axis i.e. pointing upwards.  An exhaust velocity of 20m/s (which has been
			<ul> <li>confirmed with the operator).</li> <li>An exhaust gas temperature of 250oC (which has been confirmed with the EPC contractor).</li> <li>A Wind Speed of 3m/s.</li> </ul>

Ref	Respondent	Question	Response
			These updates have not made a material impact on the
			assessment and the overall conclusions remain as
			reported within the ES Chapter [APP-033].