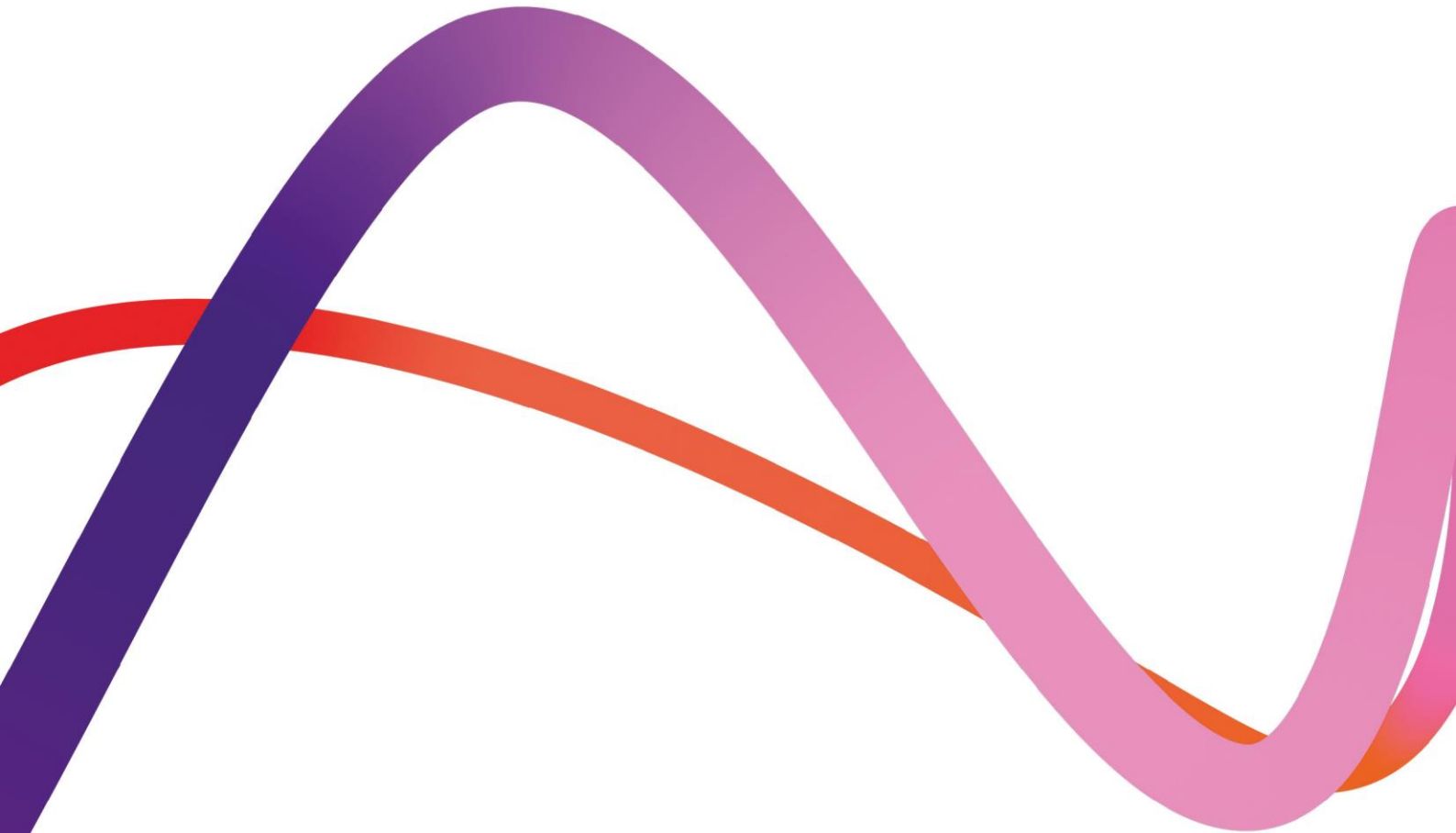


Medworth Energy from Waste Combined Heat and Power Facility



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Applicant's comments on the Deadline 3 Submissions: Part 2 Other Interested Parties

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1. Introduction

1.1 Background

1.1.1 Medworth CHP Limited (the Applicant) submitted an application for development consent to the Secretary of State on 7 July 2022 (the Application). The Application was accepted for examination on 2 August 2022. The Examination of the Application commenced on 21 February 2023.

1.1.2 This document, submitted for Deadline 4 (25 May 2023) of the Examination contains the Applicant's comments on Deadline 3 submissions. The responses were made by the following organisations:

- Statutory Parties:
 - ▶ Anglian Water **[REP3-043]**;
 - ▶ Cambridgeshire County Council and Fenland District Council **[REP3-044 to REP3-046]**; and
 - ▶ Wisbech Town Council **[REP3-052]**.
- Other Interested Parties:
 - ▶ Jenny Perryman **[REP3-047]**;
 - ▶ Mervyn Sargeant Hair World UK Ltd **[REP3-048]**;
 - ▶ Oliver Mackie of James Mackie UK Ltd **[REP3-049]**;
 - ▶ United Kingdom Without Incineration Network (UKWIN) **[REP3-050]**; and
 - ▶ Wayne Cook **[REP3-051]**.

1.1.3 This document (Part 2) contains the Applicant's response to Deadline 3 submissions from the Other Interested Parties in the following tables:

- Table 2.1 Comments on Deadline 3 submissions from UKWIN.
- Table 3.1 Comments on Deadline 3 submissions from Jenny Perryman.
- Table 4.1 Comments on Deadline 3 submissions from Mervyn Sargeant Hair World UK Ltd.
- Table 5.1 Comments on Deadline 3 submissions from Oliver Mackie of James Mackie UK Ltd.
- Table 6.1 Comments on Deadline 3 submissions from Wayne Cook.

1.1.4 The Applicant's response to Deadline 3 submissions from Statutory Parties is presented in a separate document (Part 1).



2. Comments on Deadline 3 submissions from UKWIN

Table 2.1 Comments on Deadline 3 submissions from UKWIN [REP3-050]

ID	Topic/Para	Response	Applicant Comment
UKWIN RESPONSE TO REP2-023 COMMENTS ON REP1-096			
UK01	Waste Need 4.	The Applicant's revised WFAA [REP2-009] fails to adequately consider the Government's Environmental Improvement Plan (EIP), the Government's Jet Zero Strategy, and the move towards the production of sustainable aviation fuel (SAF).	<p>In terms of the UK Government's Jet Zero strategy, this has been considered in the updated WFAA (Volume 7.3) [REP2-009], along with the potential increase in the use of SRF at cement kilns.</p> <p>Whilst it is acknowledged that there are emerging technologies and initiatives which may contribute to the achievement of future patterns of sustainable waste management, such initiatives are embryonic in stage and yet to be proven.</p> <p>Furthermore, it is not considered that these projects represent a credible alternative to the Proposed Development because:</p> <ul style="list-style-type: none"> • All the projects receiving Government funding, and which plan to use residual waste, sit outside the Study Area of this WFAA. • The SAF developments represent first-of-a-kind production plants which carry with them high capital costs, as well as technological and economic risk. These aspects currently present a barrier to private investment. • No facilities currently exist either in the UK or Europe.



ID	Topic/Para	Response	Applicant Comment
			<ul style="list-style-type: none">Any residual waste to fuel facility going into successful operation may replace EfW facilities utilising Advanced Combustion Technology, such as gasification, which will be unable to compete once their ROC subsidies expire. In 2021 EfW capacity utilising Advanced Conversion Technology totalled around 1 million tonnes. Such facilities need an RDF/SRF type feedstock, and their cost base is such that, once their ROC subsidies expire, they may be unable to compete with a Waste to Chemical/Waste to Fuel production facility. It is therefore reasonable to assume that, as these less efficient facilities decommission due to the impact of ROC expiry, their capacity will be cumulatively replaced by new Waste to Chemical/Waste to Fuel production facilities of equal capacity, with no net impact on the residual waste capacity demand. <p>For these reasons, there is a significant question mark over the ability of emerging technology such as that proposed to generate SAF to provide capacity to accommodate future residual waste. Furthermore, the use of residual waste to create SAF would not result in the management of that waste being driven further up the waste management hierarchy than use of the waste at the Proposed Development.</p> <p>With these points in mind, it is not considered that emerging technologies such as the manufacture of SAF from residual waste represent a credible or better alternative to the Proposed Development.</p>



ID	Topic/Para	Response	Applicant Comment
UK02	Waste Need 5. and 6.	<p>UKWIN's detailed comments on the Applicant's WFAA Revision 2 [REP2- 009 & REP-010] are set out in a separate Deadline 3 (D3) submission, which includes a consideration of how the updated WFAA failed to adequately consider the matters raised by UKWIN in REP1-096.</p> <p>Our separate submission also sets out how the Applicant's WFAA Revision 2 does not adequately "reflect latest available published data".</p>	<p>UKWIN's detailed comment on the updated version of the WFAA (Volume 7.3) [REP2-009] have been considered and addressed in later sections of this submission. The Applicant has also committed to prepare a further version (version 3) of the WFAA.</p>
UK03	Waste Need 7.	<p>(The Applicant fails to) adequately address the concern raised in REP1-096 paragraph 61 that: "APP-094 considered quantities of waste sent to landfill in 2019 alongside historic levels of RDF export. Reliance on the Applicant's 2019 figures fails to reflect how new capacity has come online both during 2019 (which would have only been partially available for use during 2019) and subsequent to 2019. As such, in addition to considering new capacity that has arisen since the publication of APP094, it is necessary to consider all relevant treatment capacity with the potential to treat waste sent to landfill or exported as RDF in 2019, whilst also accounting for the reductions in arisings described above".</p>	<p>The updated version of the WFAA (Volume 7.3) [REP2-009] takes account of data published since the first version of the WFAA was drafted. In this regard, the original 2019 baseline year has been updated in the latest version of the WFAA (Volume 7.3) [REP2-009] to take account of what was the latest (2020/21) data.</p> <p>As the DCO timetable required publication of the updated WFAA (Volume 7.3) [REP2-009] on the day that DEFRA published their 2021-22 LACW data, it was not possible to incorporate this data into the update WFAA. However, the Applicant is committed to reflecting this and any other updated published data in a further (version 3) iteration of the WFAA to be submitted at Deadline 5.</p>
UK04	Waste Need 8.	<p>We note that the Applicant's REP2-023 response does not directly dispute UKWIN's assertion that "it is likely that the quantity of residual waste that could be available as fuel in 2030 would be lower than the Applicant's 17.3 Mt figure" set out on</p>	<p>The updated WFAA (Volume 7.3) [REP2-009] concludes that at a national level:</p> <ul style="list-style-type: none"> In 2021, approximately 9.95 million tonnes of residual HIC waste was disposed of to landfill,



ID	Topic/Para	Response	Applicant Comment
		<p>paragraph 40 of REP1-096. This is explored further in UKWIN's separate submission on REP2-009 and REP2-010.</p>	<p>and 1.7 million tonnes was exported as refuse derived fuel (RDF) to Europe and beyond; and</p> <ul style="list-style-type: none"> By 2030, it is predicted that even if the Government's ambitious combined recycling target of 65% for municipal and 'municipal like' commercial and industrial waste is realised, there would remain a minimum shortfall of approximately 1.6 million tonnes of residual HIC capacity in the UK (rising to over 5 million tonnes if the Government's recycling target is undershot by 5%). <p>Furthermore, at a more localised level, the updated WFAA (Volume 7.3) [REP2-009] concludes that based upon the current pattern of waste arising and management across the spatial scope of the assessment, there is potential for around 2.6 million tonnes of material to be managed further up the waste hierarchy and/or at a location that is more proximate to the point of arising. Looking ahead to the position up to around 2035 it is estimated that there will be a gap in residual waste management capacity of at least ~1.3 million tonnes per annum.</p> <p>In this context, the Proposed Development could offer up to 625,600 tonnes per annum of much needed national and local residual waste management capacity.</p>
UK05	Waste Need 9.	<p>We also note that the Applicant completely fails to respond to UKWIN's assertion that assessment of waste availability should consider "coincineration (e.g. cement kiln) capacity" (as per paragraphs</p>	<p>MVV does not consider incineration at cement works as a credible alternative to the Proposed Development as they cannot take residual waste into their facility unless it is heavily processed to meet their fuel specification'. This</p>



ID	Topic/Para	Response	Applicant Comment
		16, 18, 31 and 47 and 48 of REP2-023). This too is explored further in UKWIN's separate submission on REP2-009 and REP2-010.	issue will be considered in a further (version 3) iteration of the WFAA to be submitted at Deadline 5.
UK06	Climate 10.	The Applicant also fails to respond to UKWIN's request, made at paragraph 74 of REP1-096, for the Applicant to "elaborate upon the information provided in APP-041 electronic page 47 Graphic 14.2 Medworth Firing Capacity Diagram by clarifying in their updated WFAA: ...(b) assuming 8,000 hours of operation per annum (as per Table 14.30 on electronic page 62 of APP-041), how much waste would be needed overall to meet this thermal input capacity based on the 'design point' and for the three MJ/kg scenarios for Net Calorific Values set out on electronic page 42 of the climate appendices [APP-088] (which range from 8.85 to 9.53 MJ/kg)..."	Table 4.1 of Comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3) [REP3-040] , includes the Applicant's response to UKWIN's request for elaboration on the Medworth Firing Capacity Diagram presented as Graphic 14.2 in ES Chapter 14: Climate Change (Volume 6.2) [APP-041] . The issues raised are discussed further in the responses below.
UK07	Climate change 11. and 12	<p>On electronic page 19 of REP2-023 the Applicant acknowledges that "waste throughput would increase as the CV decreased and conversely, waste throughput would decrease as the CV increased".</p> <p>This is incompatible with the approach adopted by the Applicant in their REP2-023 Climate Data Appendix, which shows that the Applicant's Climate Change assessment assumes a fixed total waste input irrespective of the CV of the waste feedstock.</p>	<p>The optimum conditions for operation of the EfW CHP facility would be to treat residual waste at a constant composition and rate. However, it is recognised that there will be variability in the composition of waste received and the associated Net Calorific Value (NCV). The firing capacity diagram presented as Graphic 14.2 in ES Chapter 14: Climate Change (Volume 6.2) [APP-041], is provided to confirm that the EfW CHP facility has been designed with a degree of flexibility to accommodate such variations in waste composition.</p> <p>The decision for the purposes of the Climate Data Appendix to assume a fixed total waste throughput for variations in the composition and NCV of waste being</p>



ID	Topic/Para	Response	Applicant Comment
UK08	Climate change 13.	The Applicant has not ruled out the possibility that, with Net Calorific Values (NCVs) in line with the Applicant's 8.85 MJ/kg sensitivity case (let alone other NCVs), the waste feedstock requirement for the proposed Medworth incinerator could exceed 625,600 tonnes per annum, which is relevant to – yet insufficiently considered within – the Applicant's Waste Fuel	<p>treated was made to ensure the evaluation of GHG emissions for the EfW CHP facility considered the maximum possible throughput of waste, i.e., up to 625,600 tonnes/yr for a worst-case scenario. However, as identified in the Applicant's response in Table 4.1 of Comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3) [REP3-040], the flexibility in the design allows for residual waste with a higher NCV to be processed at a lower throughput volume than the maximum design capacity (625,600 tonnes per annum), whilst maintaining constant steam production and a consistent gross power production close to 60 MWe throughout.</p> <p>As stated in the ES Chapter 14: Climate Change (Volume 6.2) [APP-041], for UK residual waste the NCV of 9.53 MJ/kg is within the design range for the EfW CHP Facility, which the firing capacity diagram indicates would be acceptable at a waste throughput of around 608,000 tonnes per annum (equivalent to approximately 38 tonnes/hr (Mg/h) for one operating stream on the firing capacity diagram), which represents a 3% reduction on the maximum throughput volume of 625,600 tonnes per annum.</p> <p>The Applicant confirms that the maximum quantity of waste that would be treated by the EfW CHP facility is 625,600 per annum, irrespective of potential variations in waste composition.</p>



ID	Topic/Para	Response	Applicant Comment
UK09	Climate Change 15. to 17.	<p data-bbox="719 339 1301 459">Availability Assessment and the Applicant's consideration of the 'Rochdale Envelope' as per the Applicant's REP2-019 response to ExQ1 DCO1.2.5.</p> <p data-bbox="719 507 1301 786">The Applicant's REP2-023 response states (on electronic page 24): "The approach to quantifying GHG emissions from the construction, operation and decommissioning of the Proposed Development has been undertaken in line with the latest IEMA guidance for assessing GHG emissions and the infrastructure life-cycle modules set out in PAS 2080: Carbon Management Infrastructure".</p> <p data-bbox="719 818 1301 1121">As explored in some depth as part of UKWIN's Written Submission [REP2- 066, electronic pages 7-21, paragraphs 9-115], there are numerous inconsistencies between the Applicant's approach to GHG assessment and relevant guidance set out in the IEMA guidance document cited by the Applicant [included on electronic pages 35-69 of REP2-066] and PAS 2080 [as quoted at paragraphs 21, 22, 23, 54 and 60 of REP2-066].</p> <p data-bbox="719 1153 1301 1305">The Applicant states that they have provided a "full list of assumptions made in the GHG assessment is appended to the ES (Appendix 14B: Assumptions and limitations (Volume 6.4) [APP-088])" and that "The Applicant has</p>	<p data-bbox="1323 507 1998 874">See Applicant's previous response in Table 4.1 of Comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3) [REP3-040], addressing the issues ('inconsistencies') raised by UKWIN with regard to conformity with guidance, confirming that the approach to quantifying GHG emissions from the construction, operation and decommissioning of the Proposed Development has been undertaken in line with the latest IEMA guidance for assessing GHG emissions¹ and the infrastructure life-cycle modules set out in PAS 2080: Carbon Management Infrastructure².</p> <p data-bbox="1323 906 1998 994">Comments regarding the assumptions provided by the Applicant are addressed in the related response for Topic/Para 18 and 19 below.</p>

¹ IEMA (2022). Environmental Impact Assessment Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance – 2nd Edition.

² The Green Construction Board, Construction Leadership Council (2016). PAS 2080:2016 Carbon Management in Infrastructure.



ID	Topic/Para	Response	Applicant Comment
UK10	Climate change 18. and 19.	<p>submitted its GHG emissions assessment spreadsheets to the examination as Appendix 10.6A to this document”.</p> <p>These statements are incorrect. For the reasons set out in REP2-066, the Applicant has not set out all of its assumptions nor have they provided the actual assessment spreadsheets they used.</p> <p>Neither APP-088 nor APP-041 nor REP2-023 provide sufficient information to enable third parties to fully understand the basis of many of the Applicant’s claims or to assess the sensitivity of the Applicant’s conclusions to changes in assumptions, system boundaries or methodology.</p>	<p>The Applicant considers that the information provided in the ES Chapter 14: Climate Change (Volume 6.2) [APP-041], and the related appendices (Volume 6.4 ES Chapter 14 Climate Appendices [APP-088]), provides sufficient detail to understand how the GHG emissions for the ES have been determined, including the assumptions made in each scenario.</p> <p>The assumptions and assessment used in the ES are based on publicly available methodologies and data for determining GHG emissions associated with EfW and landfill, along with assumptions for the EfW CHP facility construction and operation, which are referenced in the ES. The ES provides detailed descriptions on the assessment methodology (Section 14.8) and sets out the calculation of GHG emissions (Section 14.9), including tables itemising values used in the calculations, footnotes describing relevant conversion factors and where these have been applied, and cross-references to any external data sources. The sensitivity analysis (ES Chapter 14 Climate Appendix 14C (Volume 6.4) [APP-088]), confirms that the same methodology has been used as that for the ES core case and sets out the basis for the values used in the sensitivity analysis.</p> <p>The original intent in providing the Firing Capacity Diagram for the EfW CHP facility (Graphic 14.2 in ES Chapter 14: Climate Change (Volume 6.2) [APP-041]) was to confirm that the EfW CHP Facility has been</p>



ID	Topic/Para	Response	Applicant Comment
UK11	Climate change 20.	As set out in UKWIN's REP2-066 paragraph 4, what the Applicant has provided, in REP2-023 Appendix 10.6A, appears to constitute 'output' data and a disconnected list of sources and assumptions rather than spreadsheets with formulas that would enable a user to carry out sensitivity analysis or to confirm that the various calculations made are both mathematically correct and methodologically sound.	<p>designed with a degree of flexibility to accommodate variations in waste composition; however, further clarifications regarding the Firing Capacity Diagram and relevance in terms of waste throughputs, NCV values and operational outputs have been provided in the above responses and also in Table 4.1 of Comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3) [REP3-040].</p> <p>At ISH4 the Applicant has committed to providing the climate change spreadsheets with relevant formulas to UKWIN by Deadline 5. These will be provided for Deadline 4.</p>
UK12	Climate change 21.	As also set out in REP2-066, at paragraph 5, no formulas were provided in REP2-023 Appendix 10.6A to show how the Applicant derives their outputs from their inputs, and whilst in some cases the relationship between inputs and outputs is obvious in others it appears that there simply are no connections between the two and/or that there must be unstated assumptions or inputs.	Please see response above for Topic/Para 18, 19 and 20. The spreadsheets include relevant formulas to follow the relationship between input and output values, and where relevant the basis for assumptions used to derive input values.



ID	Topic/Para	Response	Applicant Comment
UK13	Climate change 22. - 24.	<p>The varying NCV inputs of 9.53, 9.50 and 8.85 MJ/kg do not seem to have any impact on the outputs.</p> <p>This raises questions regarding the validity of the Applicant's methodology which can apparently arrive at an output of 55MW for such a wide array of inputs.</p>	<p>Please see response above for Topic/Para 18 and 19, with respect to the data provided for the assessment and the use of established methodologies for determining GHG emissions associated with EfW and landfill.</p> <p>Please see response above for Topic/Para 11 and 12, and 13, with respect to varying waste composition and operational outputs.</p>
UK14	Climate change 25.	<p>The Applicant's methodology appears to fly in the face of the aforementioned REP2-023 statement (on electronic page 19) that "waste throughput would increase as the CV decreased and conversely, waste throughput would decrease as the CV increased"</p>	<p>Please see response above for Topic/Para 11 and 12, and 13.</p>
UK15	Climate change 26.	<p>.... we maintain our D1 request for the Applicant to provide UKWIN and the Examination with an electronic copy (in unlocked and functional Excel spreadsheet format) of their climate change modelling data spreadsheet(s), as per APP-041 and APP-088, including both the central case modelled and the Applicant's various sensitivities so that interested parties (and the ExA) can: (a) see the full details regarding how the various results were derived from the source data by the Applicant, and the various assumptions and modelling processes used; (b) assess the outcome of adopting additional/alternative sensitivity scenarios to evaluate the impact of different assumptions; and (c) receive further elaboration upon the implications of the Medworth</p>	<p>Please see response above for Topic/Para 18, 19 and 20.</p>



ID	Topic/Para	Response	Applicant Comment
UK16	Climate change 28. and 29.	<p>Firing Capacity Diagram with regard to the link between NCV/thermal input and MW/MWh output, especially within the context of the Applicant's chosen NCVs provided in APP-041 and APP-088, which range from 8.85 to 9.53 MJ/kg.</p> <p>While UKWIN has already provided detailed information about what we are requesting, UKWIN remains happy for the Applicant to communicate with us directly if they require further clarity regarding the information that is sought. This would allow for the information to be provided to UKWIN (and the Examination) as promptly as possible, without the significant delay that can arise from only communicating through responses published at a deadline that refers to submissions made at the previous deadline.</p> <p>A more cooperative approach from the Applicant would be in the interests of the Examination as it would allow for UKWIN's concerns about the GHG impacts of the proposal to be more fully explored at an earlier stage of the examination process and would allow for the matters to be more comprehensively discussed at relevant Issue Specific Hearings.</p>	Noted. The Applicant considers that at this stage the prescribed Examination process provides the most appropriate approach to address issues being raised.
UKWIN RESPONSE TO REP2-023 COMMENTS ON REP1-096			
UK17	Waste need	The Applicant's D2 WFAA does not resolve the serious issues raised within REP1-094, nor is it	The Applicant has provided a full response to all issues raised within REP1-094 in respect of the original version



ID	Topic/Para	Response	Applicant Comment
33.		clear from the brief reference on electronic page 19 of REP2-023 how the D2 WFAA was intended to address the criticisms of the Applicant's approach that were raised within REP1-094.	of the WFAA as part of the Deadline 3 submission – see Section 3 of Volume 11.3 Applicant's comments on Written Representations: Part 2 – Other Interested Parties [REP3-040] . In addition to this, the REP2-023 submission has now been supplemented by an updated version of the WFAA (Volume 7.3) [REP2-009] , which was submitted at Deadline 2 and as agreed at Issue Specific Hearing 3, a further iteration (version 3) of the WFAA will be submitted at Deadline 5 to reflect additional, recently published data updates. The WFAA (Volume 7.3) [REP2-009] , Revision 2 was updated to assess new data published since the initial assessment is completed. The Applicant does not accept that there are serious issues with the approach taken and considers the methodology underpinning the WFAA to be robust and comprehensive, assessing the worst case for waste fuel availability.
UK18	Alternative technologies 34.36. 37	Having reviewed the Applicant's REP2-023 response to REP1-094 UKWIN is of the view that the Applicant seems to have completely missed the point made in REP1-094 with regard to the consideration of alternatives. The Applicant's assumption implies that it views the question of alternatives not as one of 'how to treat 630,000 tonnes of waste', but rather as an opportunity to reiterate their 'sales pitch' about how incineration is the only solution, and to suggest that mixed waste sorting would simply require the same facility to operate with greater throughput.	The Applicant has prepared a technical note which sets out its consideration of alternative technologies. This is Technical Note: Alternative Technology (Volume 12.8) and is submitted at Deadline 4. This Technical Note demonstrates that alternative technologies such as gasification have not performed in line with expectations or have operated for a limited period of time, or in the case of MBT, have struggled to meet intended performance targets with outputs requiring further treatment or landfilling. EfW is an established and proven technology which can be adopted and modified to meet increasingly stringent environmental targets (such as CCS).



ID	Topic/Para	Response	Applicant Comment
UK19	Waste hierarchy 38.	The Applicant's emphasis on electricity generation misses the point that, as is stated in EN-3 (March 2023) and elsewhere, "the primary function of EfW plants is to treat waste". The Applicant comes across as mysteriously reluctant to engage with the question of the alternative means available to treat their intended feedstock.	The Proposed Development fully complies with the provisions of NPS EN-3 and, as demonstrated by the updated WFAA (Volume 7.3) [REP2-009] , would not result in the over-capacity of EfW provision either nationally or on a more localised level.
UK20	Waste need 39. – 41.	<p>It makes no sense to adopt the approach to assessing alternatives that the Applicant is proposing, as this would result in requiring even more waste to be sourced to maintain MW output rather than reducing MW output to match the reduction in waste to be incinerated as more of that waste is treated at a higher level of the waste hierarchy.</p> <p>As argued in the written representation from Equanimator provided on behalf of Rt Hon Stephen Barclay [REP2-064], notably in Appendix 4, if 630,000 tonnes of residual waste were available, and if the Applicant treated this material in line with the waste hierarchy, then around 20% of that waste would be made available for recycling, and the calorific value (CV) of each tonne of waste remaining would be lowered.</p>	<p>Please see Applicant's responses in Table 4.1 of 11.3 Comments on Written Representations: Part 2 – Other Interested Parties [REP3-040], addressing issues raised with regard to Alternatives (including the waste hierarchy) and confirmation that the EfW CHP facility is designed to accommodate variations in waste composition and associated calorific values, whilst maintaining constant steam production and a consistent gross power production close to 60 MWe throughout.</p> <p>The Applicant's REP2-023 response to REP1-094 is relevant, as this highlights that the design for the proposed EfW CHP facility has been based on actual operational experience, in the context of managing residual waste with a higher than average removal of recyclable materials prior to treatment.</p>



ID	Topic/Para	Response	Applicant Comment
UK21	Waste hierarchy 42. - 44	<p>There is no reason why this impact could not be anticipated, with the proposed MW reduced to match the anticipated inputs.</p> <p>The Applicant's peculiar interpretation of the requirement to assess alternatives would mean that the amount of residual waste – before mixed waste sorting – that would need to be available to allow the incinerator to generate 60MW gross and 55MW net, would be of the order 840,000 tonnes. This would simply exacerbate the unwelcome contribution that the facility would make to EfW overcapacity.</p> <p>It should be noted that such a sorting system might well become more common in years to come. That would have the effect, as per Equanimator's written representation, of reducing the quantity of residual waste available (consistent with Government policy), increasing recycling (consistent with Government policy), and reducing the average calorific value of the remaining waste.</p> <p>By ignoring such alternatives, the Applicant fails to respect the waste hierarchy and falls well short of fulfilling their duty to demonstrate that their proposed incineration capacity would adhere to the waste hierarchy.</p>	<p>The point being made is not fully understood. The Applicant's proposals are to take residual waste. No pre-treatment/sorting at the proposed facility is envisaged. As set out in the Applicant's Technical Note: Alternative Technology (Volume 12.8), it is the Applicant's view that such pre-treatment/sorting systems, for example, mechanical and biological treatment (MBT) have been shown not to work as intended, and it is most unlikely that they will become more common in years to come.</p>



ID	Topic/Para	Response	Applicant Comment
UK22	Alternative technologies 45. – 46.	<p>The Applicant's REP2-023 response to REP1-094 goes on to state: "Based on MVV's operational experience, the Applicant does not seek residual waste containing high amounts of plastics as this leads to increased operational costs due to higher consumable consumption and maintenance burden".</p> <p>If this were the case then it is curious that, within the context of considering alternative technologies that would better align with the waste hierarchy, the Applicant has not considered a technical solution combining mixed waste sorting – to remove plastics – with incineration (at a smaller scale)</p>	<p>As stated in our response to UK21 the Applicant does not believe that mixed waste pre-treatment/sorting facilities work well and does not propose to include such equipment at the Proposed Development. If the waste delivered contains a higher proportion of plastic the EfW CHP Facility will still be able to accept it, subject to the calorific value not exceeding that permitted by the technology, as set out in the Medworth Firing Capacity Diagram shown in Graphic 14.1 of the ES Chapter 14: Climate [APP-041].</p>
UK23	Waste hierarchy 47. – 49.	<p>The Applicant's REP2-023 response to REP1-094 also states: "In Germany, where, in 2020, the recycling rate was approximately 20 percentage points higher than the average across Europe, and where the Applicant has been operating waste incineration facilities since the 1960s, there has been no such decrease in CV due to increased recycling rates. In fact, the opposite has been observed. The Applicant will provide further details at Deadline 3".</p> <p>Once again, the Applicant appears to miss the point made, and therefore fails to address the issues raised, in REP1-094.</p> <p>Whatever the calorific value is, and will be, in the UK, the removal of a large share of the remaining</p>	<p>Please see Applicant's response in Table 4.1 of 11.3 Comments on Written Representations: Part 2 – Other Interested Parties [REP3-040], addressing issues raised with regard to Alternatives (including the waste hierarchy) and confirmation that the EfW CHP facility is designed to accommodate variations in waste composition and associated calorific values, whilst maintaining constant steam production and a consistent gross power production close to 60 MWe throughout.</p> <p>The Applicant's REP2-023 response to REP1-094 is relevant, as this highlights that the design for the proposed EfW CHP facility has been based on actual operational experience, in the context of managing residual waste with a higher than average removal of recyclable materials prior to treatment.</p>



ID	Topic/Para	Response	Applicant Comment
		<p>plastics would reduce that calorific value relative to what it would have been without sorting to remove plastics.</p>	
UK24	<p>Waste need 50. to 51.</p>	<p>The Applicant's REP2-023 response to REP1-094 claims that they: "cannot comment further on the estimated reduction in the quantity of waste of the order of 20% or the 32% reduction in waste calorific content as the study cited lacks explanation of these figures", adding that: "If further comment is required, the Applicant would welcome additional explanatory information on this point".</p> <p>UKWIN notes that the relevant report, entitled "The case for sorting recyclables prior to landfill and incineration", is a publicly available document.</p>	<p>The Applicant notes the reference to the relevant report, however as stated in [REP2-023], this study does not include an explanation of the figures used for waste reduction and calorific value reduction. The Applicant remains unable to provide further comment in the absence of clarification for how these figures have been reached. The Applicant has relied upon its own assessment, industry experience, and reports such as that published by Tolvik to review the need for the waste management capacity offered by the Proposed Development and the WFAA (Volume 7.3) [REP2-009] confirms that there is need for the Proposed Development in all circumstances.</p>
UK25	<p>Waste need 52. – 59.</p>	<p>As can be seen from the chart, the modelling carried out for ReLoop showed the impact of removing between 100 and 150 kg of plastics, metals, glass and fibre from a tonne of residual municipal waste.</p> <p>The image depicts how, at the lower end of the modelled range, the removal of between 100 and 150 kg of plastics, metals, glass and fibre from a tonne of residual municipal waste would result in reducing the net calorific value of the waste: a) from 10 GJ/tonne to 8 GJ/tonne, which is equivalent to a reduction of 20%; or b) from 12</p>	<p>The Applicant has acknowledged in previous responses that variations in waste composition (including plastics) can effect calorific values and waste throughputs (see Applicant's responses in Table 4.1 of 11.3 Comments on Written Representations: Part 2 – Other Interested Parties [REP3-040], confirming that the EfW CHP facility is designed to accommodate variations in waste composition and associated calorific values, whilst maintaining constant steam production and a consistent gross power production close to 60 MWe throughout).</p> <p>As noted above in the response to Topic/Para 47. – 49., the design for the proposed EfW CHP facility has been</p>



ID	Topic/Para	Response	Applicant Comment
		<p>GJ/tonne to 9.6 MJ/tonne, which is equivalent to a reduction of 20%; and that c) at the upper end of the modelled range this would reduce the calorific value of the waste from 12 GJ/tonne to 8 GJ/tonne, which is equivalent to a 32% decrease.</p> <p>Such findings are similar to work carried out in the past by UKWIN exploring the impacts of removing plastics from incinerator feedstock.</p> <p>The impact on capacity or feedstock requirements of changes in feedstock composition will differ for each incinerator. However, we can get a sense of the scale of impact based on feedstock composition data published by Cory with respect to their Riverside incinerator.</p> <p>The Riverside operator's feedstock composition analysis includes data on the respective contribution of dense plastic, plastic film, putrescibles and other waste types by weight and CV.</p> <p>This data can be used to determine how much reducing one element of the waste stream would lower the CV, and therefore the increase in other waste categories (paper, card, wood, etc.) that would be necessary to deliver the same input CV.</p> <p>Assuming that plastic film and dense plastics are completely removed from the feedstock and that all other categories increase proportionally, it</p>	<p>based on actual operational experience, in the context of managing residual waste with a higher than average removal of recyclable materials prior to treatment.</p>



ID	Topic/Para	Response	Applicant Comment
UK26	Climate Change 60. - 63	<p>would take around 31% more waste by weight to provide the same calorific value.</p> <p>Table based on Riverside incinerator feedstock profile provided.</p> <p>The Figure od 130.6% suggests the need for a 30.6% increase in waste by weight to provide the same calorific value.</p>	<p>The Applicant has addressed the issues raised with regard to the proportion of non-fossil carbon sequestered in landfill in 11.3 Comments on Written Representations: Part 2 – Other Interested Parties [REP3-040] (see Table 3.1, in response to the submission from Rt Hon Stephen Barclay [REP2-064], and Table 4.1, in response to the submission from UKWIN [REP2-066]).</p> <p>The assessment of methane emissions for landfill in ES Chapter 14: Climate Change (Volume 6.2) [APP-041] assumes that rather than all non-fossil (biogenic) carbon being turned into methane, only a proportion of the non-fossil carbon in residual waste is turned into methane. Therefore, allowance has been made for the proportion of non-fossil carbon sequestered in landfill, which has been deducted from the landfill emissions. To clarify, this means that rather than 100% of non-fossil carbon being converted to LFG in a landfill, the methodology has excluded 50% of non-fossil carbon present in residual waste from the calculation of emissions attributable to GHG emissions for landfill.</p>



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UK27	Climate Change 64. – 66.	<p>This matter is addressed both in UKWIN's REP2-066 submission (at paragraphs 81-88) and in evidence from Equanimator provide on behalf of Rt Hon Stephen Barclay [REP2-064], notably in Appendix 5, as summarised in Table 2 (on electronic page 122 of REP2-064).</p> <p>This failure is decisive in the comparative analysis, because when the calculations are adjusted to properly account for the sequestration of biogenic carbon in landfill then the GHG impact of landfill is reduced by 171,846 tonnes per annum, which makes the incinerator proposed for Medworth significantly worse than landfill with respect to GHG performance.</p> <p>In addition to the relevant evidence provided by UKWIN at paragraphs 81- 88 of REP2-066 and the evidence contained within REP2-064, further evidence on the importance of accounting for biogenic carbon sequestration was set out in REP1-096 (electronic pages 104-127) as part of UKWIN's Good Practice Guidance for Assessing the GHG Impacts of Waste Incineration.</p>	<p>This is in-line with Defra's model³ for evaluating sensitivity factors related to CO2 emissions from EfW and landfill, which assumes a proportion of biogenic carbon in residual waste would be locked away (sequestered) in the landfill. The Defra model also considers scenarios for EfW where CO2 emissions from biogenic carbon sources are included and excluded, noting that the conventional approach is to exclude biogenic carbon sources from CO2 emissions for EfW. The conventional approach has been adopted in the ES.</p> <p>As noted in the above response for Paras 60. – 63., please see Applicant's response in Table 3.1 and Table 4.1 of 11.3 Comments on Written Representations: Part 2 – Other Interested Parties [REP3-040], addressing the issues raised with regard to the proportion of non-fossil carbon sequestered in landfill.</p> <p>The Applicant understands that the figure of 171,846 tCO2 per annum relates to the 50% of non-fossil carbon sequestered in landfill. However, as noted in the above response for Paras 60. – 63., this carbon has been excluded from the calculation of GHG emissions attributable to the generation of LFG for landfill.</p>

³ Defra (2014). Energy recovery for residual waste. A carbon based modelling approach.



ID	Topic/Para	Response	Applicant Comment
UK28	Climate Change (Decarbonisation) 67. – 71.	<p>Despite UKWIN's REP1-096 evidence on this topic the Applicant has similarly chosen to ignore, rather than meaningfully engage, regarding this crucial issue.</p> <p>The Applicant's REP2-023 response to REP1-094 states: "...For the purposes of the assessment in the ES, to provide a conservative estimate of avoided emissions it was assumed that rather than displacing electricity generated by fossil fuels, the electricity generated by the EfW CHP Facility (Proposed Development case) and LFG (without Proposed Development case) would displace UK Grid Average electricity generation..."</p> <p>The Applicant's REP2-023 response to REP1-094 then enters into discussion about comments from various bodies such as Cambridgeshire County Council and the Climate Change Committee.</p> <p>Statements made by both these bodies indicate that they would expect the Applicant to consider a case where the source of electricity assumed to be displaced is progressively decarbonised.</p> <p>Despite this, the Applicant maintains as its Core Case the displacement of grid average electricity as it was in 2021 even though the facility proposed for Medworth could not reasonably be expected to become operational until 2027 at the earliest.</p>	<p>See Applicant's response in Table 4.1 of 11.3 Comments on Written Representations: Part 2 – Other Interested Parties [REP3-040], which in addition to consideration of decarbonisation of UK grid electricity generation in the sensitivity analysis (ES Chapter 14 Climate Appendix 14C (Volume 6.4) [APP-088]), has carried out further analysis to evaluate the impact of decarbonisation over the lifetime of the EfW CHP facility in Technical Meeting Note (TNCC01) (provided at Appendix 9.2c (Part 9) [REP1-036]).</p> <p>The Technical Meeting Note (TNCC01) indicates that, compared to the results presented in the ES, considering current forecasts for decarbonisation of UK grid electricity generation, the net savings in GHG emissions compared to LFG would be reduced from 2,571 ktCO₂e to 414 ktCO₂e over its lifetime. However, as identified in the ES Core Case and the previous sensitivity analysis for the ES, this additional sensitivity analysis for lifetime grid mix decarbonisation shows that GHG emissions will still be lower in the 'with Proposed Development' case compared to the 'without Proposed Development' case, albeit at a reduced scale.</p>



ID	Topic/Para	Response	Applicant Comment
		The approach taken by the Applicant in its Core Case is at odds with Government guidance produced by the Department for Energy Security and Net Zero and by the Department for Business, Energy & Industrial Strategy.	
UK29	Climate Change 74.	(Suite of Green Book supplementary guidance documents include) a) Valuation of energy use and greenhouse gas emissions for appraisal (last updated January 2023); b) Background documentation for guidance on valuation of energy use and greenhouse gas emissions (last updated January 2023); and c) Data tables 1 to 19: supporting the toolkit and the guidance (updated 17 April 2023, to fix formatting errors)	References to the factors used for energy use and greenhouse gas emissions are provided in Table 14.10 of ES Chapter 14: Climate Change (Volume 6.2) [APP-041] . This includes data sourced from BEIS: Treasury Green Book – Data Tables 1-19 and BEIS: Energy and emissions projections: Net Zero Strategy baseline, to evaluate scenarios for future decarbonisation of electricity generation for the UK grid in the sensitivity analysis (Appendix 14C (Volume 6.4) [APP-088]).
UK30	Climate Change 76. – 80.	The Applicant's Core Case is simply not 'the Core Case' – it is not for the Applicant to decide its own methodology for evaluating their project when clear methodological guidance from Government already exists. It would be perverse for the Secretary of State to accept the Applicant's assumptions, chosen to favour their proposal, in preference to the methodology indicated by Government, not least because the Government's methodology would	Standard methodologies have been used in the Core Case for determining GHG emissions for both the EfW CHP Facility (Proposed Development case) and LFG (without Proposed Development case), which are set out in ES Chapter 14: Climate Change (Volume 6.2) [APP-041] and Appendix 14B (Volume 6.4) [APP-088] . This includes Defra landfill emissions modelling for a UK scenario ⁴ .

⁴ Defra (2014). Review of Landfill Methane Emissions Modelling (WR1908)



ID	Topic/Para	Response	Applicant Comment
		<p>take account of the continued decarbonisation of the electricity supply.</p> <p>Further evidence showing that the Applicant's approach is inconsistent with good practice and inconsistent with Government guidance is set out in UKWIN's evidence, including within paragraphs 44-57 of UKWIN's Written Representation [REP2-066] in a sub-section entitled 'Decarbonisation of the electricity grid', and on electronic pages 138-149 of REP1-096 which is the relevant section of UKWIN's Good Practice Guidance for Assessing the GHG Impacts of Waste Incineration.</p> <p>The Applicant goes on to claim that: "Displacement of conventional fossil fuels is the most likely scenario for the EfW CHP Facility".</p> <p>Such an assertion is completely wrong and without foundation.</p>	<p>It is noted that Defra guidance⁵ supports the use of gas fired power station (Combined Cycle Gas Turbine – CCGT using natural gas fossil fuel) as a comparator for electricity generated from the combustion of waste. However, for the ES Core Case the Applicant responded to concerns raised at the PEIR stage regarding natural gas as a comparator, and it was assumed that rather than displacing electricity generated by CCGT, the electricity generated by the EfW CHP Facility and LFG would displace UK Grid Average electricity generation. Further to this, the sensitivity analysis for the Climate Chapter (Appendix 14C (Volume 6.4) [APP-088]) and the Technical Meeting Note, TNCC01 (Appendix 9.2c (Part 9) [REP1-036]) considered emissions associated with forecasts for decarbonisation of the UK electricity grid (see Applicant's response in Table 4.1 of 11.3 Comments on Written Representations: Part 2 – Other Interested Parties [REP3-040]).</p> <p>Although the ES Core Case has adopted a more conservative approach, the Applicant highlighted that displacement of conventional fossil fuels (i.e. natural gas for CCGT) is the most likely scenario for the EfW CHP Facility, as this is in line with the Defra guidance and has been used in the assessment of GHG emissions for other EfW facilities, such as the Cory Riverside EfW Facility⁶ (as noted in the ES Chapter 14: Climate Change (Volume 6.2) [APP-041]).</p>

⁵ Defra (2014). Energy from waste. A guide to the debate.

⁶ Carbon Trust (2017). Cory Riverside Energy: A Carbon Case, Carbon Trust Peer Review



ID	Topic/Para	Response	Applicant Comment
UK31	Climate change 81. – 84.	<p>... even if the facility proposed for Medworth did end up replacing CCGT, it is likely to be replacing abated CCGT (i.e. CCGT with carbon capture), yet the Applicant has only assessed the impact relative to unabated CCGT.</p> <p>As UKWIN pointed out at paragraph 51 of our Written Representation [REP2-066]: “It is also notable that the Applicant’s sensitivity analysis considers only unabated CCGT, meaning that the Applicant has not assessed the climate impacts for the energy that would be generated by the proposed Medworth incineration plant relative to CCGT with carbon capture, despite the prospect of such technology being in place during the 40-year lifetime of the proposed facility”.</p> <p>The Applicant’s failure to align their counterfactual with those recommended for use by Government is further evidenced by reference to EN-1 (March 2023) paragraph 3.3.15, and to page 96 of the Government’s Net Zero Strategy (October 2021), which both read: “Based on our whole-system modelling, by 2050, emissions associated with power could need to drop by 95-98 per cent compared to 2019, down to 1-3 MtCO₂e. In the interim, to meet our NDC and CB6 targets, we expect emissions could fall by 70-75 per cent by 2030 and 80-85 per cent by 2035, compared to 2019 levels. These figures are based on an indicative power sector pathway contributing to the whole-economy net zero and interim targets”.</p>	<p>As noted in the above response for Paras 76. – 80., in the ES Core Case the Applicant considers the scenario where the EfW CHP facility would displace electricity generated by the UK grid rather than electricity generated by CCGT (using natural gas fossil fuel), and has provided further sensitivity analysis in line with forecasts for decarbonisation of UK grid electricity generation, which is likely to also account for carbon capture associated with various forms of power generation, including CCGT.</p> <p>As noted in the above response for Paras 67. – 71. the Applicant has provided further analysis to evaluate the impact of decarbonisation of the power sector over the lifetime of the EfW CHP facility in Technical Meeting Note (TNCC01) (provided at Appendix 9.2c (Part 9) [REP1-036]). The Technical Meeting Note (TNCC01) indicates that, compared to the results presented in the ES, considering current forecasts for decarbonisation of UK grid electricity generation, the net savings in GHG emissions compared to LFG would be reduced from 2,571 ktCO₂e to 414 ktCO₂e over its lifetime. However, as identified in the ES Core Case and the previous sensitivity analysis for the ES, this additional sensitivity analysis for lifetime grid mix decarbonisation shows that GHG emissions will still be lower in the ‘with Proposed Development’ case compared to the ‘without Proposed Development’ case, albeit at a reduced scale.</p>



ID	Topic/Para	Response	Applicant Comment
UK31	Climate change 85.	<p>In other words, halfway through the life of the proposed Medworth facility, overall GHG emissions from the power sector will need to be vanishingly small, which can be seen by reference to Figure 17 of the Government's Net Zero Strategy, reproduced below:</p> <p>Figure showing indicative power emissions pathway to 2037 provided</p> <p>The Applicant's assumption that the Medworth facility would be displacing unabated fossil fuel powered generation is implausible and out of step with the power sector decarbonisation trajectory necessary for the UK to meet our net zero commitment.</p>	Please see response above for Topic/Para 76. – 80. and 81. – 84.
UKWIN's Deadline 3 comments on REP2-009 and REP2-010			
UK32	Geographical scope of National Assessment 8. and 9.	<p>The Applicant's national analysis focuses on UK-wide figures rather than on England. This means that the Applicant does not assess whether or not there is overcapacity within England, only within the UK more broadly.</p> <p>At REP2-066 paragraph 160 UKWIN provided information which indicates incineration overcapacity across England based on a residual waste arisings scenario consistent with meeting the Government's residual waste reduction targets</p>	<p>The reason that a UK wide figures are referred to is because the following sources of data present information on a UK basis i.e.:</p> <ul style="list-style-type: none"> • UK Statistics on Waste, Defra (published May 2022 update). • UK Energy from Waste Statistics - 2021, Tolvik Consulting Ltd (May 2022). • UK Residual Waste: 2030 Market Review, produced by Tolvik Consulting Ltd on behalf of the Environmental Services Association (November 2017).



ID	Topic/Para	Response	Applicant Comment
UK33	National baseline figures for residual waste 10.-16.	<p>The Applicant's national analysis starts at paragraph 5.1.1 of the D2 WFAA by providing figures for total residual waste but not for municipal residual waste. As set out in UKWIN's Deadline 2 comments on REP2-023, this means that much of this waste would not be suitable for incineration.</p> <p>However, confusingly these figures appear not to have been used by the Applicant as they then pivot to using a figure from Tolvik's 2021 Waste Statistics document where Tolvik estimated EfW inputs represented 52% of the UK Residual Waste Market in 2020 and 56% of the market in 2021.</p> <p>These 52% and 56% figures from Tolvik are then used as the basis for the Applicant's assertion at paragraph 5.1.5 of the D2 WFAA that total residual waste arisings in the UK were 27.1 million tonnes in 2020 and 26.5 million tonnes in 2021 (which then fed into the Applicant's Table 5.1 'UK Residual Waste Disposals 2020 and 2021' on electronic page 75 of the D2 WFAA).</p>	<p>As agreed at Issue Specific Hearing 3, the Applicant will provide an updated (version 3) of the WFAA at Deadline 5 to reflect recently published data updates. The Applicant will consider the extent to which the England position can be examined in this updated WFAA.</p> <p>Paragraph 5.1.1 of the updated WFAA (Volume 7.3) [REP2-009] sets the scene by identifying total national household, industrial and commercial (HIC) waste arisings – the target waste stream for the Proposed Development. Furthermore, as explained in paragraph 5.1.2:</p> <p><i>“Available government data does not however, set out how much of the total arisings constituted ‘residual waste’ i.e., that which was not recycled or reused, but instead was sent to energy recovery, landfill or exported as refuse derived fuel.”</i></p> <p>As such, the Applicant has had to look to other credible sources to calculate how much of the total HIC waste stream can be considered 'residual'. This is where the Applicant has considered the findings of the 'UK Energy from Waste (EfW) Statistics – 2021', Tolvik Consultancy Ltd (also referred to as the 2022 Tolvik report) – a credible and widely recognised source of data.</p> <p>The IP's suggestion that the Tolvik data is vague on what their UK residual waste figures represent is incorrect. Tolvik provides a clear definition of what they regard as residual waste i.e., page 1 of the 2022 report states:</p> <p><i>“Residual Waste is defined as non-hazardous, solid, combustible mixed waste which remains after recycling</i></p>



ID	Topic/Para	Response	Applicant Comment
		<p>As such, the Applicant's position about UK residual waste arisings is based on a single line in a Tolvik document that does not state the methodology used to arrive at that figure.</p> <p>Even if Tolvik's figures were correct, Tolvik is vague regarding what their UK residual market waste figures are intended to represent.</p> <p>The Tolvik statement refers to the 'UK Residual Waste Market', but it is unclear the extent to which that market includes C&I waste which is not municipal C&I waste, or more generally waste which is not combustible or which for some other reason is not suitable, or not available, for use as incinerator feedstock.</p> <p>As Tolvik's use of the term 'UK Residual Waste Market' is unclear, the availability and suitability for incineration of the waste within that stream is similarly unclear.</p>	<p><i>activities. This definition is a little broader than that for Municipal Waste but primarily includes wastes falling within European Waste Catalogue ("EWC") 19 12 10, 19 12 12 and 20 03 01."</i></p> <p>In this regard, the reported residual waste in the Tolvik 2022 document includes the same waste streams that other parts of the WFAA considers - in fact, the Tolvik definition is a little narrower, as the WFAA also considers 20 03 07 – bulky waste. As such, the total national residual waste quantities of 26.5 million tonnes in 2021 reported by Tolvik are likely to be on the conservative side.</p>
UK34	<p>National baseline figures for residual waste</p> <p>17.– 22.</p>	<p>This means that the Applicant's reliance upon these figures may overstate the apparent amount of waste fuel potentially available for the Medworth plant and for incinerators more generally.</p> <p>In the Applicant's fuel scope section, they state at paragraph 3.2.17 of the D2 WFAA that "...because it does not combust, rubble could not be managed at the Proposed Development and so needs to be discounted in this assessment".</p>	<p>As noted in the response to UK33 above, the 2022 Tolvik report is clear on its definition of residual waste i.e. <i>non-hazardous, solid, combustible mixed waste which remains after recycling activities</i>. In this regard, it is not considered that the Applicant relies on over-stated figures.</p> <p>Accordingly, rather than overstate the amount of waste fuel available for the Proposed Development, the use of the Tolvik 2022 residual waste data will constitute an underestimate of the amount of waste fuel available as</p>



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		<p>Later in that section, at paragraph 3.2.20 the Applicant states that: “because HIC waste covers a wide cross section of waste types (as illustrated in the list above), this WFAA has taken into account the fact that parts of this stream will not be suitable for use as a fuel source at the Proposed Development e.g., rubble and soils. In recognition of this, and to avoid an over-estimation of available fuel, this assessment has excluded those waste types that are not suitable for combustion at the Proposed Development”.</p> <p>Those statements were made with respect to the ‘local’ assessment which made use of the Waste Data Interrogator, but the Applicant does not appear to have carried out a similar exercise for excluding such waste from the national (or ‘UK-wide’) analysis.</p> <p>As such, despite the statements in their D2 WFAA, the Applicant has not ruled out having included in their assessment of UK residual waste quantities of waste which they elsewhere acknowledge ought to be excluded from such assessments.</p> <p>Even if the Applicant’s use of the Tolvik data was broadly correct (and we cannot know with certainty), the total amount of UK residual waste that the Applicant highlights could include wastes which are not actually suitable for incineration (and are therefore sent to landfill).</p>	<p>the report does not include EWC category 20 03 07 – bulky waste, that would be accepted by the Proposed Development.</p>



ID	Topic/Para	Response	Applicant Comment
		There is no value in providing incineration capacity for waste that is unsuitable for incineration, especially when doing so is likely to result in overcapacity.	
UK35	Historic management of waste 24.-25.	<p>The Applicant states at paragraph 5.1.7 of the D2 WFAA that: "As noted above, in May 2022, the report entitled 'UK Energy from Waste Statistics – 2021', Tolvik Consultancy Ltd, updated this position and noted that in respect of residual waste, in 2020, 14.07 million tonnes (52%) were managed via EfW, rising to 14.85 million tonnes in 2021 (56%). It is assumed that the remainder was either (a) exported as RDF (see below); or (b) disposed of to landfill".</p> <p>As per the section above on the national baseline, in it is unclear how relevant the 'UK Residual Waste figures' are to an assessment of waste fuel availability as Tolvik's analysis focused on the UK rather than England, and on all residual waste rather than just the sub-section which might be suitable for use as incinerator feedstock.</p>	Please see previous comments to UK32 and UK33.
UK36	Historic management of waste 26.-33.	<p>The Applicant's paragraph 5.1.7 assumption that the remainder that was not treated at a municipal waste incinerator was either exported as RDF or disposed of to landfill, which informs Table 5.1 of the D2 WFAA, is not safe.</p> <p>According to Tolvik's UK EfW Statistics for 2021 (published in May 2022) cited by the Applicant: "In 2021 the tonnage of SRF under EWC code 19 10</p>	<p>The introductory section of the Tolvik report <i>UK Energy from Waste Statistics 2021</i> (May 2022), notes on page 1:</p> <p><i>"For consistency with previous years, the focus of this report continues to remain upon facilities in the UK generating energy solely from the combustion of Residual Waste. For the first time, however, Appendix 1 details the total tonnage of Residual Waste, in the form of</i></p>



ID	Topic/Para	Response	Applicant Comment
		<p>12 sent to cement and lime kilns in the UK was an estimated 375kt – broadly similar to the figure over recent years”.</p> <p>This means that even the Tolvik report cited by the Applicant acknowledges that not all of the residual waste that was not incinerated went to landfill in 2020. However, the Applicant has not provided an estimate of how much of the residual waste would have gone for dedicated biomass or other treatment facilities, such as co-incineration at cement kilns, etc.</p> <p>According to Tolvik’s UK Dedicated Biomass Statistics for 2019 (published April 2020): “Tolvik estimates that in the calendar year 2019, 2.55Mt of Recycled Wood was sent to UK biomass, a 6.7% increase on the 2.30Mt in 2018-19”.</p> <p>While Tolvik names the category “Recycled Wood”, as this wood is sent to dedicated biomass facilities for burning, it is not recycled.</p> <p>The D2 WFAA does not estimate how much of the claimed 48% in 2020 would have been sent to UK biomass plants. As such, even if the Applicant’s figure for total UK Residual Waste, EfW and RDF export were correct, this would not provide an accurate estimate of how much was landfilled in a given year.</p> <p>Added to this is the fact that the Applicant’s 1.8 million tonne figure for RDF export is based exclusively on English RDF exports and not on</p>	<p>Solid Recovered Fuel (“SRF”), sent to UK cement and lime kilns in 2021.”</p> <p>Accordingly, where Tolvik report states that “It is estimated that in 2021 EfW inputs represented 56% (2020:52%) of the UK Residual Waste market.” (Section 3, page 4), that for 2021, this includes waste sent to UK cement and lime kilns. Indeed, Figure 7 in the 2022 Tolvik report “Development of the UK Residual Waste Treatment”, shows that in 2021, 56% of residual waste was sent to EfW, 8% exported as RDF, and 35% sent to landfill. The remaining 1% was sent to other treatments which, whilst not defined in the report, will include the alternative technologies that do not fall within the other categories listed.</p> <p>In respect of UKWIN's comment that the RDF export figure of 1.8mt relates only to England, this is acknowledged. However, by not including RDF exports from elsewhere in the UK, the WFAA methodology becomes additionally robust as this is a further assumption that results in an underestimate of the amount of waste available for the Proposed Development.</p>



ID	Topic/Para	Response	Applicant Comment
UK37	Historic management of waste 34.-36.	<p>the whole of the UK, as is acknowledged in the text within the Applicant's 'Graphic 4' on electronic page 74 of the D2 WFAA.</p> <p>For the reasons set out above, the Applicant's claim at paragraph 5.3.1 of the D2 WFAA that "in 2020 11 million tonnes of residual HIC waste was disposed of to landfill" is not supported by sound evidence nor by an explicitly detailed coherent methodology.</p> <p>Furthermore, even if 11 million tonnes of HIC waste was landfilled in 2020 that does not mean that all this waste would (a) still be produced in the future, (b) not be recyclable/compostable, (c) be suitable for incineration, and (d) be available for incineration.</p> <p>Finally, even if waste were historically exported as RDF, that does not mean that those exports did not contain the type of material that could in the future be collected for recycling or composting (or material which could be substituted with material which is more readily recyclable or compostable, or minimised).</p> <p>As such, evidence of the historic export of waste for RDF is not proof of a future demand for burning that waste domestically. And, even if it were, domestic waste capacity has increased since the RDF was exported, and more new waste incineration is under construction and in commissioning.</p>	<p>The Applicant recognises that future levels of residual waste generation may not be at the same levels as they are presently. The updated WFAA (Volume 7.3) [REP2-009] takes full account of both the Government's existing and future recycling targets and the more recent aspirational target of halving the amount of residual waste by 2042.</p> <p>The achievement of national targets for the recycling and reuse of waste has already been taken into account when considering how much residual waste is likely to require management in the future. Based upon the achievement of a 65% recycling target, future baseline levels of household, industrial and commercial (HIC) residual waste are estimated to be between 21.0 and 24.5 million tonnes by 2030 – thereby resulting in a shortfall of capacity of between 1.6 and 5.1 million tonnes per annum.</p> <p>The achievement of recycling targets also sits well with the provisions of the recently published Environmental Improvement Plan (EIP) 2023, which seeks the total mass</p>



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UK38	Comments on local analysis 37.-43.	<p>The D2 WFAA's Table 4.4 claims that around 2.4 million tonnes of 'potentially suitable' ('in scope') waste was generated in the Study Area in 2021 and was subsequently landfilled.</p> <p>Even if the Applicant's assessment is correct with respect to the levels of waste within the spatial scope that was historically sent to landfill, this does not mean that such waste would: a) still be produced in the future, b) not be recyclable/compostable, and c) be available for incineration.</p> <p>The Applicant does not assess how much residual waste treatment capacity within the Study Area came online in 2021, nor how much residual waste treatment capacity has subsequently come online, entered construction, or began commissioning.</p> <p>It is also important to consider that Waste Local Plans that pre-date the 65% municipal recycling target and/or those that pre-date the target to reduce municipal residual waste by 29% by 2027 and to halve residual waste by 2042 may not fully take into account the latest Government measures and policy expectations.</p>	<p>of residual waste not exceeding 25.5 million tonnes by the beginning of 2028. As such, even if residual waste reduction targets are achieved, there remains a national capacity shortfall.</p> <p>The data set out in Table 4.4 of the WFAA (Volume 7.3) [REP2-009] is based upon industry returns to the Environment Agency on how much HIC waste was deposited to non-hazardous landfill in 2021. This data is set out in the publicly available Waste Data Interrogator tool - a tool that Waste Planning Authorities have relied upon to develop their own evidence bases which underpin capacity assessments in their respective Waste Local Plans. It is also data that this used by the Regional Technical Advisory Body (RTAB) in their assessments of future need – assessments which further inform Waste Local Plan evidence bases.</p> <p>In line with the comments above under UK37, the Applicant recognises that future levels of residual waste generation may not be at the same levels as they are presently. For this reason, the updated WFAA (Volume 7.3) [REP2-009] takes full account of both the Government's national existing and future recycling targets and the more recent national aspirational target of halving the amount of residual waste by 2042 in the national analysis.</p> <p>Furthermore, it is acknowledged and recognised that the data presented in the evidence bases of the Waste Local Plan in the Study Area does come with limitations in that some of the evidence bases are a few years old (see paragraph 4.2.20 of the WFAA (Volume 7.3) [REP2-</p>



ID	Topic/Para	Response	Applicant Comment
		<p>It is therefore crucial to assess whether the proposed 625,600 tonnes of new waste incineration capacity would be needed in the event the Government's 65% municipal recycling target, and the Government's 2027 and 2042 residual waste reduction targets, are met at a local level, and not just at a national level.</p> <p>In REP2-066 paragraph 160, UKWIN provided information which indicates incineration overcapacity across the WFAA Study Area based on a residual waste arisings scenario consistent with meeting the Government's residual waste reduction targets.</p> <p>The Applicant plans to operate the facility for forty years, meaning that any capacity shortfall, if one exists at all after the facility has been commissioned, would be likely to be of a very short duration and therefore cannot justify the adverse climate impacts associated with the plant's construction and long-term operation.</p>	<p>009]. To address this, the WFAA evaluates data and analysis carried out at the regional level, to allow local forecasts to be calibrated and where appropriate, updated to reflect the latest thinking on future HIC capacity requirements. One such report was:</p> <ul style="list-style-type: none"> • <i>Landfill and Residual Treatment Capacity in the Wider South-East of England, Report for the East of England Waste Technical Advisory Body; the Southeast Waste Planning Advisory Group; and the London Waste Planning Forum, Sacks Consulting (May 2021).</i> <p>This report also includes full consideration of meeting the Government's aspirational recycling targets.</p> <p>Overall, this exercise supported the findings of the review of Waste Local Plan need assessments in the Study Area and concluded:</p> <ul style="list-style-type: none"> • The current residual waste management capacity gap in the East of England alone is considered to range from approximately 1.3 million tonnes per annum up to approximately 2.6 million tonnes per annum. • Furthermore, given the prospect of a significant shortfall in non-hazardous landfill capacity in London and the Southeast beyond 2025, between 2.8 and 5.4 million tonnes of additional EfW capacity needs to become available to serve those regions, increasing the need for the Study Area to become self-sufficient for waste management. <p>In terms of UKWIN's own calculations relating to capacity needs across the Study Area, the Applicant has provided</p>



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UK39	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 44.-47.	<p>At D1 UKWIN set out our concerns about the incompatibility of the proposal with meeting UK Government recycling and residual waste reduction targets at local and national levels. UKWIN provided further evidence on these matters in REP2-066, where we provided evidence that even without the new capacity proposed for Medworth there can be expected to be EfW overcapacity at both England-wide and WFAA Study Area levels should the Government's 2027 and 2042 targets be met.</p> <p>As set out at paragraph 168 of REP2-066: "...when considering the Applicant's WFAA Study Area, the 625,600 tonnes of new waste incineration capacity proposed for Medworth could be expected to result in overcapacity of around 921,000 tonnes in 2027 and around 4,774,000 tonnes by 2042".</p> <p>As set out at paragraph 169 of REP2-066: "...when considering the whole of England, the 625,600 tonnes of new waste incineration capacity proposed for Medworth could be expected to result in overcapacity of more than</p>	<p>a full response to this exercise in their Deadline 3 submission Applicant's comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3), page 111 (UKWIN's assessment of the impact of residual waste reduction targets). This response refutes the assertion that there will be any over-capacity of supply in the Study Area.</p> <p>See response to UK37 above.</p> <p>In terms of UKWINs own calculations relating to capacity needs across the Study Area, the Applicant has provided a full response to this exercise in their Deadline 3 submission Applicant's comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3), page 111 (UKWIN's assessment of the impact of residual waste reduction targets). This response refutes the assertion that there will be any over-capacity of supply in the Study Area.</p>



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UK40	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 48.-51.	<p>3.3 million tonnes in 2027 and more than 10.7 million tonnes by 2042".</p> <p>While the Applicant's D2 WFAA touches on some of the issues raised by UKWIN, the revisions reinforce rather than resolve our concerns.</p> <p>Paragraphs 2.2.32 - 2.2.34 of the D2 WFAA acknowledge the 2042 and 2027 waste reduction targets set out in the Environmental Improvement Plan 2023 ('the EIP'). Notably however, this section of the Applicant's D2 WFAA does not refer to the EIP target to reduce municipal residual waste by 29% by 2027 (i.e. to 333kg/person) which is set out on internal page 148 of the EIP [electronic page 148 of REP1-096]. This municipal residual waste reduction target was noted as a key target by UKWIN at paragraphs 38 and 43 of REP1-096.</p> <p>In fact, the Applicant provides no mention whatsoever of the Environmental Improvement Plan's 29% reduction target for 2027 within their latest submission, despite their proposed feedstock for Medworth being comprised primarily of municipal waste within the terms of how municipal waste is defined within the target (i.e. "waste from households plus waste similar in composition to household waste, such as commercial waste", as per internal page 148 of the EIP).</p>	<p>The WFAA (Volume 7.3) [REP2-009] has considered the implications of achieving the Government's Environmental Improvement Plan's (EIP) longer term 'stretch' target of halving residual waste produced per person by 2042 (equating to no more than 287kg per capita). The Applicant has sought to focus on the most stringent (worst-case), target i.e., that for 2042, rather than any interim target that would inherently have larger quantities of residual waste. Furthermore, as the Proposed Development would be able to accommodate household <u>and</u> industrial/ commercial waste, it has been considered more appropriate to apply the Government's wider residual waste target rather than the narrower 'municipal waste' target.</p> <p>After allowing for population growth and the loss of existing, aging capacity, there remains a clear need for the capacity offered by the Proposed Development even in the event the EIP stretch target is met.</p>



ID	Topic/Para	Response	Applicant Comment
UK41	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 52.-59.	<p>Rather than focusing specifically on the municipal target, the Applicant instead discusses a broader target, i.e. the target to reduce English residual waste (which includes both municipal and non-municipal waste) to 25.5 million tonnes by 2027.</p> <p>For example, at paragraph 5.2.20 of the D2 WFAA the Applicant states: "The adoption of the 'median' and 'Circular Economy' scenarios also sits well with the provisions of the recently published Environmental Improvement Plan (EIP) 2023, which seeks the total mass of residual waste not exceeding 25.5 million tonnes by the beginning of 2028" (emphasis added).</p> <p>The 'median' and 'Circular Economy' scenarios referred to by the Applicant relate to Tolvik's November 2017 UK Residual Waste 2030 Market Review's '55% household recycling' and 'Circular Economy target' scenarios and resulted in assumed 2030 UK-wide residual waste of 24.5Mt and 21.0Mt respectively.</p> <p>However, internal page 2 of Tolvik's 2030 Market Review stated that: "The focus of the reports and this review is upon Residual Municipal Waste – being Residual Waste which can be treated alongside residual Household Waste".</p> <p>This is reflected in the Applicant's Table 5.3 which refers to "Household waste" and "Municipal C/I Waste", i.e. the Tolvik-derived residual waste listed as '2030 Residual waste' include the</p>	<p>Interim target 2 of the Government's Environmental Improvement Plan (EIP) (page 147) states:</p> <p><i>"By 31 January 2028, the total mass of residual waste excluding major mineral waste in the most recent full calendar year does not exceed 25.5 million tonnes".</i></p> <p>With this target in mind, the adoption of the 'median' and 'Circular Economy' scenarios, which equates to a predicted residual waste quantity in 2030 of 24.5 and 21.0 million tonnes respectively, sits well with interim target 2 of the Environmental Improvement Plan (EIP) 2023.</p> <p>Furthermore, the updated WFAA (Volume 7.3) [REP2-009] has sought to assess the potential impact of achieving the most stringent (worst-case), 2042 target i.e., that for 2042. The IP refers to interim target 3, which seeks the total mass of municipal residual waste in a year not exceeding 333 kg per capita by the end of January 2028. However, in their updated WFAA (Volume 7.3) [REP2-009], the Applicant has applied the more stringent long-term target of not exceeding 287 kg per capita by the end of January 2028 (page 147 of the EIP).</p> <p>After allowing for population growth and the loss of existing, aging capacity, there remains a clear need for</p>



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		<p>municipal fraction of C&I, not the total non-mineral C&I stream.</p> <p>As such, the appropriate EIP figure to use would not be the 25.5 million tonnes of residual waste in 2027 set out on internal page 147 of the EIP (which includes all non-mineral waste, and not just household waste and the municipal fraction of C&I waste), but the 333kg per capita figure for municipal residual waste in 2027 set out on internal page 148 of the EIP.</p> <p>As set out by UKWIN from paragraph 38 of REP1-096, the 333kg figure can be converted to tonnes of municipal residual waste per annum by applying the ONS population forecast of 58,061,002.</p> <p>Applying the 333kg figure to the population forecast for 2027 would result in 19.33Mt of total municipal residual waste in England.</p> <p>This equates to 17.40Mt of municipal residual waste assuming 90% of the total figure (to account for the non-combustible fraction of the total, e.g. ceramics, rubble, soil, etc. in line with the acknowledgment by the Applicant at Paragraph 3.2.20 of the D2 WFAA that not all HIC is suitable for use as a fuel source); 16.43Mt assuming 85% of the total figure; and 15.47Mt assuming 80% of the total figure.</p>	<p>the capacity offered by the Proposed Development even in the event the EIP stretch target is met.</p>



ID	Topic/Para	Response	Applicant Comment
UK42	<p>Accounting for UK Government recycling and residual waste targets being met at Local and national levels.</p> <p>60.-64.</p>	<p>As per Table 5.3 of the D2 WFAA, the Circular Economy figure is based on Tolvik's 2017 residual waste figure of 21.0 million tonnes for 2030, and the 'high recycling' scenario is based on Tolvik's 2017 residual waste figure of 17.3 million tonnes for 2030. As such, in line with UKWIN's comments at paragraph 40 of REP1-096, the Applicant's 'Median' or 'Central' scenario of 21.0 million tonnes per annum in 2030 (which Tolvik call the '55% household scenario') has not been shown to be compatible with the reductions of waste required to meet the EIP's target to reduce municipal residual waste to 333kg per person by 2027 which reflects a figure of 17.40Mt (not all of which would be suitable for incineration).</p> <p>As set out in REP1-096, if England is to meet its 2027 targets and be on course to meeting its 2042 target then the amount of residual waste suitable and available for incineration could be expected to be much lower than the levels which the Applicant suggest are compatible with meeting the targets.</p> <p>In line with paragraph 40 of REP1-096, while the Applicant's "high recycling" scenario could be considered more plausible, it is likely that the quantity of residual waste that could be available as fuel in 2030 would be lower than the Applicant's 17.3Mt figure. This is because residual waste can be expected to fall from the 2027 level as progress is made towards achieving the Government's 2042 target and because not</p>	See Applicant's response above in relation to UK41.



ID	Topic/Para	Response	Applicant Comment
		<p>all residual waste would be suitable for incineration.</p> <p>Part of the reason why the quantity of residual waste in 2030 can be expected to be lower than in the Applicant's 'high recycling' scenario is that, as set out on Table 5.3 of the D2 WFAA, the Applicant's / Tolvik's scenario was premised on average annual growth of 0.4% and 0.5% for household and municipal C&I waste, whereas the UK Government is aiming for significant reductions in waste and residual waste.</p> <p>This means that the level of ambition for residual waste reduction in the Applicant's 'high recycling' scenario is insufficiently high to be compatible with the UK Government's ambitions.</p>	
UK43	<p>Accounting for UK Government recycling and residual waste targets being met at Local and national levels.</p> <p>65.-67.</p>	<p>The Government's residual waste reduction ambition is not only set out in the EIP, but also in the Resources and Waste Strategy (which was published in December 2018, and therefore post-dated Tolvik's November 2017 Residual Waste Market Review) as per paragraph 131 of REP2-066.</p> <p>The 2018 Resources and Waste Strategy sets out how the Government's desired direction of travel is to be reducing 'Total waste generated' and 'Total residual waste generated per capita' and increasing 'Household waste recycling', 'Municipal waste recycling' and 'Commercial and industrial waste recycling'.</p>	<p>It is acknowledged that Tolvik's November 2017 Residual Waste Market Review pre-dates the Government's 2018 Resources and Waste Strategy, but the provisions of the two documents are not incompatible.</p> <p>The 2018 Resources and Waste Strategy states on page 79 that:</p> <p><i>"Incineration currently plays a significant role in waste management in the UK, and the Government expects this to continue."</i></p>



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UK44	<p>Accounting for UK Government recycling and residual waste targets being met at Local and national levels.</p> <p>68.-73.</p>	<p>While there is a desire for less landfilling set out within the Resources and Waste Strategy, this can be achieved through the top tiers of the waste hierarchy as there is no explicit statement about a desire for an increase in volumes of waste incinerated.</p> <p>As previously set out by UKWIN, given the high levels of existing and emerging waste incineration capacity across the UK, any increase in incineration capacity is likely to divert the management of waste from the top tiers of the waste hierarchy rather than from landfill.</p> <p>Indeed, according to Rebecca Pow, speaking as the UK Government's Parliamentary Under-Secretary of State for Environment, Food and Rural Affairs: "I want to set the record straight: as my right hon. Friend the Member for Romsey and Southampton North (Caroline Nokes) highlighted, our focus as a Government is on 'reduce, reuse, recycle'. We are sticking to that, as well as to the drive towards an ever more circular economy, which many Members touched on. That means extracting maximum value from our resources, then recovering and regenerating products and materials at the end of their lifespan. Through that, we seek to minimise the amount of waste that goes to incineration or landfill, which certainly are at the bottom of the waste chain...Policies aimed at diverting waste away from landfill mean that, in addition to recycling gains, the volume of</p>	<p>The Applicant fully supports the reuse and recycling of waste. The WFAA (Volume 7.3) [REP2-009] demonstrates that there is sufficient residual waste that is currently being managed at the very bottom of the waste hierarchy, i.e., being landfilled, to support the EfW CHP Facility currently and in future allowing for recycling targets. The Proposed Development does not and will not prejudice or detract from future recycling efforts. The focus of the WFAA (Volume 7.3) [REP2-009] is on the availability of residual waste only. The WFAA (Volume 7.3) [REP2-009] looks at the fraction of the household and commercial waste stream that is not able to be managed in any other way apart from incineration (with or without energy recovery) or landfill.</p> <p>The achievement of national targets for the recycling and reuse of waste have been taken into account when considering how much residual waste is likely to require management in the future. In this regard, the WFAA (Volume 7.3) [REP2-009] concludes that at a national level:</p> <ul style="list-style-type: none"> In 2021, approximately 9.95 million tonnes of residual HIC waste was disposed of to landfill, and 1.7 million tonnes was exported as refuse derived fuel (RDF) to Europe and beyond; and



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		<p>waste being treated at energy from-waste plants has increased. Of course, however, the aim with all the measures in the waste and recycling strategy is to bring that down".</p> <p>Because the Applicant is relying on Tolvik's historic analysis – which predated the Resources and Waste Strategy, let alone the EIP's target for 2027 – it is not surprising that it reflects an outdated estimate of future arisings, thereby undermining the Applicant's assessment of compatibility with local and national recycling residual waste reduction targets.</p> <p>With respect to the Environment Act's 2042 target to halve residual municipal waste relative to a 2019 base year, the D2 WFAA is brazen in its apparent denigration of, and failure to robustly explore the potential impact of, the achievement of this legally binding Government target.</p> <p>At paragraph 5.2.21 of the D2 WFAA the Applicant mischaracterises the Environment Act's 2042 target as a 'stretch target', and at paragraphs 5.2.22 and 5.2.23 the Applicant seeks to cast doubt on the achievability of the target.</p> <p>The Applicant's full frontal assault on a key element of the Government's existing waste policy is unwarranted and unhelpful.</p>	<ul style="list-style-type: none"> By 2030, it is predicted that even if the Government's ambitious combined recycling target of 65% for municipal and 'municipal like' commercial and industrial waste is realised, there would remain a minimum shortfall of approximately 1.6 million tonnes of residual HIC capacity in the UK (rising to over 5 million tonnes if the Government's recycling target is undershot by 5%). <p>Furthermore, at a more localised level, the updated WFAA (Volume 7.3) [REP2-009] concludes that based upon the current pattern of waste arising and management across the spatial scope of the assessment, there is potential for around 2.6 million tonnes of material to be managed further up the waste hierarchy and/or at a location that is more proximate to the point of arising. Looking ahead to the position up to around 2035 it is estimated that there will be a gap in residual waste management capacity of at least approximately 1.3 million tonnes per annum.</p>



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UK45	<p>Accounting for UK Government recycling and residual waste targets being met at Local and national levels.</p> <p>74.-80</p>	<p>Firstly, we turn to the Environmental Targets (Residual Waste) England Regulations 2023 [REP1-06 electronic pages 77-82].</p> <p>The Regulations state that: “In accordance with section 4(1) and (2) of the 2021 Act, the Secretary of State has sought advice from persons the Secretary of State considers to be independent and to have relevant expertise, and is satisfied that the target in these Regulations can be met”.</p> <p>This confirms the Government’s position that the target to reduce residual waste is achievable.</p> <p>Furthermore, the Regulations state that: “The residual waste long-term target is that by the end of 31st December 2042 the total mass of residual waste for the calendar year 2042 does not exceed 287 kilograms per head of population in England”.</p> <p>As such, the residual waste reduction target is not a ‘stretch’ target, but a legally binding long-term target.</p> <p>Additionally, the Explanatory Note to the Regulations states that: “These Regulations, which apply to England, set a long-term target in relation to the reduction of residual waste, which is within the priority area of resource efficiency and waste reduction under section 1 of the Environment Act 2021 (c.30). The Regulations specify the standard to be achieved in respect of the target and the date by which it must be achieved”. (emphasis added)</p>	<p>The Government, in its Environmental Improvement Plan 2023, states on page 147 in respect of the 2042 target:</p> <p><i>“We set a stretching long-term target to halve ‘residual’ waste (waste that is sent to landfill, put through incineration or used in energy recovery in the UK or overseas) by 2042.”</i> (emphasis added).</p>



ID	Topic/Para	Response	Applicant Comment
		This not only confirms the importance of these targets, but also that they are targets that “must be achieved”	
UK46	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 81.-84.	<p>At Paragraph 5.2.22 of the D2 WFAA the Applicant’s claims that “...a fundamental factor is that the EIP neither includes a clear strategy nor puts the required funding in place to set out how a halving of residual waste by 2042 will be achieved - especially given the stagnating municipal recycling rates already discussed in this assessment”.</p> <p>It is not for the Applicant to seek to undo Government policy simply because the policy is unhelpful to its application (much as it seems evident that the Applicant wishes for exactly that outcome).</p> <p>The UK Government ran a public consultation on the Environmental Targets which resulted in more than 81,000 responses. These responses were then considered in advance of the Government’s decision to adopt the 2027 and 2042 targets for residual waste reduction.</p> <p>The appropriate place for challenging the residual waste reduction target was as part of the relevant consultation, and not at an NSIP Examination.</p>	<p>The Applicant in no way seeks to “undo Government policy”. The Applicant provides context through an informed narrative against the reality of achieving these statutorily rooted targets – a narrative that is supported by empirical evidence.</p> <p>For example, the Government has statutory recycling targets for the recycling of municipal waste: 50% by 2020 and 65% by 2035. However, recycling rates have remained relatively flat since 2010 (as set out in Graphic 5 of the WFAA (Volume 7.3) [REP2-009], with recycling rates in 2020/21 equating to 40% for England and 44.1% in 2021/22. Existing targets have therefore already been significantly undershot and there are some significant changes that must take effect if the government is going to achieve an increase of 25% points in the next 12 years if the ‘aspirational’ 2035 target is to be achieved.</p> <p>In providing this context and evidence, the Applicant is not challenging the new recycling targets themselves but simply pointing out that previous targets have not been met and the new targets will be very challenging to achieve.</p>
UK47	Accounting for UK Government recycling	Far from constituting a “fundamental factor”, the Applicant’s arguments say more about the	The WFAA (Volume 7.3) [REP2-009] submitted at Deadline 2 gives consideration to the implications of



ID	Topic/Para	Response	Applicant Comment
	<p>and residual waste targets being met at Local and national levels.</p> <p>85.-88.</p>	<p>Applicant's lack of understanding of the Government's policy position than about the policy itself.</p> <p>Firstly, there is no requirement for the EIP to set out how the target would be achieved.</p> <p>The Government's position is that the targets can be achieved, and if the development proposed for Medworth would provide capacity that would be incompatible with the achievement of the targets then that can justify refusal of the application.</p> <p>Secondly, the EIP sets out numerous measures to support recycling and residual waste reduction. As set out in REP1-096 electronic pages 53, Government measures to achieve the residual waste reduction targets include commitments to:</p> <p><i>-commitments a) to f) are listed.</i></p>	<p>achieving the Government's EIP target which seeks the total mass of residual waste not exceeding 25.5 million tonnes by the beginning of 2028; and their longer term 'stretch' target of halving residual waste produced per person by 2042 (equating to no more than 287kg per head of population in England) as set out in the Environmental Improvement Plan and the Environmental Targets (Residual Waste) (England) Regulations 2023. See paragraphs 5.2.21 to 5.2.24 of the updated WFAA (Volume 7.3) [REP2-009].</p>
UK48	<p>Accounting for UK Government recycling and residual waste targets being met at Local and national levels.</p> <p>89.-91.</p>	<p>According to internal pages 1 and 26 of the 2021 Waste Management Plan for England: "The major waste reforms set out in the [Environment] Bill [now the Environment Act] will support the achievement of a 65% recycling target for municipal waste by 2035" and "These measures are expected to increase recycling from households from current levels to 65% by 2035".</p> <p>Thus, the Government also expects the 65% target to be met both for household waste and municipal waste (which includes both household</p>	<p>See Applicant's responses above in relation to UK44 to UK47.</p>



ID	Topic/Para	Response	Applicant Comment
UK49	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 92.-94	<p>waste and the fraction of commercial waste which is similar to household waste).</p> <p>The UK Government's commitment to halving residual waste, and their conviction that such reductions are achievable, are also set out within Defra's Environment Act Targets Impact Analysis: Waste Reduction, which notes the following: A) To c) are listed.</p> <p>Given the long-term nature of these statutory targets, it is quite reasonable for the Government to leave some of the decisions regarding which government policy levers to use beyond those already set out in the Resources and Waste Strategy and EIP to the next Parliament. However, it is clearly the Government's position that such levers exist and that the targets can and will be met using such levers.</p> <p>Endorsing the desirability of this increased level of ambition, the Government – in their consultation document for the target – explained how: "Tackling residual waste reduces the environmental impacts of treatment, including air, soil, and water pollution...It is more sustainable to prevent waste completely and, where waste is unavoidable, to recycle it...The proposed target can drive both waste minimisation and recycling of unavoidable waste..."</p> <p>Given the numerous benefits of reducing residual waste, it is not surprising that the Government</p>	See Applicant's responses above in relation to UK44 to UK47.



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UK50	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 95.-99.	<p>has adopted a long-term statutory residual waste reduction target and that the Government anticipates that further levers will be adopted to achieve this target.</p> <p>Another reason to have confidence in the anticipated reduction in residual waste is that much of what is currently treated as 'residual waste' is actually recyclable or compostable.</p> <p>This fact is explored in depth in UKWIN's Good Practice Guidance, including at pages 150-164 of REP1-096, and in UKWIN's Written Representation (WR), including the section of the WR entitled 'Defra's concerns regarding the recyclability of residual waste' [REP2-066 paragraphs 144-147].</p> <p>As noted on electronic page 155 of REP1-096, the Government explained in January 2020 that: "...the measures in the resources and waste strategy and the Environment Bill will enable a paradigm shift, in relation to reducing, reusing and recycling our waste, that should limit the amount that ever has to go to incineration and landfill".</p> <p>It is not surprising that the impacts of this 'paradigm shift' have not been felt prior to the measures set out in the Resources and Waste Strategy and Environment Bill being enacted, but these measures – and additional measures – can be expected to be implemented in the coming</p>	See Applicant's responses above in relation to UK44 to UK47.



ID	Topic/Para	Response	Applicant Comment
UK51	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 100.-101.	<p>years, thus negating the relevance of assessing historic English recycling rates that predate the introduction of such measures.</p> <p>Now that it has been shown that the 2042 target ought to be given serious consideration, we turn to the Applicant's assessment of the impact of achieving that target.</p> <p>Paragraph 5.2.24 of the D2 WFAA states: "Current Office for National Statistics (ONS) population predictions are that in 2043, there will be approximately 61,744,098 people in England – and at 287kg of residual waste per head, this equates to 17.72 million tonnes of residual waste. Whilst current operational and 'in construction' EfW capacity equates to 19.4 million tonnes (as predicted by Tolvik in 2022), inevitably by 2042, a large proportion of the existing capacity will be decommissioned and/or require upgrading – particularly the older/smaller non-R1 compliant facilities. With this in mind, it is considered that even in the unlikely event of the EIP stretch target of halving residual waste by 2042 being achieved, there remains a clear need for the capacity offered by the Proposed Development".</p> <p>This statement is far from reassuring for a multitude of reasons. For example:</p> <ul style="list-style-type: none"> a) the 287kg per head figure which underpins the Applicant's 17.72Mt figure relates to all residual waste (excluding 	<p>In respect of point (a) - the Applicant has provided a full response to the IP's own calculations in their Deadline 3 submission Applicant's comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3), page 111 (UKWIN's assessment of the impact of residual waste reduction targets). This response refutes the assertion that there will be any over-capacity of supply in the Study Area.</p> <p>In respect of point (b) 2042 is some significant time away. and, it is a reasonable assumption that not all existing capacity will be available – not least because significant parts of the existing UK recovery infrastructure will be between 40-60 years old by that point.</p> <p>In view of this, the Applicant remains confident in the methodology underpinning the WFAA (Volume 7.3) [REP2-009], and that there is a need for the Proposed Development in all circumstances. However, further information will be provided within Revision 3 of the WFAA to be provided at Deadline 5.</p>



ID	Topic/Para	Response	Applicant Comment
		<p>major mineral waste). For the reasons set out above, the actual focus should be on the municipal residual waste fraction of this total (and even then, only on the available combustible portion of that fraction). As UKWIN set out in REP1-096 paragraph 46, if municipal residual waste halves per person between 2019 and 2042 (as the target relates to 2042 and not to 2043) total municipal residual waste per person would be 234.5kg in 2042, and depending on the fraction of that municipal residual waste deemed suitable for use as a fuel (e.g. excluding glass, ceramics, grit and gravel, soil, rubble, etc. in line with the acknowledgment by the Applicant at Paragraph 3.2.20 of the D2 WFAA that not all HIC is suitable for use as a fuel source) the quantity of waste suitable for use as incinerator feedstock would be in the order of 11.26Mt – 12.66Mt (far below the 17.72 million tonne residual waste figure stated by the Applicant).</p> <p>b) There is no evidence that a significant quantity of existing capacity would be taken offline, and even if some of the existing capacity is no longer available in 2042 that capacity may be expected to remain online in the run-up to 2042 when municipal residual waste could be expected to be significantly lower than 2027 in order for the 2042 target to be met.</p>	<p>In respect of point (c), see Applicant's response above in relation to UK01.</p>



ID	Topic/Para	Response	Applicant Comment
UK52	Accounting for UK Government recycling and residual waste targets being met at Local and national levels. 102.-103.	<p>c) The Applicant's D2 WFAA statement fails to consider non-incineration uses for the residual waste that might otherwise be available for incineration, such as the waste being used to for co-incineration in cement kilns or as feedstock for waste-to-SAF schemes, which could undermine the justification for additional municipal waste incineration capacity.</p> <p>In light of the above, it is clear that the Applicant has failed to adequately assess the impacts of the 2027 and 2042 residual waste reduction targets on future residual waste arisings.</p> <p>These failures undermine the Applicant's latest assessment of compatibility with local and national recycling and residual waste reduction targets.</p>	<p>See Applicant's responses above in relation to UK44 to UK101.</p> <p>The Applicant is confident that the WFAA (Volume 7.3) [REP2-009] constitutes a robust worst-case scenario and that the need for the Proposed Development has been demonstrated in all circumstances.</p>
UK53	Accounting for domestic incineration capacity from 2020 onwards 104.-108.	<p>In relation to their national analysis conclusions, on electronic page 84 of the D2 WFAA, the Applicant states: "Operational EfW capacity by the end of 2026 was predicted to be 19.4 million tonnes".</p> <p>This statement is not based on the Applicant's own assessment of 'Energy from Waste Capacity Data' set out in Appendix C (which states that there will be 18.89 Mtpa of capacity for England alone), but instead on a statement in Tolvik's 2022 EfW Statistics document (which reported on 2021 data).</p>	<p>An explanation for reliance on the Tolvik EfW capacity of 19.4 million tonnes is set out in paragraph 5.1.23 to 5.1.24 of the WFAA (Volume 7.3) [REP2-009].</p> <p>In respect of Rivenhall EfW, in February it is noted, that in the recently published (May 2023) update to the Tolvik 2022 (<i>UK Energy from Waste Statistics – 2022</i>), the Rivenhall site is included as forming part of existing operational capacity. As agreed at Issue Specific Hearing 3, the Applicant will produce an updated (version 3) of the WFAA to reflect recently published data updates, such as this.</p>



ID	Topic/Para	Response	Applicant Comment
		<p>According to Tolvik, the 19.4Mtpa figure was based on “the EfWs listed in Appendix 1” of Tolvik’s 2022 report, which set out capacity for incinerators that were Operational, in Commissioning or In Construction as of December 2021.</p> <p>As such, there is no indication that these figures take into account facilities that entered construction or increased their capacity after December 2021. 108. For example:</p> <p>a) The 595,000 tpa of capacity at Rivenhall in the East of England which entered construction around November 2022. D2 WFAA Appendix C acknowledges that capacity as being under construction, but it was not listed in the Tolvik report.</p> <p>b) Tolvik’s 2022 report using 2021 data listed Protos as having a permitted capacity of 410ktpa, but the permit was varied in January 2023 to increase this capacity to 500,000 tpa (EA Ref. EPR/LP3132FX/V007). The Applicant’s D2 WFAA Appendix C lists the lower 410ktpa figure.</p> <p>c) Tolvik’s 2022 report using 2021 data listed Riverside Resource Recovery Facility as having a permitted capacity of 785ktpa, but in September 2022 the Environment Agency granted a permit variation increasing capacity to 850ktpa. Ref: EPR/BK0825IU/V009.</p>	<p>Regarding reported capacities, these are based upon what the planning consents allow. This is because permits are often issued on standardised thresholds and as such are not a reliable means of establishing maximum consented capacities.</p>



ID	Topic/Para	Response	Applicant Comment
UK54	Accounting for domestic incineration capacity from 2020 onwards 109.-111.	<p>We also note that the Applicant does not mention the various dedicated biomass facilities that either are already burning MSW/RDF, or that are intending to burn MSW/RDF, such as Aviva's plants in Hull and Boston (both of which incinerated RDF in 2022, and together represent a combined capacity of around 173,000 tonnes per annum), and the Port Clarence plant (where the operator has applied to the Environment Agency for a permit variation to enable the facility to incinerate up to 330,000 tonnes of RDF per annum).</p> <p>While these three illustrative examples on their own account for more than half a million tonnes of incineration capacity, such plants were not mentioned in Tolvik's EfW Statistics report and therefore are not reflected in Tolvik's 19.4Mtpa figure.</p> <p>As such, while the Applicant claims to take into account the latest data their approach does not take the most recent data into account</p>	<p>The WFAA (Volume 7.3) [REP2-009], draws upon a range of credible and publicly available data sources. One such data source is the '<i>UK Energy from Waste (EfW) Statistics – 2021</i>', Tolvik Consultancy Ltd (also referred to as the 2022 Tolvik report). This report brings together data, primarily the Annual Performance Reports ("APR") submitted by operators to their respective regulator. This report notes that:</p> <ul style="list-style-type: none"> (a) Permit capacity is not suitable for projecting future EfW capacity in any analysis of the UK Residual Waste market – as EfWs generally do not operate at this level. "Operational Capacity" is a more appropriate measure (see section 7 of the Tolvik report). (b) The UK operational capacity of 19.4 million tonnes estimated by Tolvik is a 2026 figure, based upon detailed market analysis of operational facilities and those in construction or about to commence construction. <p>As agreed at Issue Specific Hearing 3, the Applicant will produce an updated (version 3) of the WFAA to reflect recently published data updates – including the May 2023 update to the 2022 Tolvik report.</p>
UK55	Accounting for domestic incineration capacity from 2020 onwards 112.-115.	<p>The Applicant's 19.4Mtpa figure is used as one half of their D2 WFAA claim (found on electronic page 83 and reflected in the conclusion on electronic page 84) that: "...by 2030, there is anticipated to be between 21.0 and 24.5 million tonnes of residual HIC waste in the UK requiring management. However, up to 2026 (and beyond)</p>	<p>The updated WFAA (Volume 7.3) [REP2-009] concludes that at a national level:</p> <ul style="list-style-type: none"> • In 2021, approximately 9.95 million tonnes of residual HIC waste was disposed of to landfill, and 1.7 million tonnes was exported as refuse derived fuel (RDF) to Europe and beyond; and



ID	Topic/Para	Response	Applicant Comment
		<p>there is only anticipated to be around 19.4 million tonnes of operational EW capacity – which gives a shortfall of between 1.6 million tonnes and 5.1 million tonnes”. (emphasis in original)</p> <p>As noted above, the 21.0-24.5Mt arisings estimates for 2030 were based on Tolvik’s ‘55% household’ and ‘Circular Economy target’ scenarios which are out of step with the levels of residual waste reduction required to meet the UK Government’s residual waste reduction targets.</p> <p>As such, it appears that the Applicant is simultaneously overstating future residual waste arisings whilst understating future residual treatment capacity.</p> <p>The extent to which the Applicant overstates the supposed need for their proposed capacity is exacerbated by the Applicant’s failure to consider nonMWI (Municipal Waste Incineration) residual treatment capacity, as set out below.</p>	<ul style="list-style-type: none"> By 2030, it is predicted that even if the Government’s ambitious combined recycling target of 65% for municipal and ‘municipal like’ commercial and industrial waste is realised, there would remain a minimum shortfall of approximately 1.6 million tonnes of residual HIC capacity in the UK (rising to over 5 million tonnes if the Government’s recycling target is undershot by 5%). <p>The IP asserts that the Applicant has based their anticipated residual waste management arisings on under-stated future recycling targets. This is not the case. See responses to U37 above. As such, even if residual waste reduction targets are achieved, there remains a national capacity shortfall.</p>
UK56	<p>The need to account for non-MWI capacity</p> <p>116.</p>	<p>As set out above:</p> <p>a) the Applicant’s figures for residual waste arisings in 2030 are based on Tolvik estimates which, apart from not being consistent with meeting Government targets, are based on a wider category of ‘municipal waste’ rather than on the portion of that waste that could reasonably be considered potential incinerator feedstock (that</p>	<p>See Applicant’s response above in relation to UK55.</p> <p>In addition to this however, it is noted and accepted that 100% of residual waste would not be suitable for treatment at the Proposed Development. There is, however, no indication in the nationally available data as to what proportion of the overall residual waste stream would be suitable for energy recovery. Notwithstanding this, as it was agreed at Issue Specific Hearing 3 that an updated version of the Waste Fuel Availability</p>



ID	Topic/Para	Response	Applicant Comment
		<p>would not be used for other purposes such as for co-incineration in cement kilns);</p> <p>b) the Applicant's assessment of the 2042 arisings figures is based on all residual waste (excluding major mineral waste) and not just municipal waste, let alone the relevant fraction of this waste; and</p> <p>c) the Applicant's 16.49Mtpa 2027/2030 capacity figure is for 'UK Residual Waste' but it is unclear what types of waste this includes.</p>	<p>Assessment will be produced at Deadline 5 to reflect the most up to date capacity position.</p>
UK57	<p>The need to account for non-MWI capacity</p> <p>117.-121.</p>	<p>Given these factors, it is important to consider that some of the 'residual' waste might, if it is not reduced or reused or recycled, be treated through residual waste treatment routes other than Municipal Waste Incineration.</p> <p>The 17.3Mtpa, 21.0Mtpa and 24.5Mtpa figures in Table 5.2 of the D2 WFAA are all based on a Tolvik report for the ESA published in November 2017 ('UK Residual Waste: 2030 Market Review').</p> <p>Figure 31 of that Tolvik report compared Tolvik's 2030 estimates (of 17.3Mtpa, 21.0Mtpa and 24.5Mtpa) not against incineration capacity, but against a mix of capacity capable of treating that waste.</p> <p>In addition to 'Dedicated EfW', additional EFw, and RDF Export, Tolvik's own use of those 2030</p>	<p>The Applicant has relied upon the <i>UK Residual Waste: 2030 Market Review</i> (Tolvik, November 2017), to establish what future national residual waste arisings are predicted to be. For the two adopted scenarios in the WFAA (Volume 7.3) [REP2-009] it is predicted that a total of 21.0 – 24.5 million tonnes of residual waste will arise in 2030.</p> <p>However, the Applicant does not consider the Tolvik 2017 report to provide the most up to date position in respect of the potential future management of residual waste in the UK.</p> <p>The table reproduced by UKWIN includes 0.8 (1.4-0.5) million tonnes of MBT capacity; the Applicant has not adjusted this capacity downwards, despite a significant volume (at least 50% of the waste by volume) treated at the Waterbeach MBT facility, requiring final treatment at an EfW Facility or landfill. In addition, the prediction in 2017 was that, by 2030, 0.7 (0.6-1) million tonnes of waste</p>



ID	Topic/Para	Response	Applicant Comment																																				
		<p>estimates accounted for the following median values: a) 0.8Mt of MBT Impact (ranging from 0.5 – 1.4) b) 0.6Mt of IED Biomass (ranging from 0 – 1.2) c) 0.7 Mt of Co-incineration (ranging from 0.6 – 1.0)</p> <p>The table showing this is reproduced below:</p> <table border="1" data-bbox="719 580 1294 807"> <thead> <tr> <th>Mt</th> <th>Median</th> <th>Range Down</th> <th>Range Up</th> </tr> </thead> <tbody> <tr> <td>Dedicated ENW</td> <td>14.5</td> <td>(0.2)</td> <td>0.8</td> </tr> <tr> <td>MBT Impact</td> <td>0.8</td> <td>(0.3)</td> <td>0.6</td> </tr> <tr> <td>IED Biomass</td> <td>0.6</td> <td>(0.6)</td> <td>0.6</td> </tr> <tr> <td>Co-Incineration</td> <td>0.7</td> <td>(0.1)</td> <td>0.3</td> </tr> <tr> <td>UK Capacity</td> <td>16.6</td> <td>(1.2)</td> <td>2.3</td> </tr> <tr> <td>Additional ENW prior to 2022</td> <td>2.0</td> <td>(0.1)</td> <td>0.4</td> </tr> <tr> <td>RDF Export</td> <td>2.5</td> <td>(0.5)</td> <td>0.5</td> </tr> <tr> <td>Total</td> <td>21.1</td> <td>(1.8)</td> <td>3.2</td> </tr> </tbody> </table> <p data-bbox="837 815 1196 831">Figure 29: Projected Total 2030 Residual Waste Treatment Capacity</p> <p>This means that Tolvik’s report acknowledged a mean 2.1Mt of non-MWI capacity (ranging from 1.1Mt to 3.6Mt of non-MWI residual waste treatment capacity) which – based on Tolvik’s methodology – contributed to the 2030 capacity gap or level of overcapacity.</p>	Mt	Median	Range Down	Range Up	Dedicated ENW	14.5	(0.2)	0.8	MBT Impact	0.8	(0.3)	0.6	IED Biomass	0.6	(0.6)	0.6	Co-Incineration	0.7	(0.1)	0.3	UK Capacity	16.6	(1.2)	2.3	Additional ENW prior to 2022	2.0	(0.1)	0.4	RDF Export	2.5	(0.5)	0.5	Total	21.1	(1.8)	3.2	<p>would be treated at co-incineration facilities (i.e. cement kilns). However, this growth has not materialised with the quantity of waste sent to these facilities remaining stable at 350-375,000 tonnes per annum in the period up to 2021. Despite the age of the data, the Applicant has not adjusted the waste management capacity identified by the Tolvik report in order to ensure that the worst-case scenario is assessed by the WFAA. The Applicant considers it likely that the existing waste management capacity as at 2030 will be, in practice, significantly below that predicted by the 2017 Tolvik report.</p>
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Dedicated ENW	14.5	(0.2)	0.8																																				
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UK58	<p>The need to account for non-MWI capacity</p> <p>123.-125.</p>	<p>As such, it would be appropriate to modify Tolvik’s estimate of 19.4Mt of capacity by 2026, which the Applicant uses for their 2030 capacity estimate, to include:</p> <p>a) 535.5ktpa of additional capacity at Rivenhall (assuming 90% availability);</p>	<p>The updated version of Tolvik’s <i>UK Energy from Waste (EfW) Statistics – 2021</i>, published May 2023, incorporates 2022 capacity data and the Applicant will be providing an updated version of the WFAA, to be submitted at Deadline 5, that includes an assessment of this data in order to reflect the most up to date capacity position.</p>																																				



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UK59	Waste to SAF capacity	<p>b) 58.5ktpa of additional capacity at Riverside (assuming 90% availability);</p> <p>c) 81ktpa of additional capacity at Protos (assuming 90% availability);</p> <p>d) 455.2ktpa of capacity at the two aforementioned Aviva and Port Clarence facilities (assuming 90% availability);</p> <p>e) 600ktpa of IED Biomass capacity (which is only 100ktpa more than the amount which has already been converted to MWI but not included in Tolvik's 19.4Mt figure as noted above); and</p> <p>f) 700ktpa of co-incineration capacity.</p> <p>Making these six adjustments increases the estimated future residual waste treatment capacity from the 19.4Mt specified in the D2 WFAA Table 5.3 for 2030 to more than 21.83Mt.</p> <p>As such, based on figures from the Tolvik evidence relied upon by the Applicant combined with recent information applied in line with Tolvik's approach, it appears that in adjusted 'Circular Economy' and 'High recycling' scenarios based on those listed in Table 5.3 of the D2 WFAA there would clearly be incineration overcapacity, even without the additional 625,600 tonnes of additional capacity proposed for Medworth.</p>	A response to this issue is set out on pages 102-105 (Government policy on need to avoid incineration



ID	Topic/Para	Response	Applicant Comment
	126.-131.	<p>funded alternative aviation fuel projects are intending to convert household waste into Sustainable Aviation Fuel (SAF).</p> <p>The Applicant does not provide any quantification of how much household waste these three waste-to-SAF plants (i.e. those associated with Fulcrum, Altalto, and Lighthouse Green Fuels) might require as feedstock in the event they go ahead.</p> <p>In REP2-066 paragraph 166 UKWIN estimated that “Waste-to-SAF projects that have been awarded funds under the Government's Advanced Fuel Fund are expected to use approximately 600,000 tonnes of municipal residual waste would be available as a fuel in 2027, rising to 2.1 million tonnes by 2042”.</p> <p>This is based on 600ktpa for Fulcrum from 2027, 500ktpa for Altalto from 2028, and 1,000ktpa for Lighthouse Green Fuels from 2028 (with the years based on the UK Government's announcement and the figures based on statements made by the operators).</p> <p>The Applicant's comments at 5.2.28 of the D2 WFAA seems to be referring to capacity within the context of an appraisal of alternatives to the proposed Medworth incinerator (i.e. whether or not the waste-to-SAF schemes represent “a credible alternative to the Proposed Development”), whereas UKWIN's evidence is focused on the issue of the waste-to-SAF projects competing for the same feedstock, and more</p>	<p>overcapacity) of the Applicant's comments on Written Representations: Part 2 – Other Interested Parties (Volume 11.3) [REP2-040].</p>



ID	Topic/Para	Response	Applicant Comment
UK60	Waste to SAF capacity 132.-135.	<p>broadly of incineration capacity competing with waste-to-SAF capacity and vice versa.</p> <p>The Applicant's D2 WFAA neither assessed the impact of this waste-toSAF capacity becoming available nor the potential impact of their proposed capacity on the waste available for those projects within the national waste context.</p> <p>Within a more local context, given that the Medworth plant is intended to treat RDF as part of its feedstock, the waste used to create the RDF could be coming from outside the WFAA area and the Medworth plant could be competing with other means of treating that same residual waste, including those waste-to-SAF projects.</p> <p>The Applicant notes at 5.2.28 that there are a number of barriers to investment for waste-to-SAF projects.</p> <p>The UK Government has attempted to address some of those barriers through grant funding. However, by creating or exacerbating incineration overcapacity at a national level, the Medworth plant could be posing additional barriers that could threaten the viability of waste-to-SAF projects.</p> <p>The Applicant notes that waste-to-SAF capacity might not come online until 2027, but that is roughly when (or even before) the Medworth plant would become operational. As such, at that time</p>	<p>The fundamental focus of the WFAA (Volume 7.3) [REP2-009] is on the potential for the Proposed Development to divert suitable residual waste material from being sent to landfill. The assessment considers existing waste management capacity in order to ensure that it does not rely on diverting waste from existing energy recovery operations. The WFAA (Volume 7.3) [REP2-009] demonstrates that there are 2.4 million tonnes of suitable residual waste that is currently disposed of to landfill which could be managed further up the hierarchy by the Proposed Development.</p> <p>In addition to this, it must be clarified that the Proposed Development is designed to accept household, commercial and industrial waste. This is in contrast to SAF projects that will be limited to accepting processed RDF. Furthermore, there are no proposed SAF projects within the Study Area of the local waste fuel availability assessment.</p>



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UK61	Waste to SAF capacity 136.-140.	<p>Medworth could be directly competing with such plants for feedstock.</p> <p>It is also worth noting that the Applicant's reference, at the fourth bullet of paragraph 5.2.28, to "the impact of ROC expiry" may be misleading for several reasons.</p> <p>Firstly, as far as UKWIN is aware, contracts for Renewable Obligation Certificates (ROCs) run for 20 years from the date of accreditation, meaning that currently operational accredited schemes can expect to continue to receive ROCs for the next decade or more.</p> <p>Secondly, the ROCs programme is not the only support mechanism in place for such plants. Other forms of support include Contracts for Difference (CfD), as is the case for the Drakelow "ACT" plant.</p> <p>Thirdly, the idea that gasification plants would rather shut down than compete with waste-to-SAF seems farfetched. A large proportion of the costs of thermal treatment plants lies with construction, and as such it seems unlikely that operators would simply shut down due to competition.</p> <p>However, the Applicant's argument that there could be a 'fight for feedstock' is plausible and the argument supports UKWIN's position that allowing the incineration capacity at Medworth could make waste-to-SAF plants less likely to</p>	<p>The Applicant is of the view that without the benefit of ROC income some of those facilities that were constructed on the basis of receiving ROCs could go into a negative cash flow situation, in which case the owners would be most likely to close them down. In the event of a "fight for feedstock", a situation which has been witnessed in Germany, facilities would decrease the gate fees they offer to waste companies in order to attract the waste, thus further exacerbating the negative cash flow and increasing the likelihood of closure.</p> <p>The Applicant is of the view that turning the energy in the waste into electricity and heat for local users is more useful and environmentally friendly than turning it into aviation fuel, where its use would not be capable of carbon capture (i.e., on an aeroplane).</p> <p>Waste to SAF uses gasification technology with subsequent conversion of the syngas into a liquid fuel. The current SAF projects are in the early FEED stages and it is not clear if or by when these projects will be realised on large scale. The report <i>Advanced Gasification Technologies - Review and Benchmarking Summary report BEIS Research Paper Number 2021/038 (2021)</i> concludes that:</p> <p><i>"Many of the barriers to deployment faced by AGTs could be overcome with further time and financial investment. However, due to the number, nature and magnitude of barriers identified there is considerable uncertainty in</i></p>



ID	Topic/Para	Response	Applicant Comment
		<p>come forwards, despite the importance of these waste to-SAF projects to the Government's Jet Zero ambitions.</p>	<p><i>relation to the achievability of successfully deploying multiple large scale AGTs in the UK by 2035, as discussed with BEIS during this assignment. Furthermore, some of the barriers identified have potentially fundamental implications to the longterm viability of some, or all, of the AGT configurations considered."</i></p> <p>Since the feedstock variability of the residual waste is a major barrier for operation of gasification facilities, it seems more likely that only a fraction of the residual waste or those recyclates which are unsuitable for recycling into new products will be used as feedstock for future waste to SAF facilities.</p> <p>The article <i>Life cycle analysis of gasification and Fischer-Tropsch conversion of municipal solid waste for transportation fuel production (Journal of Cleaner Production) (2022)</i> analyses the Climate Impact of SAF production out of Residual Waste. The required pre-treatment for the RDF production is energy intensive and 1 tonne of waste generates only 480 kg of RDF with a significant fraction of the Residual Waste needing further treatment or landfilling. The overall Climate Impact is only reduced in comparison to the use of fossil fuel in the aviation industry if Carbon Capture and Storage is integrated in the process:</p> <p><i>"The CIs of MSW-derived FT fuels (80–105 gCO₂e/MJ) may exceed those of petroleum diesel (91 gCO₂e/MJ), and the high fossil fraction in MSW tends to lead to high CIs. ... The CCS option can capture CO₂ from the fuel production stage and provides significant emission reduction benefits. With CCS, the base case has a CI of</i></p>



ID	Topic/Para	Response	Applicant Comment
UK62	Waste to SAF capacity 141.-146.	<p>As set out on paragraph 2.9 of the UK Government's 17th of April 2023 Response to the independent report on Developing a UK Sustainable Aviation Fuel Industry: "...a key determinant in the effective supply of low carbon fuels, such as SAF, is the availability of sufficient quantities of suitable feedstocks to produce them. Availability is limited by competition for feedstocks across the wider energy and transport sector".</p> <p>This comments on the independent report published alongside the Department for Transport's response, and presumably responds to the statement on page 9 of that independent report that: "...some of the resources that SAF could use have an alternative application that is incremental to and (if unabated) higher carbon than other technologies (for example waste incineration to generate electricity) but have scarcity value as feedstocks in hard to decarbonise sectors..." and the statement on page 25 of the report that: "Waste and other biogenic feedstocks should be prioritised to address the challenges of the hardest to abate sectors".</p> <p>As such, rather than stating that sourcing waste feedstock for waste-to SAF would not be an issue because waste-to-SAF could simply displace</p>	<p><i>36 gCO₂e/MJ (a 60% reduction compared to that of petroleum diesel) ..."</i></p> <p>There are no proposed/ potential SAF projects within the Study Area of the updated WFAA (Volume 7.3) [REP2-009]. Furthermore, SAF requires treated RDF, representing a small proportion of the waste fuel for the Proposed Development. The Proposed Development would therefore not be competing for the same residual waste stream. In the event emerging SAF projects wished to rely upon sourcing waste from the Study Area defined in the WFAA (Volume 7.3) [REP2-009], it is considered that this would not comply with the proximity principle.</p> <p>Treatment of waste to produce SAF is not regarded as being 'superior' to the treatment of waste to recover heat and power – indeed, both methods are, in planning policy terms, equal – with both being positioned at the same point in the waste management hierarchy.</p>



ID	Topic/Para	Response	Applicant Comment
		<p>gasification capacity, the Government and the associated independent report highlight how the availability of waste feedstock is a concern with respect to the development of UK's waste-to-SAF sector.</p> <p>Thus, the Applicant's failure to assess the impact of their proposed capacity on the emerging waste-to-SAF sector, within the context of national EfW overcapacity, constitutes yet another serious failing of the D2 WFAA, which serves to demonstrate how the Applicant's suggested approach is out of step with Government thinking on this matter. 145. Furthermore, the Applicant's acknowledgement of a potential 'fight for feedstock' raises the concern that allowing the Medworth plant's proposed 625,600 tonnes of new waste incineration capacity could end up competing with recycling.</p> <p>This weakens the Applicant's already unsubstantiated case that their plant would only be treating waste which would otherwise be landfilled or exported.</p>	
UK63	<p>Impact of changes in waste composition on waste processing capacity</p> <p>147.-151.</p>	<p>Paragraph 5.1.19 of the D2 WFAA states: "Latest data in respect of waste management capacity for residual HIC waste is set out in the Tolvik report entitled 'UK Energy from Waste Statistics – 2021', (May 2022). Specifically, Figure 6 of this report states that EfW throughputs at the end of 2020 were 14.07 million tonnes, which increased to 14.85 million tonnes by the end of 2021..."</p>	<p>The Applicant notes that these comments refer to part of the WFAA that will be updated following publication of the updated version of Tolvik's <i>UK Energy from Waste (EfW) Statistics – 2021</i> was published in May 2023 (covering 2022 capacity data). As agreed at Issue Specific Hearing 3, an updated version of the Waste Fuel Availability Assessment will be produced at Deadline 5 to reflect the most up to date capacity position.</p>



ID	Topic/Para	Response	Applicant Comment
UK64	Impact of changes in waste composition on	<p>This means that the Applicant, at paragraph 5.1.19 of the D2 WFAA, provides information on the quantity of waste.</p> <p>When comparing how much waste was treated at incinerators in 2021 against the total permitted capacity, it is important to take into account how:</p> <p>a) some of those plants were still in commissioning during 2021 and/or may only have been fully operational for part of the year, meaning that the amount treated in 2021 did not reflect the capacity potential of those plants; and</p> <p>b) changes in waste composition (and associated changes in calorific value (CV) of the feedstock) might result in those EfW plants treating a higher quantity of waste in the future.</p> <p>Paragraph 5.1.20 of D2 WFAA states: "It should be noted however, that the Tolvik 2022 report draws a distinction between 'operational' capacity and 'headline' capacity – the latter including projects seeking planning consent, projects which have planning consent or for which planning consent has been refused but some form of appeal/new submission is expected".</p> <p>This concept is relied upon by the Applicant in their Table 5.2, which seems to contrast 'Operational capacity' with 'Headline capacity'.</p>	As agreed at Issue Specific Hearing 3, an updated version of the Waste Fuel Availability Assessment will be



ID	Topic/Para	Response	Applicant Comment
	waste capacity 152.-157.	<p>processing the difference between the 'Total Permitted Capacity' figure of 21.67Mt for 2021 in Figure 2 of Tolvik's 2022 report (for 2021 EfW Statistics) and the 19.4Mt capacity figure set out in Figure 32 in that report.</p> <p>This D2 WFAA statement from the Applicant is misleading, and appears to conflate two different issues: a) the extent to which it is reasonable to rely on facilities' permitted capacity and the extent it is fair to assume that future incineration rates will deviate from that 'headline' figure; and b) consideration of capacity which has yet to enter construction. 24</p> <p>Figure 2 of Tolvik's report on 2021 EfW Statistics report is entitled 'Headline Capacity (as at December 2021)' with the accompanying text stating that: "The Total Permit Capacity of those EfWs which were fully operational or in late stage commissioning was 17.31Mtpa with a further 4.37Mtpa of EfW capacity either in construction or about to commence construction".</p> <p>As such, the 'Total Permit Capacity' figure for the end of 2021 of 21.67Mt represents only plants that were fully operational or in late stage commissioning at the end of 2021. Importantly, the figure does not include capacity that was "consented and not built and in planning" as implied by Table 5.2 of the D2 WFAA.</p> <p>Indeed, as stated by Tolvik, Figure 32 of Tolvik's 2021 EfW Statistics report, i.e. which shows the</p>	<p>produced at Deadline 5 to reflect the most up to date capacity position.</p> <p>Notwithstanding this, as noted in paragraph 5.1.20 of the updated WFAA (Volume 7.3) [REP2-009]:</p> <p><i>"..... the Tolvik 2022 report draws a distinction between 'operational' capacity and 'headline' capacity – the latter including projects seeking planning consent, projects which have planning consent or for which planning consent has been refused but some form of appeal/new submission is expected. The report identifies a further 2.3million tonnes of 'headline' capacity (taking the total operational + headline capacity to 21.7 million tonnes beyond 2026). Importantly though, the report highlights that for projecting future EfW capacity in any analysis of the UK residual waste market, this is more appropriately measured by the operational capacity only."</i></p>



ID	Topic/Para	Response	Applicant Comment
UK65	Impact of changes in waste composition on waste processing capacity 158.-160.	<p>19.4Mt figure, is “based upon the EfWs listed in Appendix 1”, and that list does not include any facilities that had yet to enter construction as of December 2021.</p> <p>Tolvik’s 19.4Mt figure for 2026 was in effect an assumption that around 90% of historically permitted capacity which was operational or under construction in December 2020 would be available to process waste in 2026. It was not an estimate of how much might be available if additional capacity came online.</p> <p>As far as UKWIN is aware, Tolvik’s projected 19.4Mt ‘UK Operational Capacity’ figure for 2026 (which the Applicant uses for 2030 in their D2 WFAA) assumes a consistent calorific value of the waste to be used as incinerator feedstock. Paragraph 5.1.20 of the D2 WFAA states: “...this WFAA places reliance operational rather than headline capacity”. As such, the WFAA fails to acknowledge that looking at historic rates of waste processed may underestimate future operational capacity because changes in composition can reduce calorific value and therefore increase feedstock requirements.</p> <p>UKWIN set this out in detail at paragraphs 63-74 of REP1-096, where we noted that feedstock changes in Wales (where the national recycling rate for municipal solid waste (MSW) exceeded 65% in 2021) meant that the maximum capacity of the Cardiff incinerator was increased from</p>	<p>The WFAA (Volume 7.3) [REP2-009] has considered the extent to which the residual waste derived from the municipal sector in the Study Area could change in composition. Specifically, Appendix E of the updated WFAA (Volume 7.3) [REP2-009] considers the Waste Collection Authority arrangements across the Study Area. This demonstrates that the majority of the Authorities already separately collect food waste and mixed dry recyclables including plastics. In this regard, it is not considered that there would be a significant change to the composition of the municipal element of the wider residual waste stream that could potentially be treated by the Proposed Development, such as may be seen through the implementation of food waste recycling.</p> <p>It is also important to note that national recycling targets are for municipal waste. They are not aligned to the larger commercial and industrial waste sector – the sector from which the Proposed Development would attract the majority of its waste fuel. In this regard, it is not anticipated</p>



ID	Topic/Para	Response	Applicant Comment
UK66	March updates to EN-1 and EN-3 161.-164.	<p>350,000 tpa to 425,000 tpa because of the "lower average calorific value of waste is being generated - meaning more waste is needed to maintain the energy output" and that the expectation is that England will follow a similar trajectory to that traversed by Wales, with more waste feedstock required to feed a given incinerator.</p> <p>Paragraph 2.2.17 of the D2 WFAA stated: "NPS EN-1 and EN-3 are presently undergoing review, with drafts published for consultation in September 2021. The consultation ended on 29 November 2021, but the Government has not yet published its response. The emerging draft NPS EN-3 includes some subtle changes to policies for EfWs – most notably that:</p> <ul style="list-style-type: none"> • A new EfW must not result in over capacity of EfW waste treatment at a national or local level (paragraph 2.10.5). • An application for a new EfW must set out the extent to which it would be compatible with and support long-term recycling targets, taking into account existing treatment capacity and capacity already in development (paragraph 2.17.4)". <p>Paragraph 2.2.18 of the D2 WFAA stated: "The emerging draft NPS and other national and local policies (which are outlined in the remainder of this section) will be relevant and important considerations that the Secretary of State will consider in reaching his decision (s.104 (2) of the Planning Act 2008)".</p>	<p>that there would be a substantial change to the composition of the commercial and industrial residual waste stream.</p> <p>The Applicant has provided a full commentary on how the Proposed Development complies with the revised draft NPS in the National Policy Statement Tracker Rev 2 (Volume 9.13) [REP3-031]. The Applicant is confident that the Proposed Development accords with the current NPS and the revised draft NPS EN-1 and EN-3.</p>



ID	Topic/Para	Response	Applicant Comment
		<p>The Applicant is correct to highlight the relevance and importance of the principles set out in paragraphs 2.10.5 and 2.17.4 of the September 2021 draft of EN-3.</p> <p>One planning professional who has worked on behalf of Applicants for EfW NSIPs commented on the significance of the draft EN-3 requirement, noting how "an energy from waste plant must not result in overcapacity of EfW waste treatment at a national or local level" was "not as favourable [for the EfW industry] as had been hoped", observing that: "...this wording would mean they [promoters of new EfW schemes] will need to be robust in making the case that there is demand for the project".</p> <p>UKWIN's REP2-066 set out how contradictions with policy statements such as those found at paragraphs 2.10.5 and 2.17.4 of the September 2021 draft of EN-3 indicate how the proposed Medworth development conflicts with key elements of current and emerging Government policy which seek to promote reduction, re-use and recycling over EfW and which seek to avoid EfW overcapacity at a local and national levels.</p>	
UK67	<p>March updates to EN-1 and EN-3</p> <p>166-172</p>	<p>On 30th March 2023 the UK Government published its responses to the consultations on the September 2021 versions of EN-1 and EN-3 and launched a new consultation on updated drafts of EN-1 and EN-3.</p>	<p>See response to UK66.</p>



ID	Topic/Para	Response	Applicant Comment
		<p>Paragraphs 3.7.7 and 3.7.7 (page 15) in the March 2023 draft of EN-3 are updated versions of the aforementioned paragraphs 2.10.4 and 2.10.5 of the previous draft. They appear under the heading of 'Factors Influencing site selection and design' and the sub-heading of 'Waste treatment capacity'.</p> <p>The March 2023 draft updates the earlier 2021 proposals as follows:</p> <p>2.10.4 3.7.6 As the primary function of EfW plants is to treat waste, applicants must demonstrate that proposed EfW plants are in line with Defra's policy position on the role of energy from waste in treating waste from municipal waste or commercial and industrial sources.</p> <p>2.10.5 3.7.7 The proposed plant must not compete with greater waste prevention, re-use, or recycling, or result in over-capacity of EfW waste treatment at a national or local level."</p> <p>As such, rather than dropping the previous language and the requirement for applicants to provide a 'robust' demonstration of demand for need for proposed new EfW capacity, we see how the Government's updated version of draft EN-3 strengthens the language regarding the potential for EfW to harm waste prevention, re-use, and recycling.</p> <p>The Government's latest consultation is 'more focused' on a narrow range of topics, none of</p>	



ID	Topic/Para	Response	Applicant Comment
UK68	March updates to EN-1 and EN-3 173.-179.	<p>which relate to statements regarding the need to avoid incineration overcapacity or to the need to prevent incineration competing with the top tiers of the waste hierarchy.</p> <p>As such, it appears that the Government's position on these matters remains clearly in line with previous Government statements made to Parliament as highlighted by UKWIN's Written Representation [REP2-066] which sets out the Government's stated position that incineration overcapacity needs to be avoided.</p> <p>This position is made explicit in the Government's March 2023 response to the previous consultation (an extract of which accompanies this submission).</p>	See response to UK66.



ID	Topic/Para	Response	Applicant Comment
		<p>there is over-capacity for EfW and called for a moratorium”.</p> <p>Despite these pleas from the incineration industry about the supposed urgency to allow new incineration capacity and the ‘apparent’ conflict between restricting incineration and the principles of EN-1 about not placing limits on new energy infrastructure, the Government decided not only to maintain statements about avoiding incineration overcapacity, but to strengthen those statements and to add further such statements.</p> <p>This explains why the Government explicitly prioritises protecting the top tiers of the waste hierarchy over and above adding to electricity generation capacity, and why incineration which could compete with the top tiers of the hierarchy and/or result in overcapacity ought to be refused irrespective of any contribution to energy generation capacity.</p> <p>The Government’s prioritisation of residual waste reduction over energy generation is further reinforced by the introduction of two new paragraphs in the Government’s revised EN-3 (paragraphs that, like the updated paragraphs 3.7.6 and 3.7.7, are not the focus of further consultation).</p> <p>The first of these new paragraphs (on page 18, under the ‘Technical considerations’ heading and the ‘Commercial aspects of waste combustion plants’ sub-heading) reads: “3.7.29 Applicants</p>	



ID	Topic/Para	Response	Applicant Comment
		<p>must ensure EfW plants are fit for the future, do not compete with greater waste prevention, re-use, or recycling and do not result in an over-capacity of EfW waste treatment provision at a local or national level".</p> <p>The second of these new paragraphs (on page 21, under the 'Impacts' heading and "Waste management' sub-heading) states: "3.7.55 Applicants must ensure proposals do not result in an over-capacity of EfW waste treatment provision at a local or national level".</p> <p>These two new paragraphs unambiguously place the burden of proof onto the Applicant.</p>	
UK69	<p>March updates to EN-1 and EN-3</p> <p>180.-184.</p>	<p>UKWIN would also like to draw attention to paragraph 3.7.45 of EN-3 (March 2023) which retains the new paragraph from EN-3 (2021) which stated: "Applicants should set out the extent to which the generating station and capacity proposed is compatible with, and supports long-term recycling targets, taking into account existing residual waste treatment capacity and that already in development".</p> <p>EN-3 (2011) paragraph 2.5.67 refers to 'recovery targets' and this includes recycling (i.e. materials recovery) targets, but its successor paragraph in EN-3 (March 2023), i.e. paragraph 3.7.45, explicitly places the burden of proof on the applicant to demonstrate that their proposal</p>	See response to UK66.



ID	Topic/Para	Response	Applicant Comment
		<p>would be compatible with, and would support, long-term recycling targets.</p> <p>It is important to consider the potential for EfW overcapacity within the context of the UK Government's targets to halve residual waste by 2042 and to reduce municipal residual waste per person by 29% by 2027, especially in light of the EN-1 (March 2023) statement on the need to consider duties under the Environment Act 2021 in relation to environmental targets (which includes the waste reduction targets, as set out below and in the accompanying extract).</p> <p>Page 54 of EN-1 (March 2023) states (under the 'Assessment Principles' section and 'Environmental Principles' sub-section): "4.2.29 Through the Environment Act 2021 the Government has set 13 legally binding targets for England covering the areas of: biodiversity; air quality; water; resource efficiency and waste reduction; tree and woodland cover; and Marine Protected Areas. The Secretary of State must consider duties under the Environment Act 2021 in relation to environmental targets and have regard to the policies set out in the Government's Environmental Improvement Plan for improving the natural environment".</p> <p>The evidence set out above supports the conclusion set out in UKWIN's Written Representation [REP2-066] that the Medworth proposal conflicts with both extant and emerging</p>	



ID	Topic/Para	Response	Applicant Comment
UK70	Waste Hierarchy Projections 185.-191.	<p data-bbox="719 336 1301 395">national policy statements in relation to issues of 'waste need'</p> <p data-bbox="719 443 1301 687">It appears from statements made by the Applicant on electronic pages 95 and 96 of the D2 WFAA [REP2-009] that the Applicant is relying on their draft proposed DCO Requirement 14 to "ensure that the Proposed Development complies with the waste hierarchy" and allay concerns about the potential waste hierarchy impacts of the scheme raised by stakeholders.</p> <p data-bbox="719 719 1301 874">A similar statement is made by the Applicant in their REP2-019 response to ExQ1 PND.1.5 where the Applicant claims: "Compliance with the waste hierarchy is secured via Requirement 14 in the Draft DCO (Volume 3.1)".</p> <p data-bbox="719 906 1301 1118">Such an approach is deeply flawed, as Requirement 14 does little more than require that "the types of waste and permitted EWC codes to be accepted at the authorised development as specified by the Environmental Permit" which would already be a requirement under the permitting regime.</p> <p data-bbox="719 1150 1301 1305">The EWC code does not prevent mixed waste from being incinerated which might otherwise have been collected in a different manner to divert waste to recycling or processed in a manner to extract additional recyclates.</p>	<p data-bbox="1323 443 1998 624">Requirement 14 of Schedule 2 of the Draft DCO (Volume 3.1) [REP3-007] is based on Requirement 16 of Schedule 2 of The Riverside Energy Park Order 2020. The Secretary of State has accepted that a Requirement is an appropriate and suitable way to secure compliance with the waste hierarchy.</p> <p data-bbox="1323 655 1998 810">The EfW CHP Facility will also be governed by the terms of the Environmental Permit. This approach ensures that there is no avenue for the EfW CHP Facility to accept waste that could be managed higher up the waste hierarchy.</p> <p data-bbox="1323 842 1998 995">In practice, the Proposed Development will accept waste from sources that have already undertaken sorting to remove recyclable material, either by separated roadside collection or having been managed at a dedicated sorting facility or similar.</p>



ID	Topic/Para	Response	Applicant Comment
UK71	Waste Hierarchy Projections 192.-194.	<p>UKWIN notes the North Lincolnshire Examining Authority's (ExA's) recent criticisms of a similarly worded draft Requirement proposed for the North Lincolnshire Green Energy Park (NLGEP) as part of the current NSIP Examination (Planning Inspectorate Ref: EN010116).</p> <p>The NLGEP ExA's Schedule of recommended amendments to the Applicant's draft DCO Revision 5 [NLGEP REP6-004], published on 6th April 2023, recommends the removal of a corresponding requirement (which had been NLGEP dDCO Requirement 15) on the basis that: "Requirement 15 as drafted does not meet the tests of precision, necessity, or enforceability in the ExA's view".</p> <p>To provide context for the NLGEP ExA's recommendation we set out below a number of comments from North Lincolnshire Council (NLC) and UKWIN, made as part of the NLGEP Examination, regarding the proposed NLGEP Waste Hierarchy Scheme.</p>	Please refer to the Applicant's response to UK70.



ID	Topic/Para	Response	Applicant Comment
		<p>Based on these extracts, set out below, it should be clear that not only is a Waste Hierarchy Scheme requirement unlikely to protect the hierarchy because it does not provide much additionality over the Waste Regulations 2011 requirements, but that the EWC Code system does not ensure that the top tiers of the waste hierarchy could not be adversely impacted by local, regional or national EfW overcapacity.</p> <p>This leads to the conclusion that protecting the waste hierarchy by not allowing excess capacity from being consented is necessary, and that this is the role of the planning system rather than the permitting system</p>	
UK72	<p>Submission from North Lincolnshire Council (NLC) to the NLGEP Examination regarding the NLGEP Waste Hierarchy Scheme</p> <p>195.</p>	<p>The following quotes are taken from the North Lincolnshire Council's (NLC's) responses to the NLGEP ExA's second written questions (ExQ2) Issued 2nd March 2023:</p> <p>Q2.17.0.3 Draft Requirement 15 the waste hierarchy scheme (WHS) 1. Does the use of the terms 'reasonably possible' or 'encourage' provide precision that allow the LPA to enforce the terms of Requirement 15 if necessary?</p> <p>NLC do not consider that these terms are precise or would allow for enforcement of the requirement. We are currently discussing the Articles and Requirements presented in the</p>	Please refer to the Applicant's response to UK70.



ID	Topic/Para	Response	Applicant Comment
		<p>dDCO in order to provide an updated position on these matters as part of the SoCG.</p> <p>2. The effectiveness of the WHS would appear to rely on recyclable or re-usable waste being removed by persons upstream of the development as it has no separation facilities. Does it follow that this relies upon contractual agreements between the waste transferor and the undertaker as indicated at R15 b) and d)?</p> <p>NLC would agree that the effectiveness of the WHS [Waste Hierarchy Scheme] would appear to rely on recyclable or re-usable waste being removed by persons upstream of the proposed development. This is not something that would be enforceable by the LPA and would rely upon the contractual agreements between the waste transferor and the undertaker.</p>	
UK73	<p>Extracts from UKWIN's ISH3 Post-hearing submissions to the NLGEP Examination regarding the NLGEP Waste Hierarchy Scheme</p> <p>196.-222.</p>	<p>Please refer to Examination document REP3-050 which sets out the relevant extracts.</p>	<p>Please refer to the Applicant's response to UK70.</p>



3. Comments on Deadline 3 submissions from Jenny Perryman

Table 3.1 Comments on Deadline 3 submissions from Jenny Perryman [REP3-047]

ID	Topic/Para	Response	Applicant Comment
Adverse Impacts on Human Physical and Mental Health			
JP01	Human Health	There is a lack of robust evidence showing 'locational implications' that health concerns have been considered particularly with regard to the local community which has higher than national average health issues.	<p>The Applicant's Environmental Statement (Volumes 6.1-6.4) includes consideration of human health. The scope and methodology was developed in consultation with statutory consultees which included Public Health England (now the UKHSA).</p> <p>ES Chapter 16 health (Volume 6.2) [APP-043] presents the assessment and the conclusion that effects would not be significant. Specifically with regard to air quality ES Chapter 8 (Volume 6.2) [APP-035] includes as Annex H to Appendix 8B (Volume 6.4) [REP2-006] a Human Health Risk Assessment. This concludes that effects would not be significant.</p>
JP02	Human Health	A lack of evidence does not mean a lack or risk.	The Environmental Statement provides evidence to demonstrate that the Proposed development would not give rise to significant effects upon human health. The UKHSA has confirmed that it is in agreement with the Applicant's methodologies and conclusions (Statement of Common ground between Medworth CHP Ltd and the UK Health Security Agency rev 2 Volume 9.11 [REP2-013]).
JP03	Human Health	Comments made on the role of the UKHSA and its predecessor organisations with regard to a lack of independent studies to support its position.	Noted.



ID	Topic/Para	Response	Applicant Comment
JP04	Human Health	Comments made on the role of the Environment Agency.	Noted.
	Human Health	The IP calls into question the fact that the only figures supplied are by the Applicant and the independence of the environmental statement.	The Applicant's environmental impact assessment which is reported within the Environmental Statement is a robust assessment of the environmental effects that would arise as a result of the construction, operation and decommissioning of the Proposed Development. The EIA was prepared by Wood Group UK Ltd, now WSP. WSP is registered with the Institute of Environmental Management and Assessment and employs consultants with the appropriate experience and qualifications. The list of consultants undertaking the environmental assessments reported within the Environmental Statement can be found in ES Chapter 1 Introduction, Appendix 1A List of Competent Experts (Volume 6.4) [APP-068] .
JP05	Human Health / Air Quality	Reference to WHO guidance on PM2.5.	The dispersion modelling detailed in Deadline 2 Submission - 6.4 Environmental Statement Appendix 8B: Air Quality Technical Report [Rep 2-006] shows that the current and predicted future (opening year) concentrations of PM _{2.5} are below the new annual mean UK PM _{2.5} target of 10µg/m ³ (to be achieved by 2040) at the majority of receptors. Where the target is predicted to be exceeded, this is because of existing pollution sources and the impact from the chimney emissions is 0.01µg/m ³ (R53).
JP06	Human Health	That notice cannot be taken of the UKHSA or EA positions with regard to the Proposed Development and the IP explains how it reaches this conclusion.	Noted.



ID	Topic/Para	Response	Applicant Comment
JP07	Human Health	Comments and quotes taken from MVV in relation to its existing Devonport (Plymouth) facility.	All EfW facilities are operated under an environmental permit, which sets limits for specific compounds. The Applicant publishes weekly emissions data for its Devonport (Plymouth) and Baldovie (Dundee) facilities on its website. Very occasionally, unusual operating conditions can result in an exceedance; these are always reported to the EA (England) or SEPA (Scotland) and this information is therefore publicly available. Where the exceedance is for a half-hourly period, it can be compensated for during the next or subsequent half-hourly period; this ensures that daily limits are not breached.
JP08	Human Health	<p>Reference to a number of studies looking into the effects on health of populations living close to energy from waste facilities.</p> <p>That despite the evidence the UK's Health Protection Agency, and Defra concluded that incinerators were 'safe', or 'that there was no evidence for a link between the incidence of disease and the current generation of incinerators'. That this latter Defra comment was criticised by the Royal Society.</p>	<p>It is not appropriate for the Applicant to comment on the competence or otherwise of the organisations referred to by the IP.</p> <p>The UKHSA is however a statutory consultee for all Nationally Significant Infrastructure Projects and as such the Applicant had a statutory duty to consult with the organisation. Statutory consultees are listed within Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulation 2009.</p> <p>The UKHSA website defines its role as being '<i>responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats</i>'.</p>
JP09	Human Health	The IP provides additional justification as to why the relevant agencies are not fulfilling their duties and that the Inspector (sic) should request from the UKHSA the actual 'evidence-based professional, scientific expertise and support' they relied on the	It is not appropriate for the Applicant to comment on the competence or otherwise of the organisations referred to by the IP.



ID	Topic/Para	Response	Applicant Comment
		conclude their position for the proposed development.	



4. Comments on Deadline 3 submissions from Mervyn Sargeant Hair World UK Ltd

Table 4.1 Comments on Deadline 3 submissions from Mervyn Sargeant Hair World UK Ltd [REP3-048]

ID	Topic/Para	Response	Applicant Comment
MS01	Compulsory Acquisition Para 2	Our premises are directly opposite the proposed incinerator, I fail to see why there is a need to compulsory purchase Algores Way. All of the construction traffic should be confined to using a new purpose built entry route and not dealt with by Algores Way which is already over busy and difficult to negotiate with the existing traffic.	Matters raised by the IP are addressed by the Applicant in Response AW01 to AW05 in the Summary of Oral Submissions made by Interested Parties at Open Floor Hearings 1 and 2 and the Applicant's Response (Volume 2.23) [REP1-056] . Please also see the Applicant's Technical Meeting Note on Traffic and Transport – Algores Way contained in Appendix 9.2A of the Applicant's response to the Relevant Representations – Part 9 Appendices [REP1-036] which explains that for the majority of the 36-month construction period, HGV/LGV movements would be lower than the current permitted levels for the site.
MS02	Compulsory Acquisition Para 3	Many of the patients that we see for the counties hospitals need to have a vehicle access directly to our entrance door as they are frail and undergoing chemotherapy, this would therefore have an enormous effect on those who need to visit us.	See Applicant's response to Para 2, above.
MS03	Compulsory Acquisition / Consultation Para 3	My company has never ever been contacted by Medworth regarding the compulsory purchase of Algores Way, in fact, we have received no information regarding any of their plans. I also note that the compulsory purchase was for some reason	It is confirmed that the IP submitted a Statutory Consultation response using the online form on the Applicant's website on 12/07/2021. The IP made a submission following the Open Floor Hearings (reference ID15898) [REP3-048] in which he confirmed receipt



ID	Topic/Para	Response	Applicant Comment
		introduced at a much later date during this application process.	<p>of a hand delivered letter from the Applicant dated 10th February 2023. The letter clarified that the Applicant was seeking compulsory acquisition powers at the time to regularise access arrangements along the unadopted section of Algores Way.</p> <p>However, following ISH1, a change has been made to the compulsory acquisition proposals for Algores Way, and the Applicant is now requesting only rights of access over the unadopted section of Algores Way. This is because CCC has confirmed that it does not wish to adopt the unadopted section of Algores Way [REP1-067].</p>
MS04	Traffic and Transport Para 4	Algores Way is currently a very busy industrial road and totally unsuitable for using as a route for ANY construction traffic. It currently struggles to cope with the existing business traffic without a massive influx of additional lorries and workmen constructing a Mega Incinerator over a four year period. This would have a huge impact on all the businesses in Algores Way and I believe many would find it too difficult to continue trading.	<p>See Applicant's response to Para 2, above.</p> <p>The period for construction is 36-months, see Section 3.7.2, ES Chapter 3: Description of the Proposed Development (Volume 6.2) [APP-030]. No construction related HGV traffic will be using Algores Way after this time.</p>
MS05	Compulsory Acquisition Para 4	I therefore strongly oppose any compulsory purchase of Algores Way and any use of Algores Way for any construction works by Medworth or its contractors should this flawed application be approved.	See Applicant's response to Para 2, above.



5. Comments on Deadline 3 submissions from Oliver Mackie of James Mackie UK Ltd

Table 5.1 Comments on Deadline 3 submissions from Oliver Mackie of James Mackie UK Ltd [REP3-049]

ID	Topic/Para	Response	Applicant Comment
OM01	Construction works Para 4	To set the record straight I would explain that I did meet with Mr Carey at the end of February after the first round of inspectorate meetings to discuss the reality of disruption to my business through MVV's activities on Algores way. This meeting was somewhat clarifying although Mr Carey could not speak to the disruptions which would be caused during construction as he is not a builder, he did want to send his head of construction to our facility so I could discuss it with the actual builders although I received no further contact regarding this.	After meeting the General Manager of James Mackle UK Limited on 23 February 2023, to address concerns about the impacts from construction activities on Algores Way, the Applicant's Construction Manager prepared a "Construction: Early Works Method Statement – Algores Way (See Appendix A of this document)". This method statement was issued to the IP on 04 April 2023 together with an offer for a future meeting to review and discuss matters. In response, on 05 April 2023 the IP agreed to a meeting on 12 April 2023, however this was cancelled due to the IP's prevailing personal circumstances. The Applicant plans to rearrange this meeting with the IP; date to be confirmed.
OM02	Construction works Para 5	I did have another meeting planned with Mr Carey this week although I cancelled that through email due to the birth of my son.	See response to Para 4, above.
OM03	General comment Para 6	I would just like to make sure that there were no misrepresentations of the contact I have had with Mr Carey and to again state that I and my business are still fully in opposition to the construction of his incinerator across from our food manufacturing factory.	Comments noted and we draw the IPs and ExAs attention to response RE05, AW01 to AW05 and LW02 in the Summary of Oral Submissions made by Interested Parties at Open Floor Hearings 1 and 2 and the Applicant's Response (Volume 2.23) [REP1-056] .



6. Comments on Deadline 3 submissions from Wayne Cook

Table 6.1 Comments on Deadline 3 submissions from Wayne Cook [REP3-051]

ID	Topic/Para	Response	Applicant Comment
WC01	Traffic and Transport	Mr Cook considers that some of the arguments raised by some people to be unfounded especially in relation to road and traffic networks. He raises the current condition of the highways and provides his opinion with regard to the lack of current maintenance. He also comments that Broad End Road is no more dangerous (in terms of accidents) than other roads and does not require a roundabout.	Mr Cook's comments are noted. His reference to the proposed roundabout at Broad End Road is understood to relate to CCC's proposals to undertake improvements to the Broad End Road/A47 junction. The Applicant's design for the Grid Connection was prepared in consultation with CCC and with regard to its design for this junction.

Appendix A Email to James Mackle UK Limited and attaching the Construction: Early Works Method Statement – Algores Way

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Medworth Open Floor Hearing
Date: 04 April 2023 11:10:35
Attachments: [Early Works Method Statement Alqores Way V01.pdf](#)
[REDACTED]

Hi [REDACTED]

Further to our meeting on 23rd February I attach a method statement which describes how we will approach the first phase of our project (Early Works). This includes the relocation of the bell mouth entrance to our site and the access to the temporary construction compound, both of which are close to your entrance. I hope you will see that neither of these activities will obstruct your entrance.

[REDACTED]
[REDACTED]

I will be in Wisbech again on 11th (late), 12th and 13th April, if you want to discuss any aspect of the attached.

[REDACTED]

From: [REDACTED] >
Sent: Thursday, February 23, 2023 11:21 AM
To: [REDACTED] >
Subject: Medworth Open Floor Hearing

Caution! This message was sent from outside your organization.

Hi [REDACTED]

I've had word from Tracey Williams that you would like to make contact with us.

If there is something you would like to discuss you can reach me on my mobile [REDACTED]

Regards,

[REDACTED]
General Manager
[REDACTED] (Telephone)
[REDACTED] (Fax)

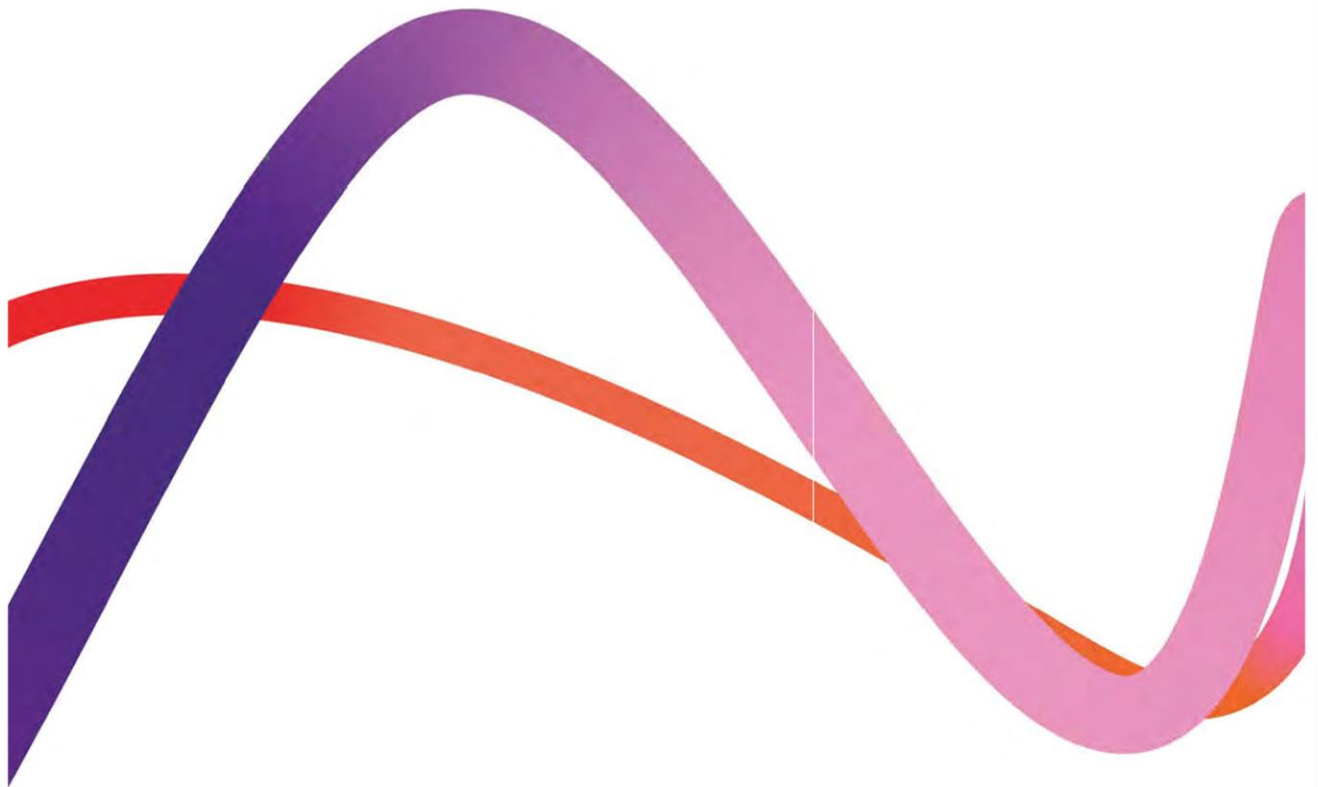


57 Algores Way
Wisbech
Cambridgeshire
PE13 2XQ

"This email and any attachment, is confidential. If you have received it in error, please delete it from your system, do not use or disclose the information in any way and notify the sender immediately. The contents of this message may contain personal views which are not the views of James Mackle (UK) Ltd unless specifically stated."

**Medworth Energy from Waste
Combined Heat and Power Facility**

March 2023



**Construction: Early Works
Method Statement – Algores Way**

**We inspire
with energy.**



2 Construction: Early Works Method Statement – Algores Way

Issue record

Status	Rev	Description	By	Date	Check	Date
Draft	0	First Issue	GP	02.03.2023	TM	30.03.2023
Current	1	Issued for approval	TM	30.03.2023	GP	30.03.2023



3 Construction: Early Works Method Statement – Algores Way

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Appendix A: Figure 3.11i to 3.11iv E/W CHP Facility Temporary Construction Compound Layout
 Appendix B: Figure 10.2 Algores Way operational access design



4 Construction: Early Works Method Statement – Algores Way

1. Introduction

1.1 Background

1.1.1 Following their presentation at the Open For Hearing (OFH), the Applicant met a representative of James Mackle (U.K.) Limited (JML) on 23 February 2023. The principal concern raised by JML was how the construction of the Proposed Development might affect access to their property off Algores Way (opposite the EFW CHP Facility Site and adjacent to the entrance into the Temporary Construction Compound (TCC), see **Figure 1.1**). It was agreed that the Applicant would provide further details on the construction arrangements affecting Algores Way.

Figure 1.1: Location of JML, Algores Way





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1.2 Purpose of this Document

1.2.1 This document provides JML with further details of the measure to control construction activities, to be secured by the Development Consent Order (DCO), and an initial construction Method Statement to assist in identifying the works involved with site set-up of the TCC and the early works (first 3-months) involved with the construction of the EfW CHP Facility and Access Improvements that affect Algores Way.

1.2.2 Where referenced in this document, the DCO Application documents can be accessed via the following link:

<https://infrastructure.planninginspectorate.gov.uk/projects/eastern/medworth-energy-from-waste-combined-heat-and-power-facility/?ipcsection=docs>

1.3 Structure of this document

- Section 2 – Pre-commencement construction commitments
- Section 3 – Initial Construction Method Statement



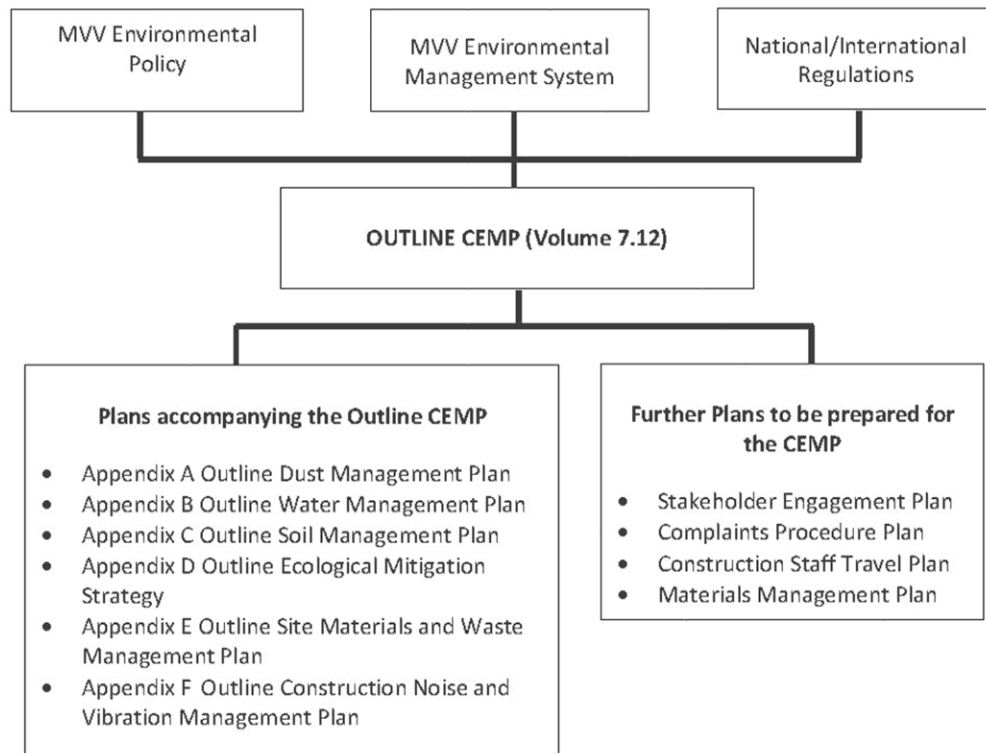
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2. Pre-commencement of construction commitments

2.1 Construction Environmental Management Plan

2.1.1 An **Outline Construction Environmental Management Plan (CEMP) (Rev 2) (Volume 7.12) [REP1-022]** accompanies the DCO Application. The Outline CEMP states how impacts associated with construction activities will be controlled and monitored. In addition to general controls, including hours for construction and registering with the Considerate Contractor Scheme, **Graphic 1.1** lists specific management plans to be prepared by the Applicant/EPC Contractor.

Graphic 1.1: Management plans to be included within the CEMP



2.1.2 The commitments stated in the Outline CEMP will be developed to produce a detailed CEMP which is secured by **Requirement 10, Draft DCO (Volume 3.1) [REP-107]**.



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2.2 Construction traffic and access

2.2.1 An **Outline Construction Traffic Management Plan (CTMP) Appendix 6A Outline CTMP (Rev 2) (Volume 6.4) [REP1-010]** accompanies the DCO Application. The **Outline CTMP** states how impacts associated with the movement and access for construction vehicles would be mitigated.

2.2.2 Following oral presentations at the OFH1 and OFH2 from businesses (including JML) on Algores Way, the Outline CTMP was updated to reaffirm or include the following commitments:

- To manage construction traffic at the entrance to the TCC and EfW CHP Facility off Algores Way, a banksperson will be present;
- The Applicant and EPC Contractor will maintain vehicle and pedestrian access to businesses and properties during construction of the Proposed Development.
- The Applicant with the EPC Contractor shall issue advanced notification of temporary works affecting the highway proximate to businesses and properties.
- Where necessary, the Applicant with the EPC Contractor will contact local businesses and properties to discuss and agree arrangements to ensure access is maintained during the temporary highway works.
- A liaison group will be established and local businesses, such as, JML will be invited to attend.
- Outline design for the Access Improvements at the entrance to the EfW CHP Facility on Algores Way.

2.2.3 The commitments stated in the Outline CTMP will be developed to produce a detailed CTMP which is secured by **Requirement 11, Draft DCO (Volume 3.1) [REP107]**.

2.3 Compliance

2.3.1 The Applicant will submit the CTMP and CEMP to and for the written approval of the relevant planning authority. The approved CTMP and CEMP will be in place before the commencement of construction and thereafter, for the duration of construction, the Applicant/EPC Contractor must comply with it.



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3. Outline Construction Method Statement

3.1 Introduction

3.1.1 This Method Statement has been produced to assist in defining the early works involved with the construction of the Proposed Development and specifically those aspects that could affect the existing vehicle access into JML, Algores Way, Wisbech. It presents the sequence of events that will occur during the first 3-months of the construction programme and the implementation of the Algores Way Access Improvements.

3.1.2 The main activities involve works at and within EfW CHP Facility Site, the Temporary Construction Compound (TCC), Algores Way and New Bridge Lane Access Improvements and the foul Water Connection (on Algores Way), see **Figure 1.1**.

3.2 Prior to mobilisation and site set-up

3.2.1 Pre-commencement surveys, for example, ecological, geo-technical and dilapidation surveys would be undertaken prior to the mobilisation period. Access to the EfW CHP Facility Site and TCC will be via Algores Way.

3.2.2 The EfW CHP Facility Site and TCC will be registered under the Considerate Constructors Scheme, the scheme focusses on respecting the community, caring for the environment, and valuing the workforce. During Phase 1, signage advising of the scheme and providing designated communication routes for members of the public to raise experiences and observations will be erected on the fence line to Algores Way and New Bridge Lane.

3.3 Phase 1: Mobilisation and site set-up months 1-3

General

3.3.1 During Phase 1, the TCC will be established and the EfW CHP Facility Site secured.

Site security

3.3.2 Boundary fencing will be erected to the full perimeter of the TCC and EfW CHP Facility Site, including all necessary gates and access to provide a secure site boundary.

3.3.3 Once the site is secure, health and safety signage, in accordance with the CDM regulations 2015, will be erected on the boundary and works to create the temporary access road into the TCC from Algores Way will commence.



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Set-up of the TCC

- 3.3.4 Initially a compacted aggregate track will be constructed tying into the junction with Algores Way, this will be tarmaced once the remaining TCC area is complete at approximately month 3 of the works.
- 3.3.5 To create the compacted track, vegetation and topsoil will be removed and stored in bunds within the TCC, a geotextile membrane will be laid followed by compacted aggregate to build up the temporary track.
- 3.3.6 The works to create this track will be carried out from within the boundary of the TCC fence line will not obstruct the use of Algores Way for other users or businesses.
- 3.3.7 Once a suitable track is installed, a gate house will be set up on the entrance to the TCC inbound of the Algores Way entrance. This will allow suitable space for delivery and vehicles to park up prior to entering the TCC and preventing any restrictions on Algores Way for other road users or businesses. The purpose of the gate house is to monitor and record all vehicles entering and exiting the site and monitor the cleanness of delivery vehicles tyres prior to exiting onto Algores Way. This will be carried out via a mobile wheel wash station until the completion of the tarmac road.
- 3.3.8 Works will progress with the removal of the existing topsoil and sub-soil surface to the remaining TCC area, soils will be stored in sealed bunds around the site for re-use in the final reinstatement of the land.
- 3.3.9 Concrete foundations will be created for the installation of the temporary buildings that will house offices, mess, toilets, showers, and stores. The temporary buildings will be delivered to the TCC via Algores Way. Outline details the temporary office and welfare buildings to be erected at the TCC are provided in **Figures 3.22i to 3.22vii, ES Chapter 3 (Volume 6.3) [APP-049]**.
- 3.3.10 Temporary drainage including an oil interceptor will be installed to collect water run off prior to being discharged into the local Internal Drainage Board network at greenfield run off rates.
- 3.3.11 **Figure 3.11i to 3.11iv (see Appendix A)** display the site layout, including access and drainage arrangements for the duration construction. Note that on completion of construction the TCC will be reinstated to its original state; grassland.
- 3.3.12 Finally, the remaining area of the TCC will be tarmaced including the road accessing Algores Way, this will assist in preventing debris being carried over onto Algores Way.
- 3.3.13 For the duration of construction, staff and visitors will access the TCC via Algores Way. To manage construction staff travel arrangements, a Construction Staff Travel Plan will be prepared and secured by the CEMP (See **Graphic 1.1**).



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Demolition and site clearance

- 3.3.14 A gate house will be set-up on the existing gated entrance to the EfW CHP Facility Site. The purpose of the gate house is to monitor and record all vehicles entering and exiting the site and monitor the cleanliness of vehicles tyres prior to exiting onto Algores Way. This will be carried out initially for the first few months via a mobile wheel wash station until a long-term wheel wash facility is completed.
- 3.3.15 At the EfW CHP Facility Site, the existing waste transfer station buildings, structures and hardstanding will be demolished and removed from site. Where possible, materials will be reused, for example, crushed aggregates and concrete under strict compliance with the approved Materials and Waste Management Plan; a requirement of the CEMP.
- 3.3.16 Existing underground structures will be exposed and removed prior to the main earthworks activity commencing. Again, where possible concrete will be crushed and reused as recycled aggregates on site.
- 3.3.17 Remaining topsoil will be stripped from the site and stored on the western boundary of the EfW CHP Facility Site adjacent to the current disused March to Wisbech railway. The bunds with a maximum height of 4m, will store topsoil for future reinstatement in landscape areas, temporary drainage measures would be in place to prevent untreated run-off into the surrounding surface water drainage network.
- 3.3.18 Earthworks will commence to create a working platform designed to provide a reliable and stable surface on which piling rigs and other heavy plant can operate safely. The installation of this platform, generally created using geotextile membranes and crushed aggregate, will be applied over most of the EfW CHP Facility Site.
- 3.3.19 During the earthworks activity the temporary surface water runoff system will be installed. This includes the installation of French drains, perimeter swales and three detention basins. This will allow the controlled discharge of surface water runoff into the Internal Drainage Board network at greenfield run-off rates. Details of the construction phase drainage strategy are described in the **Outline Drainage Strategy, Appendix 12F (Volume 6.4) [REP1-017]**.

3.4 Phase 2: Access Improvement works months 2-7.

Algores Way Access Improvements

- 3.4.1 Whilst utilising the existing access into the EfW CHP Facility Site i.e., the current access into the waste transfer station, the Algores Way Access Improvements works will commence. **Figure 10.2 (Appendix B)** presents the outline design for the Algores Way Access Improvements.
- 3.4.2 Prior to the construction of the Algores Way Access Improvements, detailed design drawings and specifications of the works will be issued to the relevant highways authority for approval. Once approved the works will commence.



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- 3.4.3 These works will involve excavations, installation of subbase aggregates, installation of new kerb lines, excavation and installation of new underground services and a build-up of tarmac layers to create the new “bell mouth” entrance.
- 3.4.4 The majority of the works will be carried out from within the EfW CHP Facility Site, maintaining full availability of Algores Way to the neighbouring users. Should any restrictions be required within the highway for temporary works such as saw cutting the existing road surface to create the tie in, and any making good of the surface of Algores Way, consultations will be carried out with the local businesses (including JML) and the highway authority to provide details of the works and intended durations, together with any appropriate traffic management measures, such as, temporary signals and signage. During any restrictions, access will always be maintained to the other users and businesses on Algores Way, and disruption will be kept to a minimum.

New Bridge Lane Access Improvements

- 3.4.5 At around month 2 the New Bridge Lane Access Improvements works will commence; this enables the new main access entrance to be created whilst still maintaining access to the EfW CHP Facility Site via Algores Way.
- 3.4.6 Prior to the construction of the New Bridge Lane Access Improvements, detailed design drawings and specifications of the works will be issued to the relevant highway authority for approval. Once approved the works will commence. **Environmental Statement Chapter 3: Description of the Proposed Development (Volume 6.2) [APP-030]** provides further details of the Access Improvements to New Bridge Lane.

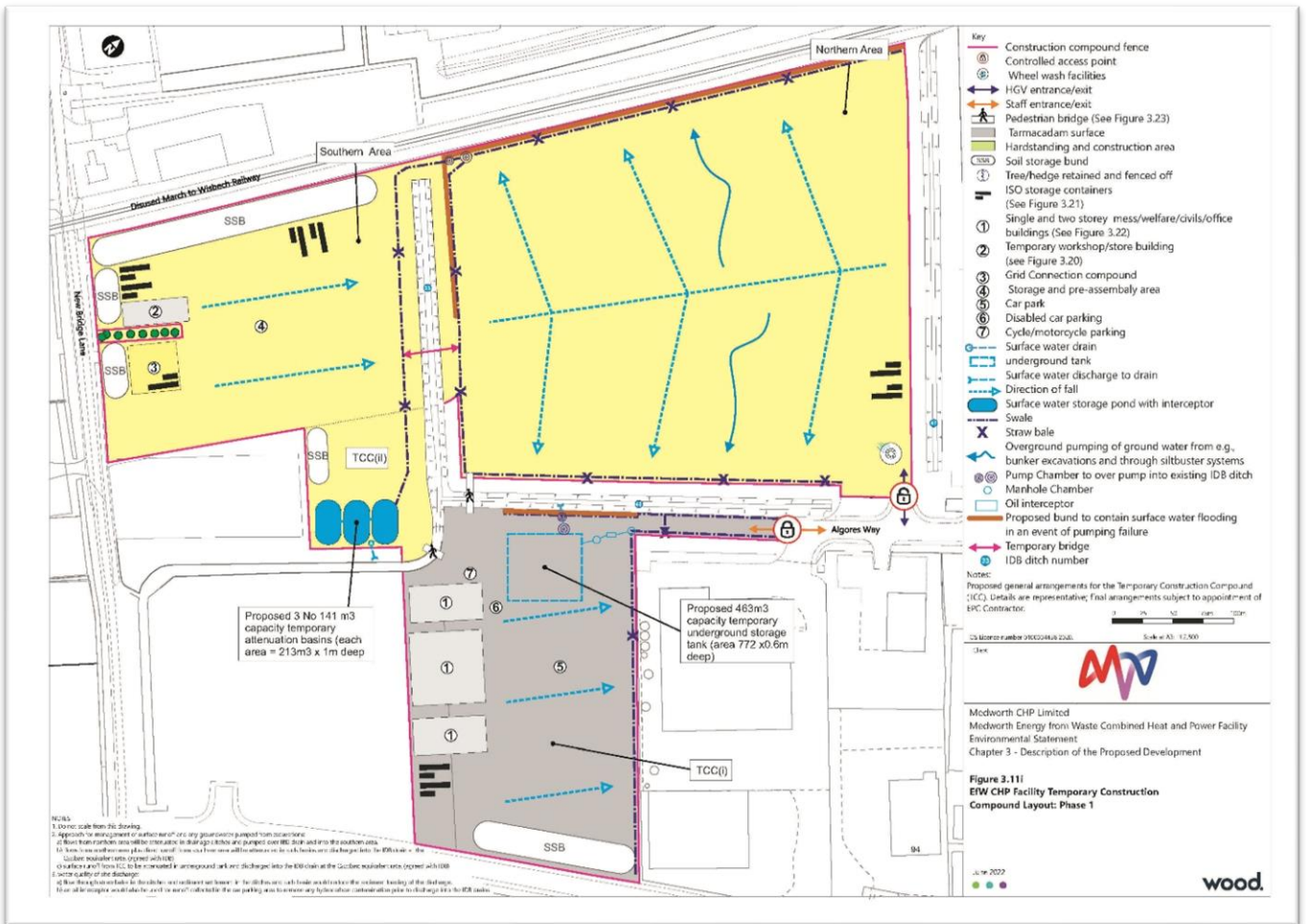
HGV Access

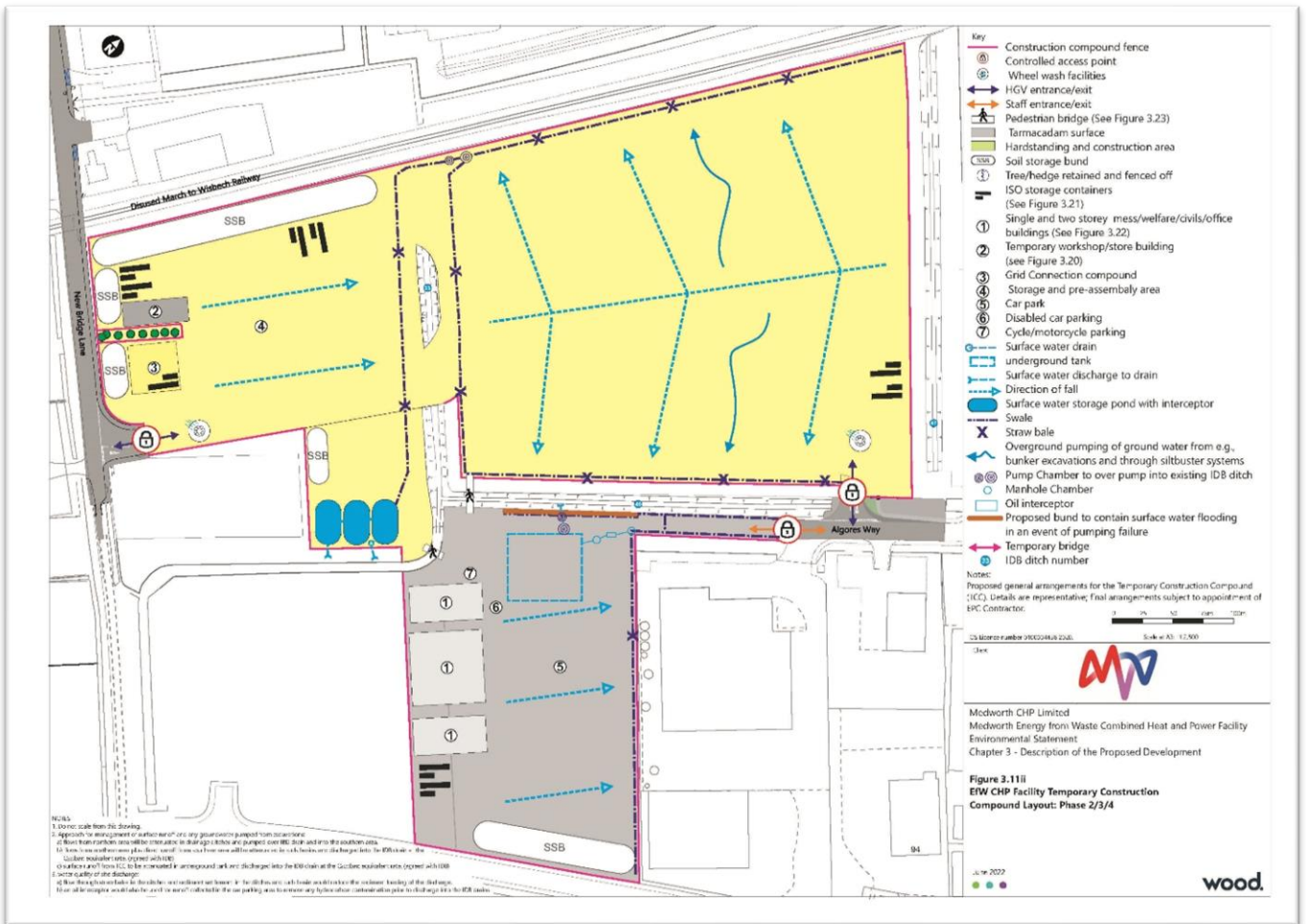
- 3.4.7 Once the Access Improvement works are completed, New Bridge Lane will be the principal access route for HGVs to the EfW CHP Facility Site, however the Algores Way entrance will continue to be used for the duration of construction.

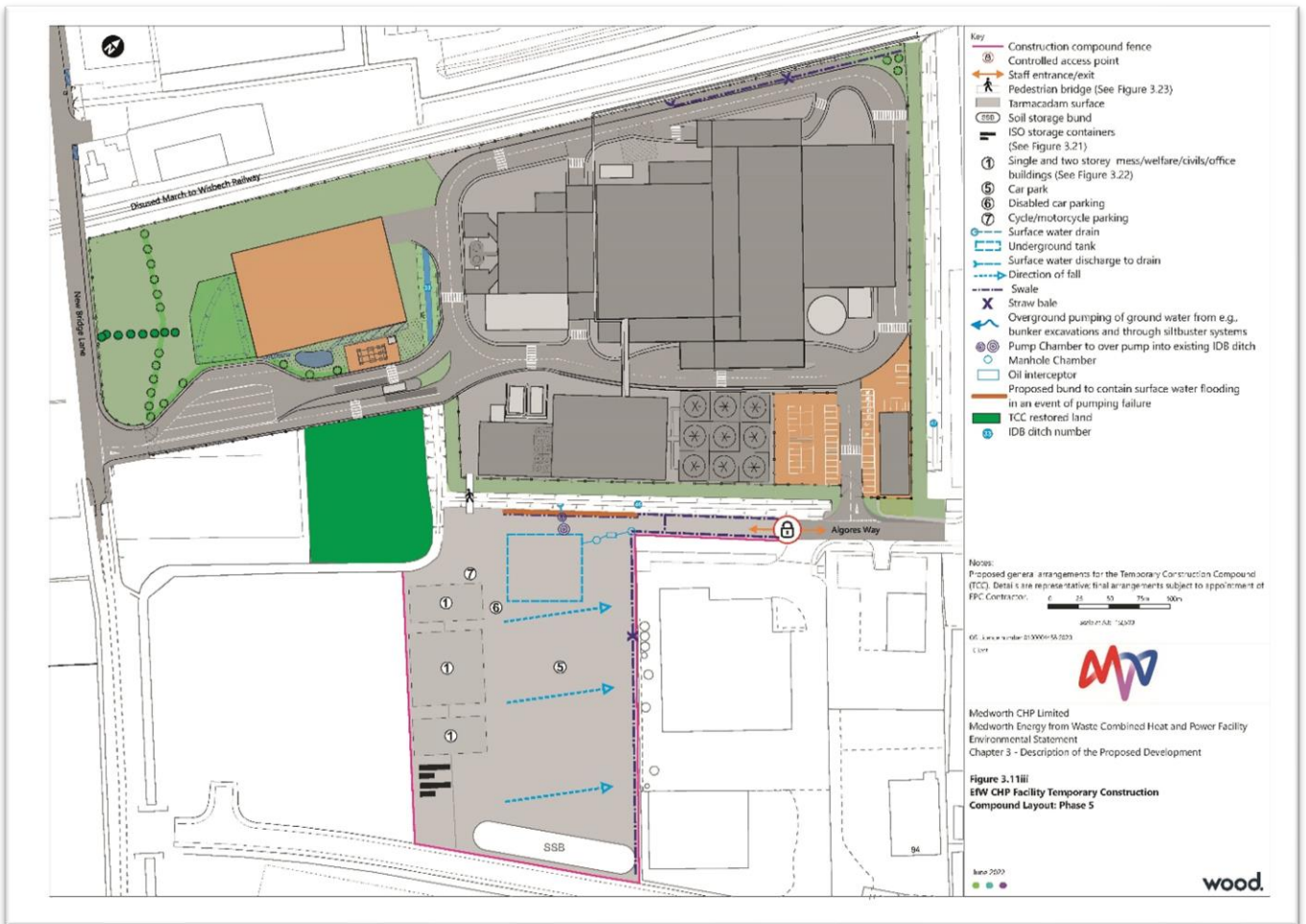


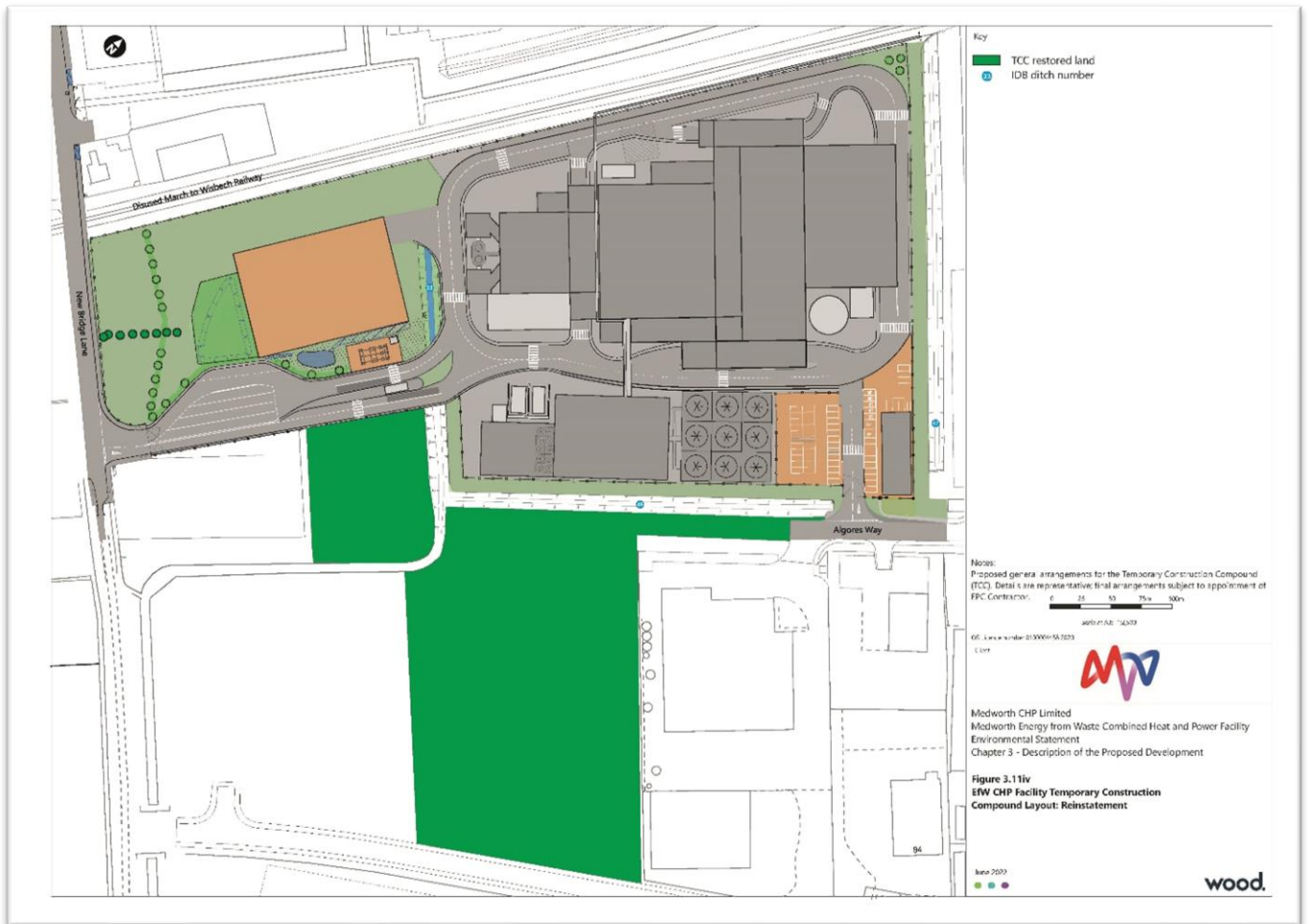
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Appendix A: Figure 3.11i to 3.11iv EfW CHP Facility Temporary Construction Compound Layout











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Appendix B: Figure 10.2 Algores Way operational access design



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