MILLS & REEVE

Your reference:
Our reference: MFBA/4060919-0005
Document number: 753939896_2

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4 April 2025

Dear Sirs

Outer Dowsing Offshore Wind (the trading name of GT R4 Limited) (the "Applicant")

Proposed Outer Dowsing Offshore Wind Farm Order

Deadline 6 submissions on behalf of T.H. Clements & Son Limited ("T.H. Clements")

Mills & Reeve continue to be retained by T.H. Clements and have been instructed to make the following submissions to the Examining Authority ("**ExA**") at Deadline 6 of the examination.

These submissions have been prepared in conjunction with the following experts appointed by T.H. Clements:

- Mr Phillip Wright of Wright Resolutions Limited (soil expert);
- Mr Iain Gould, Associate Professor of Soil Science at the University of Lincoln (soil expert);
- Mr Damian Pawson of Sweco UK (air quality expert); and
- Mr Daniel Jobe of Brown & Co. (surveyor).

Appendices 1-4 of the written representation submitted by Mills & Reeve on behalf of T.H. Clements [RR-067] set out the qualifications and relevant experience of the above experts.

1 Written summaries of oral case put at CAH2 and ISH8

1.1 Please see Appendix 1 and Appendix 2 which comprise T.H. Clements' summaries of its oral case put at CAH2 and ISH8 respectively.

2 Issue Specific Hearing 8, Action Point 8 - Outline Code of Construction Practice and Outline Soil Management Plan

2.1 At ISH8, Action Point 8, the Examining Authority asked T.H. Clements and the Applicant to seek to resolve their outstanding disagreements on the oSMP and oCoCP and to provide an update at Deadline 6.

2.2 T.H. Clements confirm that the versions of the oSMP (received via email on 27 March 2025 at 15:43) and oCoCP (received via email on 2 April 2025 at 13:25) and to be submitted by the Applicant at Deadline 6 have been agreed by T.H. Clements.

3 Closing statement

3.1 Please refer to Appendix 3 which sets out T.H. Clements' closing statement.

4 Comments on the Applicant's Comments on T.H. Clements' Deadline 4a Submissions

4.1 Please refer to Appendix 4 which sets out T.H. Clements' comments on the Applicant's comments on T.H. Clements' Deadline 4a submissions in relation to dust contamination.

4.2 Should the ExA require any additional information in relation to this representation, please contact [redacted] [redacted] or [redacted] [redacted] of Mills & Reeve at [redacted]mills-reeve.com or [redacted]@mills-reeve.com.

Mills & Reeve LLP

Appendix 1 - Written summary of oral case put at CAH2

OUTER DOWSING OFFSHORE WINDFARM

T.H. CLEMENTS (INTERESTED PARTY REFERENCE 20049059)

POST HEARING SUBMISSION – SUMMARY OF ORAL SUBMISSIONS MADE AT CAH2

INTRODUCTION

1. The following persons appeared on behalf of T.H. Clements at CAH2:

   (i) Mark Westmoreland Smith KC, Francis Taylor Building;

   (ii) Fiona Barker, Solicitor and a Principal Associate at Mills & Reeve LLP, T.H. Clements' lawyers; and

   (iii) Sam Jeffery, Finance Director, THC.

2. T.H. Clements spoke to Agenda Item 3.2(1)(b) in relation to sections 122 and 123 of the Planning Act 2008.

SUBMISSIONS

3. T.H. Clements updated the Examination on negotiations with ODOW as at the date of CAH2.

4. T.H. Clements confirmed that negotiations continue outside of the Examination. These have been constructive. It appears that both sides are working towards and wish to come to an agreement. However, there remain material issues to resolve and the outcome of the talks will be critical to the final position of T.H. Clements in the Examination.

5. Without an agreement there will likely be material private loss without compensation (T.H. Clements has already expended considerable financial resources to mitigate the impacts of the scheme without compensation). This impact on the business is material to both the overarching planning balance and in judging the proportionality of the interference with human rights as well as the question of compelling case in the context of compulsory acquisition.

6. ODOW made a formal offer to T.H. Clements on 17 February 2025 and since that date there have been a number of meetings and correspondence between the parties to discuss the offer. The details of that commercial negotiation are not for the Examination.

Progress has been made in many areas, but there are still important areas of difference to be resolved.

7. As was set out in T.H. Clements' Written Representation **[REP1-050]** and the CAH1 summary of oral representations **[REP3-061]**, T.H. Clements is obliged to provide a continuous supply of quality products to meet service level agreements with demanding customers in what is a highly competitive industry/market.

8. T.H. Clements has to ensure an ability to consistently meet its customer obligations going forward, and to do so has taken out a farm business tenancy on Gosberton farm which has sufficient land in order to mitigate the impacts of this scheme (the amount of the land was discussed in ISH8 and is reflected in T.H. Clements' post hearing submission on ISH8).

9. The key issue that remains is the proportion of the Gosberton Farm rent that will be paid by ODOW. This question turns on land use impacts and, in particular, dust impacts that will be discussed at ISH8 (again, the discussions on this issue are recorded in T.H. Clements' post hearing submission on ISH8).

10. Whilst ODOW's position in the context of land use impacts/ EIA assessment is that there will be no dust emissions whatsoever outside of the cable construction corridor, in the context of the negotiations, ODOW are prepared to contemplate dust emissions outside of the cable construction corridor and have, as part of the latest offer, suggested a buffer zone outside of the cable construction corridor of 20m and then additionally offered to pay for any crop loss arising from dust damage outside of that area.

11. The problem with this approach is explained in **[REP5-173, App.6]**. T.H. Clements plans its crop cycle 18 months in advance. It does so specifically to meet its supply contracts. T.H. Clements cannot risk planting near to the cable construction corridor and suffering dust damage as the effect of such damage would be a service level/ contract failure, which could jeopardise contracts with supermarket clients and in turn the business. Compensation for crop loss in a particular part of a particular field is not the real issue. The real problem is the systematic risks to the business as a whole of planting in an area of risk. That lies behind the need for the land at Gosberton Farm in order to properly mitigate the risks caused by ODOW's scheme.

12. T.H. Clements confirmed that until the agreement is reached with ODOW, the points made at CAH1 and recorded in **[REP3-061]** stand, save for one: alternatives and the working width of the cable corridor.

13. As T.H. Clements has previously made clear, it does not have in place expert resources in relation to construction matters and has only sought further information and explanation on this issue in order to properly understand if all of the land sought was in fact required.

14. The one outstanding point on this issue was the justification of an 80m construction corridor where trenchless techniques are used to install the cable. ODOW has provided

a more detailed explanation at **[REP5-150, p.63]** in light of which T.H. Clements confirms that it does not pursue any further point in relation to alternatives.

15. In response to submissions by ODOW, T.H. Clements reiterated that it was not raising compensation matters that would be the subject of a reference to the Upper Tribunal and which are beyond the scope of the Examination, the concerns relate only to the principle and availability of compensation.

16. The availability or otherwise of compensation is directly relevant to the question of whether or not the award of compulsory acquisition powers is proportionate and to the compelling case test. The decision maker needs to have in mind that, without a deal between ODOW and T.H. Clements, there will be interference with T.H. Clements occupation of land with adverse consequences for business. T.H. Clements' point is about *the absence of compensation*.

17. This is a negative material consideration both in the context of the general planning balance and the compelling case test. It is also a material consideration to which significant weight should be applied. The assumption that lies behind the Compensation Code is that interference with the occupation of land ought generally to be compensated, but here it will not be, absent an agreement. In short, there is a lacuna in the code, the cost of which is currently being borne not by the body causing the interference but by those who are interfered with. That is clearly the wrong way around.

Appendix 2 - Written summary of oral case put at ISH8

OUTER DOWSING OFFSHORE WINDFARM

T.H. CLEMENTS (Interested Party Reference 20049059)

POST HEARING SUBMISSION – SUMMARY OF ORAL SUBMISSIONS MADE AT ISH8: ONSHORE ENVIRONMENTAL MATTERS

INTRODUCTION

1. The following persons appeared on behalf of T.H. Clements at ISH8:

   (i) Mark Westmoreland Smith KC, Francis Taylor Building;

   (ii) Fiona Barker, Solicitor and a Principal Associate at Mills & Reeve LLP, T.H. Clements' lawyers;

   (iii) Philip Wright, Director and founder of Wright Resolutions Limited, a consultancy which provides specialist advice to the agricultural industry. Mr Wright is a Chartered Engineer with a BSc (Hons) in Agricultural Engineering. Mr Wright's CV is at App.1 to T.H. Clements' Written Representation **[REP1-050]**);

   (iv) Damian Pawson, Technical Director on Air Quality at Sweco UK Limited (whose CV is at App.4 to T.H. Clements' Written Representation **[REP1-050]**); and

   (v) Sam Jeffrey, Finance Director at T.H. Clements.

2. T.H. Clements contributed to Agenda Item 3.3: Land Use, Geology and Ground Conditions and 3.5: draft Development Consent Order.

AGENDA ITEM 3.3: LAND USE, GEOLOGY AND GROUND CONDITIONS

Outline Air quality Management Plan

3. T.H. Clements confirmed that it is broadly content with the Outline Air Quality Management Plan **[REP4a-077 and 78]**, subject to the point made by Mr Pawson that the Outline Air Quality Management Plan includes a measure to "install hard surfaced haul roads" in relation to dust 'trackout', which typically relates to roads entering/exiting the construction site onto the public highway. This measure is unlikely to consider all haul roads within the ECC. T.H. Clements would welcome a commitment to install trackway (or similar) or at the least to consider the installation of the same on sections of haul road within the ECC sections that are adjacent to T.H. Clements land, which would serve to reduce wheel-generated dust emissions (where ground/soil

conditions are suitable for this). As Mr Pawson explained, this would align with section 1.16 of the Outline Soil Management Plan **[REP4a-080, p.17]**.

Dust contamination

4. As the ExA is aware, T.H. Clements provided a Technical Report: Dust Deposition Modelling assessment which was appended to their Written Representation **[REP1-050]** ("the THC Dust Report"). The Applicant responded to the THC Dust Report **[REP45-125]** ("Applicant's Dust Report") and T.H. Clements further respond to this at Deadline 5 **[REP5-173]**.

5. There remains a material difference between the parties on dust emissions. The Applicant's position is that there will be *no risk* of dust deposition beyond the redline of the application (i.e. outside of the cable construction corridor) due to the mitigation measures it will put in place. That is plainly not going to translate into reality as a matter of common sense. It is acknowledged that detailed dust modelling is rarely done, but given the sensitivity of the receptor in question and the significance of the business at risk then, it is appropriate in the circumstances of this case to conduct the assessment that T.H. Clements has done. What the assessment does is identify land at high risk of visual dust deposition. It is does not seek to establish how much dust will fall where but looks at risk. The suggestion – which is the Applicant's position – that there is no risk beyond the redline, based on no modelling- is not credible.

6. The ExA noted that the IAQM update on minerals guidance review in February 2025 referred to the increased use of dispersion modelling and asked Mr Turner for the Applicant if he knew when the updated guidance will be available. Mr Pawson understands it will likely be published in the second half of this year.

7. Mr Turner then stated the guidance intends to retain the risk assessment approach as per the 2016 version. Mr Pawson will respond in writing to this but the IAQM clearly recognises increased use of dispersion modelling in this space, therefore, it is fair to assume that non-UK emission factors are being used for such studies (as per the T.H. Clements assessment). Furthermore, it is noted that the IAQM construction dust guidance that was updated in 2024 has retained the qualitative risk assessment approach which was in the previous 2014 version, but crucially now allows for construction dust modelling. This is important for two reasons: first, construction dust guidance allows modelling such as that carried out by T.H. Clements; and, secondly, it indicates a change in direction of travel that might well be followed by new IAQM minerals guidance (i.e. maintain risk assessment approach, but will allow dispersion modelling in unique cases, precisely the approach taken by T.H. Clements).

8. Mr Turner made a number of technical points that have been ventilated in the written materials on dust deposition. In response Mr Pawson made the following high level points:

   (i) Emission factors**:** Mr Pawson confirmed that emission factors are activity based, not sector based. So whilst some of the factors come from activities within the

mining industry, the same factors are referenced for use across other sectors (e.g. construction) where the *activity* is the same. These factors are referenced in live guidance cited as global best practice.

(ii) Wind erosion factor: Mr Pawson stated that there was a contradiction in the Applicant's critique of the T.H. Clements' study. On one hand, the Applicant uses IAQM minerals guidance to state the assessment is inappropriate because T.H. Clements uses non-UK emission factors, but then suggests T.H. Clements should have used a *default* non-UK factor. The emission factors used in the T.H. Clements' study were carefully selected to ensure, where possible, they directly relied on local inputs relating to soil and climate. Mr Pawson explained using the analogy of digging a trench here versus a trench at an Australian mine, the key differences are the scale of activity, nature of material (e.g. soil characteristics) and climate (wind speed, rain). Importantly, the factors Mr Pawson used in the T.H. Clements' study allowed for these local variables to be accounted for and the scale of activities was based on project-level information published by the Applicant. Using a default factor as suggested by the Applicant would assume fixed conditions (soil/climate) in any location. Use of default factors would increase uncertainty in the modelling process as there is no consideration for local conditions.

9. Mr Pawson finished by saying that it was appropriate in this case to undertake a modelled assessment given the unique scenario whereby T.H. Clements land is subject to zero tolerance for visible dust contamination in commercial contracts.

Mitigation land

10. Sam Jeffrey explained why obtaining the farm business tenancy at Gosberton Farm amounts to proportionate mitigation.

11. Although the Gosberton Farm has a total of 1,050 acres (and T.H. Clements have to pay rent on the whole), this includes the yard and land that is not available for use. The tenancy is a sustainable farm business tenancy under which 689 acres are available for growing vegetables in any given year.

12. The figures below demonstrate ODOW and T.H. Clements' respective positions as to the extent to which Gosberton Farm is required.

Gosberton Farm total land (including yeard etc) 1,050 acres. However under stustainable farm tenancy, only 2/3rd is available to use for veg.

Total Acres available for Veg @ Gosberton	689			
		ODOW	THC	THC exc FG
Acres for corridor		192.7	192.7	192.7
Area for dust contamination		74.9	264	264
Fred Grant (THC grower) land not available			90	
		267.6	546.7	456.7
			79%	
Uplift to account for 85% yield		47.2	96.5	80.6
TOTAL		**314.8**	**643.2**	**537.3**
		45.7%	93.3%	78.0%

13. The area of the cable construction corridor is agreed.

14. The area for dust contamination is not. ODOW's figure comprises the buffer zone it is now allowing for dust contamination (in the context of negotiations). This is a 20m zone either side of the cable constriction corridor. T.H. Clements' figure represents the areas assessed by it as being at high risk of dust deposition. Whilst ODOW have now said that they would compensate for crop loss arising from dust deposition in this area (and, indeed, anywhere it occurs), this does not address the potential shortfall in supplies that such damage would cause and the concomitant risk to the business.

15. Fred Grant also grows product for T.H. Clements. The product is purchased at harvest. However, 90 acres of his land is also impacted by the scheme such that he will be unable to grow 90 acres worth of vegetables that he would usually supply to T.H. Clements. T.H. Clements need to cover that missing product by growing it at the Gosberton Farm. As such, the 90 acres is included in the total mitigation land needed. ODOW do not account for this.

16. The total land requirement is then to be uplifted to account for the expected lower productivity of the Gosberton Farm land (so, as explained by Ms Jeffrey, 100 acres at Gosberton would be equal to 85 acres of the land impacted by the scheme due to its superior quality).

17. This total comes to 643 acres (93.3% of the total at Gosberton Farm). Even excluding Fred Grant land, the number is 78%. This demonstrates that Gosberton Farm was an appropriate lease to take out having regard to the extent of mitigation required. It was also a rare opportunity that needed to be taken to ensure mitigation was in place.

AGENDA ITEM 3.5: THE DRAFT DEVELOPMENT CONSENT ORDER

18. T.H. Clements made two comments in relation to the draft development consent order.

19. First, it supports the ExA's proposed changes, set out in **[PD-026]**, to the restrictive covenant in Schedule 7 of the draft Development Consent Order. This reflects the change sought by T.H. Clements in **[REP4a-140, p.2]**. The change is both narrow in scope and necessary. It only applies where there is waterlogging and there is, therefore, a threat of damage to crops (and, in turn, to the business through supply/ contract failures). The requirement in those particular circumstances is to act fast. The concerns raised by ODOW are not insurmountable. First, it is clear that the undertaker would be the person from whom consent was required. Secondly, any paucity in information supplied would lie with the applicant for consent and could be met by a refusal of consent. The proposed drafting does not require consent to be issued within 24 hours, only that the application for consent is determined which may entail a refusal. In all circumstances, the proposed change and its narrow scope properly balances the interests of all those involved.

20. Secondly and in relation to the proposed changes to Article 22, T.H. Clements confirmed that, although it raised this issue in the December hearings, it has not actively pursued this point subsequently because ODOW confirmed that the only land to which Article 22 applies freely is land not caught by Schedules 7 and 9 and this does not include T.H. Clements' land, all of which is subject to those schedules.

Appendix 3 - Closing statement

OUTER DOWSING OFFSHORE WINDFARM

T.H. CLEMENTS (Interested Party Reference 20049059)

CLOSING SUBMISSIONS

INTRODUCTION

1. This closing statement sets out a summary of the key issues as between T.H. Clements and the Applicant at the close of the Examination. Whilst negotiations continue, the parties are still some way apart and T.H. Clements continues to object to the scheme and the interference with its business caused by the proposed works in relation to the installation of the onshore cable.

OVERVIEW OF T.H. CLEMENTS BUSINESS

2. An explanation of the T.H. Clements business and its vulnerability to this development is set out in the T.H. Clements's Written Representation **[REP1-050, §§1.1-1.14]** as well as its submission at Deadline 5 **[REP5-173, App.6]**.

3. The key points about the business to note are that:

   (i) T.H. Clements is a leading producer of high-end Brassica vegetables and supplies approximately 20 per cent. of the Brassica market in the UK.

   (ii) T.H. Clements currently has an annual turnover of approximately £90 million and is forecast to achieve an annual turnover of circa £100 million within the next three years.

   (iii) T.H. Clements employs approximately 650 staff.

   (iv) T.H. Clements is more than just an agricultural business. It also produces a range of semi-prepared products including some that incorporate sachets with marinades, sauces or glazes and other ingredients alongside the vegetables in a roasting tin.

   (v) A key differentiator that T.H. Clements has over its competitors, is that it harvests and packs in quick succession with no washing or any other processing. This means the product retains maximum freshness, is natural, and reaches the customer with the best natural and environmentally sustainable credentials. Unwashed and ready to cook is the unique selling point behind T.H. Clements' success and growth in semi-prepared vegetables. As such, T.H. Clements has invested many millions in a dedicated semi-prepared produce factory with no

chemicals, no water use in the factory and no unnecessary processing. This means that the business is almost uniquely vulnerable to dust contamination in the field.

(vi) Farming is not a high margin industry, and so the products and methods that have been developed by T.H. Clements, along with its exacting standards, are essential to maintaining the business, as it is these that have been the enabler for improving profitability.

(vii) The business is reliant on large contracts with supermarkets. T.H. Clements largest customer is Tesco Stores. T.H. Clements is held to extremely high standards by its customers who require a minimum 98.8% adherence to exacting quality standards and service levels, including that products should have no visible dust.

(viii) If these standards are not met, this would at best result in T.H. Clements incurring hefty financial penalties and fines, and/ or being held accountable for securing alternative supply (although in practice securing alternative supply would rarely be possible), and in all likelihood would result in the loss of key contracts with existing customers and a loss of reputation (with resultant weaker position for securing future business from existing and potential new clients).

(ix) The threat posed by dust contamination has the potential to directly adversely impact the viability of T.H. Clements as a business, by the threat to the supply contracts that would be brought about by crop damage, and a consequent failure to meet the minimum requirements of the supply contracts.

STEPS TAKEN BY T.H. CLEMENTS TO MITIGATE THE IMPACTS OF THE APPLICANT'S SCHEME

4. T.H. Clements, therefore, had no choice but to mitigate against the risk of visible dust deposition posed by the Applicant's scheme , and the consequential risk there would be to its supply contracts and business, by seeking to acquire land away from the cable corridor on which to grow the vegetables that would otherwise have been grown in the cable corridor or close to it.

5. Land of the quality that T.H. Clements farms, rarely becomes available, and when it does, competition is fierce. There have only been a handful of opportunities in recent years, with the majority offering less than 100 acres to let, which would be insufficient for mitigating the impacts of the Applicant's scheme.

6. As such, when Gosberton Farm became available, T.H. Clements took the opportunity to secure it, despite the tenancy agreement starting in 2024, i.e. before the grant of development consent and commencement of construction of the ODOW scheme and despite the fact that farming it will be at an increased cost because it is further away from T.H. Clements' main processing facility at Bennington and as such there will be greater travel costs and a need to set up an operational and management hub at Gosberton Farm.

THE APPROPRIATENESS OF GOSBERTON FARM AS MITGATION

7. There are a number of aspects to the question of whether or not Gosberton Farm represents appropriate mitigation:

   (i) Whether or not there is a need for mitigation at all having regard to the risk of dust deposition;

   (ii) Whether additional land was required at all or whether compensation for crop damage could be sufficient; and

   (iii) Whether the amount of land taken at Gosberton Farm was appropriate having regard to the extent of risk.

RISK OF DUST DEPOSITION

8. T.H. Clements provided a Technical Report: Dust Deposition Modelling assessment which was appended to its Written Representation **[REP1-050]** ("the THC Dust Report"). The Applicant responded to the T.H. Clements Dust Report **[REP4-125]** ("Applicant's Dust Report") and T.H. Clements further responded to this at Deadline 4a **[REP4a-140, App.3]** and 5 **[REP5-173]**. T.H. Clements have commented further on the Applicant's comments in relation to dust at Appendix 4 of these submissions.

9. There remains a material difference between the parties on dust emissions. Only one party has undertaken a quantitative, evidence-based assessment of the risk of visible dust impacting T.H. Clements' farmed land and that is T.H. Clements.

10. The Applicant's position is that there will be *no risk* of dust deposition beyond the redline of the application (i.e. outside of the cable corridor) due to the mitigation measures it will put in place. This is based on a qualitative, risk-based approach that assumes mitigation eliminates risk, without explicitly assessing site-specific sensitivities.

11. The Applicant's assessment is obviously not going to survive contact with reality. The Applicant should not be permitted to fail to properly assess the risks where there is a specific sensitive receptor adjacent to the proposed construction activities. It is plainly not reasonable to assume zero dust impact on land adjacent to construction activities. As the IAQM (2024) guidance acknowledges, even the most rigorous dust management plan cannot guarantee complete effectiveness at all times and yet that is exactly what the Applicant is relying on.

12. It is telling that in open negotiations with T.H. Clements, the Applicant takes a different stance as it is prepared to recognise a buffer zone adjacent to the cable corridor and to compensate for any crops growing within that buffer zone that are in fact damaged by

dust. For the reasons explained below and at CAH2, this would not address the systematic business risk (potential contractual failures) that crop damage would cause.

13. For T.H. Clements, for whom zero visible dust contamination is contractually mandated, it was both appropriate and necessary to undertake a detailed quantitative assessment of dust deposition risk. The Applicant's assertion that it does not need to quantify dust impact fails to account for the specific commercial risks faced by T.H. Clements.

14. The Examining Authority and Secretary of State should place greater weight on T.H. Clements's detailed, evidence-based assessment, which aligns with the latest IAQM guidance and evolving best practice and provides a clear, site-specific quantification of dust contamination risk. It demonstrates that even with mitigation, significant dust impact remains likely.

15. The Applicant's approach, in contrast, presents an unsubstantiated assumption that mitigation alone is sufficient, without the necessary quantification of risk. Of course, the Applicant has had plenty of opportunity to conduct its own assessment rather than simply criticise the assessment done by SWECO for T.H. Clement. SWECO are very well respected environmental consultants and experts in this field. In the result, there is only one set of expert evidence before the Examination that the Examining Authority and the Secretary of State can rely on.

16. If the Applicant was confident it could show no risk of dust deposition, then surely that is what it would have done? The fact it did not, allied with the different position it adopts in negotiations with regards dust, should tell the Examining Authority all it needs to know.

17. Furthermore, the key criticisms the Applicant makes of the SWECO assessment do not stand up to scrutiny.

18. The first key criticism is that no quantitative assessment should have been done at all. In stating this, the Applicant fails to appreciate the unique nature of the T.H. Clements business and the risk dust deposition would pose to the business. It is quite clear that the Applicant simply did not understand this until the Examination itself. By then it had already carried out its qualitative assessment and was unprepared to revisit it.

19. The Applicant sought to rely on the IAQM Minerals Dust Guidance to justify its failure to carry out a quantitative assessment but that guidance does not rule out a quantitative approach, it merely states that it is "*generally*" not done in the UK, citing the lack of UK emissions data as a limitation **[Rep4-125, p.7, §2.1]**. Moreover, the direction of travel as Mr Pawson made clear is towards a greater use of quantitative assessments (i.e. dispersion modelling) and the guidance is currently being reviewed.

20. The second key criticism is that in so far as T.H. Clements relied on the above guidance it relates to mining and not the type of works that the Applicant will be undertaking in laying the cable. However, as Mr Pawson explained to the Examining Authority during ISH8, the action of digging a hole, removing soil, and dropping the material onto the

ground on a construction site in the UK is no different to doing the same thing on a mining site in Australia. What is different in every construction activity, however, is the nature of the soil, the climatic conditions and the scale of the activity.

21. The SWECO assessment described in the THC Dust Report used local data about the nature of the soils, local meteorological data and based the scale of the activities on the Applicant's own description of development.

22. Accordingly, the emissions factors used in the SWECO study (which are derived from all these factors), are dependent on site-specific characteristics relating to soil and climate and the construction activities that the Applicant itself has described.

23. For the Applicant to try, therefore, to dismiss the SWECO assessment as being based on mining which is different, is not properly to engage with or reflect what has been done, which is a careful bespoke assessment based on local conditions and the works proposed.

24. The third issue taken by the Applicant is the lack of model validation. It cannot be validated in the absence of local baseline dust deposition monitoring which does not exist (see **[REP1-150, App.14, §149]**). It is not a fair criticism but taking advantage of the Applicant's own lack of work in this area. The Applicant then proceeded to suggest that in the absence of validation on the basis of observed data, a "factor-of-four" correction should be applied, i.e. the dust deposition model outputs in the THC Dust Report should have been divided by four.

25. However, the papers relied on by the Applicant principally focus on regional and/or urban scale dispersion modelling of dust emissions. Such modelling is used to represent far-field impacts in the order of kilometres away from a given source, with a tendency to focus on finer particulate matter (e.g. PM_{10} and $PM_{2.5}$) which can be transported larger distances.

26. In contrast, the THC Dust Report focusses solely on total suspended dust and, by definition, only considers near-field dust deposition due to the proximity of sensitive growing fields to the proposed Order Limits

27. One of the studies the Applicant relies upon in **[REP4-125]** states that "*…accounting for near-source deposition losses is superior to the 'divide-by-four' approach*" (Countess, Richard: "*Reconciling Fugitive Dust Emission Inventories with Ambient Measurements*", presented at Emission Inventory Conference, 15 November 2007).

28. The T.H. Clements' modelling effectively does this as all receptors are located in proximity to the Order Limits. The Applicant's assertion that the THC Dust Report reports a "*four-fold overestimation in dust emission modelling*" is patently wrong.

29. The fourth main criticism was the suggestion that THC Dust Report assumes continuous construction over a 48.3 km segment for three years at maximum parameters. Again, that suggestion was simply wrong.

30. As Mr Pawson explained (and see **[REP1-050, App.14, §122 and §157 and s.6 generally]** and **[REP3-065, pp.14-15]**), the dust deposition results of each of the three construction phases were treated independently. This removed the potential for double counting of dust deposition impacts between phases and overlapping of construction activities between phases. Dust deposition impacts at each receptor in each phase were modelled over short- term periods (daily/monthly). Total annual dust deposition results were not modelled, as that would effectively be a representation of continuous construction and was specifically avoided in the model as not reflecting the proposed construction activities. The adopted modelling approach assesses the risk of dust deposition at a given location under varying weather conditions throughout the year.

31. The final key criticism was the Applicant's suggestion that inputs to the model were "*unreliable*". Again, there is no force to that criticism. Indeed, this criticism was mere assertion. As Mr Pawson explained, the THC Dust Report identifies the risk of potential dust deposition impacts on the T.H. Clements' farmed land using approved and globally accepted emission factors and dispersion model, whilst incorporating appropriate location/site-specific data and proposed scheme design parameters published in the relevant DCO documents (e.g. **[APP-058], [APP-270], [AS1-086], [REP3-022]**), with appropriate assumptions applied, including the following (see **[REP4-125, App.14, §§136-141]**):

    (i) Use of five years of hourly weather data representative of the T.H. Clements study area;

    (ii) Soil data from the study area itself;

    (iii) Application of relatively high moisture contents for soil (leading to less dust dispersion) even though the Outline Soil Management Plan undertakes that "*…soils will only be moved when they are in a dry and friable condition*";

    (iv) For open cable trenches, a 50 per cent dust emission reduction was applied to reflect a lower likelihood of dust generation compared to above-ground surfaces;

    (v) For dust generated by HGV movements on the haul road, the average daily HGV flows reported in Table 27.28 of **[AS1-086]** were used in deriving emissions, as opposed to use of the maximum daily HGV flows given in the same table; and similarly

    (vi) The emissions calculated for wheel generated dust from the haul road optimistically assumed that soil dust from adjacent activities within the working width of the cable corridor, which would be of a finer size, will not settle on the haul road and be re-suspended.

32. In conclusion, the Applicant has failed to carry out a quantitative assessment and has asserted no impact without any modelled evidence. The Applicant's ultimate position that no dust would be dispersed by the construction activities is untenable and contrary

to common sense. It is clear that the Applicant recognises as much from the different stance it takes in the context of negotiations where it does contemplate the risk of dust dispersion. The difference between the parties relates to the likely extent of dispersion, but the problem with that for the Applicant is that the only evidence of likely extent is the THC Dust Report.

COULD COMPENSATION FOR CROP DAMAGE BE SUFFICIENT?

33. The Applicant's offer to compensate for crop damage shows that it accepts in reality that there is a risk of dust deposition but it also shows that the Applicant has failed to understand T.H. Clements' business properly.

34. The problem with the prospect of compensation for crop damage is explained in **[REP5-173, App.6]**. T.H. Clements plans its crop cycle 18 months in advance. It does so specifically to meet its supply contracts. T.H. Clements cannot risk planting near to the cable corridor and suffering dust damage because the effect of such damage would not only be the crop damage itself but the more serious and consequent potential to leave T.H. Clements unable to meet the minimum service level on its contracts.

35. Such a failure could jeopardise T.H. Clements' contracts with the supermarkets it supplies and, in turn, the business itself. Compensation for crop loss in a particular part of a particular field is not the real issue. The real problem is the systematic risks to the business as a whole of planting in an area of risk. It is this that lies behind the need for the land at Gosberton Farm in order to properly mitigate the risks caused by the Applicant's scheme.

WHETHER THE AMOUINT OF LAND TAKEN AT GOSBERTON FARM WAS APPROPRIATE

36. Gosberton Farm has a total of 1,050 acres. The tenancy is a sustainable farm business tenancy under which a certain amount of land cannot be used to grow vegetables. Under the tenancy 689 acres are available to T.H. Clements in any given year to grow vegetables.

37. The figures below demonstrate the Applicant's and T.H. Clements' respective positions as to the extent to which Gosberton Farm is required (Please note: 1. The below table differs from that included in T.H. Clements ISH8 summary as it reflects the updated position that occurred subsequent to the hearings; and 2. Each 'Doc ref.' in the table below is a reference to the relevant paragraph of these closing submissions):

Gosberton Farm total land (inc. yard etc) 1,050 acres. However under sustainable farm tenancy, only 689 acres available for veg.

Acres impacted: Applicant	Doc Ref.			% of Total Gosberton Farm land (including yard etc.)
Acres for corridor	38	Agreed	192.7	1,050
Dust contamination	39		74.9	
Applicant total			**267.6**	**25%**
				% of Gosberton Farm land available for crops
Acres impacted: TH Clements & Son Ltd				689
Acres for corridor	38	Agreed	192.7	28.0%
Dust contamination	39		264.0	38.3%
F Grant (THC grower) land	40		90.0	13.1%
Subtotal of existing land not available			**546.7**	**79.3%**
Uplift to account for 85% yield	41		96.5	14.0%
Total Mitigation Land needed			**643.2**	**93.3%**

38. The area of the cable corridor is agreed.

39. The area at risk of dust contamination is not. The Applicant's figure comprises the buffer zone it is now allowing for dust contamination (in the context of negotiations). This is a 20m zone either side of the cable corridor. T.H. Clements' figure represents the areas assessed by it as being at high risk of dust deposition. Whilst the Applicant has now said that they would compensate for crop loss arising from dust deposition in this area (and, indeed, anywhere it occurs), this does not address the potential shortfall in supplies that such damage would cause and the concomitant risk to the business.

40. Fred Grant grows product for T.H. Clements. The product is purchased at harvest. However, 90 acres of his land is also impacted by the ODOW scheme such that he will be unable to grow 90 acres worth of vegetables that he would usually supply to T.H. Clements. T.H. Clements needs to cover that missing product by growing this crop at Gosberton Farm. As such, the 90 acres is included in the total mitigation land needed. The Applicant do not account for this.

41. The total land requirement is then to be uplifted to account for the expected lower productivity of the Gosberton Farm land. At ISH8 Ms Jeffrey, the Finance Director of T.H. Clements, explained that the land at Gosberton Farm is of a lower quality to that effected by the ODOW scheme and that 100 acres at Gosberton would be equal to about 85 acres of the land impacted by the scheme.

42. This total comes to 643 acres (93.3% of the total at Gosberton Farm). Even excluding Fred Grant's land, the number is 78%. This demonstrates that Gosberton Farm was an appropriate lease to take out having regard to the extent of mitigation required. In short, it was plainly reasonable for T.H. Clements to take the (rare) opportunity to protect its business from the Applicant's scheme when the Gosberton Farm lease came on the market.

CONSEQUENCES OF FAILURE TO COME TO AGREEMENT WITH T.H. CLEMENTS

43. If an agreement is not entered into with the Applicant, T.H. Clements would experience private loss without compensation. T.H. Clements has sought to mitigate the risks of the Applicant's scheme through the acquisition of Gosberton Farm. Without the Applicant's

scheme, this acquisition would not have been made. T.H. Clements has been put to the cost of this acquisition and the on-going cost of running this farm; the increased costs of travel to it; and the need for an operational and management base at it. This is all through the interference of the Applicant's scheme in the T.H. Clements business. And all without compensation.

44. There are four short points to make in closing.

45. First, this is a business cost that has been forced onto T.H. Clements. In truth it is the Applicant's cost but it has failed to pay. It amounts to a direct interference with the business without compensation. This goes to the overarching case for the inclusion of compulsory acquisition powers in the development consent order and amounts to unjustified interference with the business's proprietary rights under Article 1 Protocol 1 of the European Convention on Human Rights.

46. Secondly, the fact that T.H. Clements has sought to protect its business should not be held against the company and the Applicant be allowed to take advantage of it. Forcing a party into undertaking costly steps is not the Applicant mitigating the effects of its scheme, it is the definition of interference with a business that without compensation should not be allowed.

47. Thirdly, the Applicant has made reference in hearings to the fact that it is has made an offer to T.H. Clements as if that in itself is appropriate compensation. The current offer is discussed below but compensation only arises where payment is made. An offer is obviously distinct from compensation.

48. Fourthly, the Applicant has consistently implied that T.H. Clements was raising inappropriately compensation as an issue. T.H. Clements reiterates that it has never raised compensation matters that ought to be the subject of a reference to the Upper Tribunal and which are beyond the scope of the Examination.

49. T.H. Clements concerns relate only to the principle and availability of compensation. The availability or otherwise of compensation is directly relevant to the question of whether or not the award of compulsory acquisition powers is proportionate and to the compelling case test. The Examining Authority and Secretary of State will need to have in mind that, without a deal between the Applicant and T.H. Clements, there will be interference with T.H. Clements occupation of land with adverse consequences for its business. T.H. Clements' point is about *the absence of compensation*.

50. Having not yet arrived at an agreement the failures against the compulsory acquisition tests set out in the T.H. Clements CAH1 post hearing submissions remain (save in relation to alternatives in respect of corridor width) **[REP3-061]**.

UPDATE ON OPEN NEGOTIATIONS

51. The Applicant made a formal offer to T.H. Clements on 17 February 2025 and since that date there have been a number of meetings and correspondence between the parties

to discuss the offer. The offer has since been revised. The details of that commercial negotiation are not for the Examination, but at present the Applicant is offering very broadly to cover a little over 1/4 of the costs Gosberton Farm. T.H. Clements has made clear that it will compromise and accept something less than 100 per cent compensation but the current offer is materially short of compensating T.H. Clements appropriately for the very substantial interference with its business.

52. On 1 April 2025, the Applicant provided T.H. Clements with a draft Deed which the Applicant advised is based on the Applicant's "standard" occupier's consent document but amended to include an indemnity requested by T.H. Clements in the context of the ongoing compensation agreement negotiations (in respect of costs, losses etc. associated with accidental interaction between T.H. Clements farming machinery and the cable).

53. The Applicant advised T.H. Clements that the Deed is being offered as an 'interim measure' (pending conclusion of a fully negotiated compensation agreement) with the intention of giving T.H. Clements 'comfort' that it will be treated as an occupier and will be compensated on that basis (for crop loss essentially) as if the compensation code applied. While it is apparently intended to be helpful it does not give T.H. Clements the 'comfort' it requires and only serves to demonstrate once again the Applicant's failure to recognise and/or address the fact that compensation for crop loss in a particular part of a particular field is not the real issue for T.H. Clements. As set out above, the issue is that T.H. Clements cannot take the risk of growing vegetables on land in proximity to the ECC that could be contaminated by dust, as any resultant crop loss meaning customer contracts could not be fulfilled would risk the loss of key customer contracts and thus the business itself. Vegetables needed to meet customer contracts must be grown elsewhere, hence the reason for securing alternative growing land at Gosberton Farm.

54. The proposal to enter into the Deed is unorthodox. An undertaking setting out the Applicant's position with heads of terms for an agreement appended would have been more appropriate, or at the very least a formal position statement.

55. The proposal to enter into the Deed at this late stage in the Examination appears to be an attempt by the Applicant to undermine T.H. Clements' position that without a suitable compensation agreement being in place it will be exposed to significant private loss without compensation and that the ExA must take that into account when deciding whether or not compulsory acquisition powers should be granted.

56. T.H. Clements will continue to negotiate with a view to entering into a compensation agreement covering all compensation heads sought, but as things stand, its objection remains.

OTHER MATTERS

57. Attached as Schedule 1 is a table which sets out the outstanding areas of disagreement, the first of which is the subject of these submissions, being the key issues between the parties.

58. The table also records the areas of agreement where progress has been made through the Examination. In particular, it should be noted that T.H. Clements confirms that it is now content with the outline SMP and CoCP. The changes made by T.H. Clements to those documents were necessary to ensure that the top quality Grade 1 ALC land that T.H. Clements farms is handled and reinstated to its pre-construction condition in so far as possible and that drainage systems are re-instated or replaced so that the land T.H. Clements farms can be successfully drained and high yields maintained.

CONCLUSION

59. For the reasons set out above, T.H. Clements maintains its objection on the basis of the failure to justify the interference with its business and the land use impacts in relation to the installation of the onshore cable.

T.H. Clements & Son Limited – Final Principal Areas of Disagreement Statement

Schedule 1

Areas of Disagreement

No.	Issue
1	There is disagreement as to the extent of land at risk of visible dust deposition on crops resulting from construction activities. T.H. Clements has carried out dust emission modelling to assess the risk, which the Applicant has not. The main point of contention is the methodology used in the modelling, particularly the dust emission factors and the correct interpretation of IAQM guidance. T.H. Clements' dust deposition modelling is set out Appendix 14 of its written representation [REP1-050]. The Applicant's initial response to T.H. Clements' modelling is at Table 1.10, Section 4.27 of the Applicant's Responses to Written Representations [REP3-038]. There has been little movement on the parties' positions since then. T.H. Clements' most recent position on this issue is set out in Appendix 5 of T.H. Clements' Deadline 5 submissions [REP5-173], and the Applicant's most recent position is set out at Table 1.19 of the Applicant's Comments on Deadline 4a Submissions [REP5-173]. Further comments on dust are submitted by T.H. Clements at Appendix 4 of these submissions.
2	To ensure that waterlogging can be addressed as a matter of urgency to avoid crop loss, T.H. Clements has requested the following amendment to the restrictive covenant in Schedule 7 of the dDCO: *"B. A restrictive covenant over the land for the benefit of the remainder of the order land to —* *… (c) prevent the carrying out of any excavations or works or agricultural practices to a depth greater than 0.75 metre from the surface of the land, without the consent in writing of the undertaker (such consent not to be unreasonably withheld or delayed**, with consent for trench digging requests relating to waterlogging to be determined within 24 hours, if the proposed activity would not cause damage to the relevant part of the authorised development nor make it materially more difficult to access or maintain the authorised development, with such consent being subject to such reasonable conditions as the undertaker may require**) provided that (for the avoidance of doubt) —"* T.H. Clements' initially requested this amendment at Deadline 3 in its Comments on the Applicant's update to the draft DCO [REP3-063]. The Applicant set out its position at Table 0.3, Ref No (i), Section 8 of the Applicant's Response to Written Summaries of Oral Cases at ISH1 [REP4-109]. T.H. Clement requested amendment was included at Page 6 of the ExA's recommended changes to the dDCO [PD-026] but has still not been accepted by the Applicant. The Applicant set out their reasoning further in Page 16 of their comments on the Examining Authority's schedule of changes to the dDCO [REP5-148] and during ISH8. The Applicant claims that the covenant is too detailed and subjective in a restrictive covenant which applies generally; that it will be practically difficult to provide consent within a 24 hour period; and that the process for seeking and obtaining consent should be set out more fully.

T.H. Clements & Son Limited – Final Principal Areas of Disagreement Statement

	T.H. Clements position remains unchanged. As set out in T.H. Clements' summary of oral case put at ISH 8 at Appendix 1 of these submissions, T.H. Clements view is that the change is both narrow in scope and necessary. It only applies where there is waterlogging and there is, therefore, a threat of damage to crops (and, in turn, to the business through supply/ contract failures). The requirement in those particular circumstances is to act fast. The concerns raised by the Applicant during ISH 8 are not insurmountable. First, it is clear that the undertaker would be the person from whom consent was required. Secondly, any paucity in information supplied would lie with the applicant for consent and could be met by a refusal of consent. The proposed drafting does not require consent to be issued within 24 hours, only that the application for consent is determined which may entail a refusal. In all circumstances, the proposed change and its narrow scope properly balances the interests of all those involved.
3	Potential impacts on crops caused by soil heating from underground cable routes has not been agreed. T.H. Clements' raised emerging scientific evidence of the adverse effects at Paragraph 4.3.16 – 4.3.20 of its written representation [REP1-050]. The Applicant responded to the points raised in its response to LU 1.16 of the ExA's First Written Questions [REP2-051]. The Applicant pointed to research papers indicating that there will be no significant impact on growing crops. T.H. Clements appointed soil experts reviewed the research papers and responded at Appendix 4, Section 4.3.16 of T.H. Clements' Deadline 4 submissions [REP4-150]. T.H. Clements doubt the relevance of the research papers provided. The parties' positions have not changed. T.H. Clements is to assess the impact of cable heating on marketable yield of a vegetable crop being grown on rented land in due course to add weight to its argument.
4	The length of indemnity to be provided in relation to reinstated or replaced drainage systems has not been agreed.
5	In its response to CC 1.4 of the ExA's First Written Questions [REP2-079], T.H. Clements raised the need for the Applicant to monitor the depth and lateral position of the onshore cables. Following discussions with the Applicant, the Applicant stated at Table 36, Q1 CC 1.4 of its comments on Deadline 4a submissions [REP4a-115], that such monitoring is not practical and it was understood that T.H. Clements were looking into alternatives. Without more detailed information as to the nature of the cables to be installed, T.H. Clements is unable to further investigate/identify any alternative solutions.

T.H. Clements & Son Limited – Final Principal Areas of Disagreement Statement

Areas of Agreement

No.	Issue
1	The extent of order land owned and/or farmed by T.H. Clements, and land to be severed, has been agreed between the Applicant and T.H. Clements.
oSMP	
2.1	T.H. Clements requested that it be consulted prior to the submission of the final SMP to the LPA for approval and that T. H. Clements comments on the SMP be submitted to the LPA at the same time. The drafting proposed by T.H. Clements below was agreed: Section 8: *"Prior to submission to the LPA, the final SMP will be submitted to the Landowner Interest Group (LIG)* ***and T H Clements*** *providing no less than 10 working days for comments to be provided. Comments will be taken on board by the Project and alterations will be made where appropriate prior to work commencing.* ***The Applicant will collate comments received and any subsequent amendments agreed by the Applicant and submit these details to the LPA when submitting the final version of the SMP****."*
2.2	T.H. Clements raised issues in relation to the oSMP's provisions on pre and post-construction surveys. In initial drafts of the oSMP, the distance proposed between survey points was too great, which could have led to variations in silt and running sand being missed. T.H. Clements also requested more detailed provision in relation to the type of testing to be carried out on soils, and provisions to ensure that stone content testing accurately reflected the overall field parcel. The below wording proposed by T.H. Clements was agreed: Section 16: ***"Where changes in soil type and / or depth are identified, an additional point will be surveyed at 50m, in order to provide more accuracy on where the change occurs."*** Section 17: ***"Samples of topsoil, upper subsoil, and lower subsoil (where present) will be taken within each soil type for Particle Size Distribution (PSD) analysis, in order to calibrate and confirm hand texturing."*** Section 18: ***"Soil Clerk of Works will attend site and verify that the soil survey results are reflective of overall field parcel. Where discrepancies are noted, it may be necessary to undertake additional bulk sampling to verify and confirm stone percentages within a field parcel."*** In initial drafts of the oSMP, provision for additional testing was included for topsoil only. T.H. Clements requested provision for subsoil testing to be included.

	The below wording proposed by the Applicant was accepted by T.H. Clements: Section 25: **<u>If requested, as part of the precondition surveys additional soil testing will be undertaken on the upper subsoil. The testing will be undertaken on the upper subsoil horizon identified by the ALC surveys. The indicators that will be tested will comprise pH, Phosphorus, Potassium, Magnesium and Organic Matter.</u>**
2.3	T.H. Clements raised concerns that the construction of a temporary haul road could affect (increase) the stone content of the soil. To confirm that stone content will be returned to its original (pre-construction) level after construction (essentially stoneless), the below wording proposed by T.H. Clements below was agreed: Section 44: ***<u>"Following the methodology defined within Section 1.8, pre and post-construction soil surveys will be carried out</u> to <u>ensure that soils are returned with their original stone content."</u>***
2.4	T.H. Clements raised concerns as to how the oSMP provisions dealt with the management of "Running Sand". T.H. Clements requested that soil surveys to identify the presence of silt soils and groundwater-affect soils, should use the same methodology as the methodology previously established in the oSMP. Also, given the presence of multiple soil horizons, the provisions in earlier drafts of the oSMP relating to the easiest way to separate soil was too simple. Until the actual depths of the soil horizons are determined, it is not possible to say how much of the layer(s) above the running sand should be separated. The below amendments proposed by T.H. Clements were agreed: Section 51: *"A detailed soil survey of the route pre-construction* ***<u>~~at a minimum density of one investigation per 100m~~ following the methodology detailed in Section 1.8</u>****, to identify the presence of silt soils and groundwater-affected soils …"* Section 52: *"Separate 'soil' (the topsoil, upper and lower subsoil horizons) from any underlying material and ensure that underlying material is replaced below the soil when trenches are filled****. <u>~~This would be most simply achieved by separating the upper 0.5m to 1.0m of subsoil from any material below~~</u>****."*
2.5	T.H. Clements did not agree with the initial drafts of the oSMP in relation to adverse weather. The original drafts allowed soil handing operations to restart after one full dry day following heavy rainfall. T.H. Clements requested that soil handling operations should restart only after an agreed moisture criteria was met. The below amendment proposed by T.H. Clements was agreed:

	Section 53: *"If sustained heavy rainfall (e.g., >10mm in 24 hours) occurs, soil handling operations must be suspended. Soil operations must not restart until* ***~~the ground has had at least one full dry day or~~*** *an agreed moisture criteria of the soil can be met (such as 'drier than the plastic limit') as advised by the SCoW;"* T.H. Clements also requested that mowing and stripping should be avoided during wet conditions. This was agreed to by the Applicant and included in Section 53.
2.6	T.H. Clements raised concerns in relation to the soil reinstatement provisions in oSMP. T.H. Clements requested that the oSMP expressly confirm that the purpose of the soil reinstatement provisions was to restore the soil to its baseline ALC classification. T.H. Clements requested further amendments to achieve the minimum loss of marketable yield. The below wording proposed by T.H. Clements was agreed: Section 92: ***"The consequence of this, for the purpose of satisfying the tests in NPS EN-5 paragraph 2.9.25 as it relates to mitigating effects on ALC grade land, is that the land will be returned to its baseline agricultural land classification."*** Section 97: *"Care must be taken to ensure that soil horizons are replaced* ***to their original position****, and to the correct thickness (with an allowance of up to 20% bulking to allow for settlement)."* Section 103: *"Soil surveys* ***~~and soil testing~~*** *will be carried out* ***following the methodology detailed in Section 1.8****, to record the physical characteristics of the reinstated soils."*
2.7	Throughout the oSMP, when referring to soil horizons, T.H. Clements requested that "topsoil", "upper subsoil" and "lower subsoil" should be referred to separately except where appropriate. It was important to ensure that distinct soil horizons were identified, segregated and maintained at all stages to achieve the minimum loss of marketable yield which otherwise could result from inconsistent crop growth. This was agreed to, and implemented by, the Applicant by way of amendments to the oSMP.
oCoCP	
3.1	T.H. Clements requested that it be consulted prior to the submission of the final CoCP to the LPA for approval and that T. H. Clements comments on the CoCP will be submitted to the LPA at the same time. The below drafting proposed by T.H. Clements was agreed: Section 3: *Prior to submission to the LPA, the final CoCP will be submitted to the Landowner Interest Group (LIG)* ***and TH Clements*** *providing no less than 10 working days for comments to be provided. Comments will be taken on board by the Project and alterations will be made where appropriate.* ***The Applicant will collate comments received and any subsequent amendments agreed to by the Applicant and submit these details to the LPA when submitting the final***

	versions.
3.2	T.H. Clements requested that points of dispute in relation to severed land should be referred to an independent surveyor. The below wording proposed by T.H. Clements was agreed: Section 109: ***"In the event of dispute regarding the matters to be agreed in paragraphs 104, 105 and 106, the point in dispute shall be referred to an independent RICS surveyor with at least 10 years experience ("Expert"). The costs of such reference/appointment shall be borne by each party and the Expert's decision, including awarding costs, shall be final and binding on the Applicant and the landowner in question."***
3.3	The Applicant included a drainage plans approval process at sections 112 and 113 of the oCoCP. The inclusion of these were welcomed by T.H. Clements. However, T.H. Clements requested that agents as well as landowners were consulted during this process, and that experts with the appropriate experience were involved. The following amendments to section 112 and section 113 proposed by T.H. Clements were agreed: Section 112 and Section 113 • *"The landowner and or their drainage consultant/**agent** will have 20 working days following receipt of the drainage report to confirm if they have any additional requirements. If no response is received within 20 working days then it is deemed the landowner has accepted the drainage report; …"* • ***"In determining whether to accept additional requirements from the landowner and or their drainage consultant/agent, the Applicant will act fairly and reasonably taking into account the soil type, the nature of cropping along with the need for crop consistency, and the current drainage system/infrastructure; …"*** • *"… the landowner and their drainage consultant ~~may~~ **will** be given the opportunity to inspect the drainage works and any reasonable representations will be taken into account by the Applicant; …"* • *"In instances where the existing drainage scheme cannot be adequately reinstated, the Applicant may design an alternative drainage scheme over part or the entirety of a field. Such design to be agreed with the landowner **following the same procedure as set out above in relation to drainage reports; …"*** • ***"All connections to existing drainage systems to be photographed and a GPS location recorded. Digital copies to be provided to the landowner; …"*** • ***"The Applicant will provide accurate as laid drainage plans to the landowner post construction; …"***

	• *"Should there be a dispute between the parties then the matter will be referred to expert determination where an independent drainage expert, **with appropriate experience of the soils concerned**, will be appointed by ADAS"* Section 112 • *"The Applicant will submit a pre construction drainage report to the landowner **and agent** for their review and comment; …"* Section 113 • *"As soon as reasonably practicable following completion of the works the Applicant's drainage contractor will conduct a site meeting with the landowner **and agent** to carry out an assessment of any impact on the drainage system as a result of the construction works; …"* • ***"Where appropriate and necessary, redundant upstream drainage will be removed after an alternative drainage scheme has been installed; …"***
3.4	Throughout the oCoCP, when referring to soil horizons, T.H. Clements requested that "topsoil", "upper subsoil" and "lower subsoil" should be referred to separately except where appropriate. It was important to ensure that distinct soil horizons were identified, segregated and maintained at all stages to achieve the minimum loss of marketable yield which otherwise could result from inconsistent crop growth. This was agreed to, and implemented by, the Applicant by way of amendments to the oCoCP.
oAQMP	
4.1	Following T.H. Clements' air quality expert's submissions in ISH5, the Outline Air Quality Management Plan was amended to confirm that each final AQMP will be updated to incorporate detailed construction data to enhance the accuracy of dust mitigation strategies.
4.2	The draft oAQMP submitted at Deadline 4a [REP4a-077] makes it clear that 'hard surfaced roads' will be installed in relation to 'trackout', which principally relates to the entry/exit sections of the haul road at the site boundary. As outlined in T.H. Clements' submission on PDF pages 9-10 Deadline 5 [REP5-173], in response to Action Point 23 from ISH5 and as discussed at ISH8, T.H. Clements has requested that the oAQMP includes a commitment to consider the installation of trackway (or similar) on sections of haul road within the ECC sections that are adjacent to agricultural land that is subject to stringent visible dust contamination standards imposed by commercial contracts (e.g. T.H. Clements' farmed land). This would serve to reduce wheel-generated dust emissions (where ground/soil conditions are suitable for this) and would align with Section 1.16 (Page 17) of the Outline Soil Management Plan [REP5-115]. The suggested edits would also provide additional clarity for those haul road sections running the length of the ECC, ensuring due consideration is given to the use of trackway (or similar) in addition to just aggregate (which will naturally have a higher dust potential).

T.H. Clements & Son Limited – Final Principal Areas of Disagreement Statement

	Following T.H. Clements' request, the Applicant provided T.H. Clements with an updated version of the oAQMP with amendments to Table 2.1 relating to Trackout / Construction Access Points / Haul Road Crossings. The amendments take T.H. Clements' considerations into account. As such, the version of the oAQMP submitted by the Applicant at Deadline 6 is agreed.

Appendix 4 - Comments on the Applicant's Comments on T.H. Clements' Deadline 4a Submissions

T.H. Clements' Comments relating to REP5-150 "*The Applicant's Comments on Deadline 4a Submissions*" (March 2025)

This document provides T.H. Clements' consolidated comments on the Applicant's further submission [REP5-150] in relation to T.H. Clements' detailed dust dispersion modelling study [Appendix 14 of REP1-050] (the "THC Study").

The Applicant's submission – specifically Pages 65-69 and Pages 74-93 of REP5-150 – principally aim to respond to T.H. Clements' submission on dust contamination in Appendix 3 of REP4a-140.

Given that the technical disagreements between the Applicant and T.H. Clements in relation to the THC Study remain unresolved and essentially unchanged since the submission of the THC Study, there is little value in T.H. Clements providing further *detailed* technical responses in this document. Any such responses would only serve to repeat the detail and transparency of the THC Study [REP1-050] and subsequent written submissions made in REP3-065; REP4a-140; and REP5-173.

T.H. Clements' comments and responses in this document are predominantly high-level and provide the relevant cross-references to earlier submissions. However, in some instances, T.H. Clements has provided a more detailed response where it is deemed that the Applicant has distinctly misinterpreted T.H. Clements' previous submission in REP4a-140.

T.H. Clements' consolidated comments on the Applicant's submission [REP5-150] are provided in **Table 1** of this document.

To reiterate, the THC Study submitted in Appendix 14 of REP1-050 is a detailed, robust, and evidence-based assessment of potential visible dust impacts on T.H. Clements' land. Throughout the Examination at Issue Specific Hearings ISH3 (December 2024), ISH5 (February 2025), and ISH8 (March 2025), in addition to the aforementioned written submissions, T.H. Clements has, where needed, provided appropriately justified responses to confirm the validity of the dust dispersion modelling and results. As such, there has been no need, at any stage, to provide a material update to the original assessment.

Overview of T.H. Clements' Position

The issue of dust contamination on T.H. Clements' farmed land is a particularly **unique scenario**, driven by a combination of:

- **zero tolerance to visible dust** imposed by THC's commercial contracts;
- **proximity of THC land** directly adjacent ODOW's proposed export cable corridor (ECC);
- potential **intensive dust-generating construction activities** within the 80 m working width of the ECC;
- **millions of tonnes of soil being stripped, excavated, disturbed, and stored** within the ECC adjacent to THC land;
- soil types that are **susceptible to wind erosion**, based on expert soil analyses; and,
- project location in **one of the driest, warmest regions in the UK** with relatively **high wind speed frequency** (flat and coastal) as per the UK Met Office regional climate description.

Given the above, a **common sense approach** dictates there is the **distinct possibility of visible dust contamination** on THC's sensitive crops. On this basis, the THC Study was undertaken to quantify this risk.

The THC Study [Appendix 14, REP1-050] presents a **robust and evidence-based modelling assessment**, which includes:

- a detailed bottom-up dust emissions inventory for each key construction phase;
- use of **Project-level information** on construction **activity types and scale**:
- application of activity-based dust emission factors aligned with **global best practice**;
- use of a **regulatory approved dispersion model**; and
- reliance on **location-specific variables relating to soil and climate**, ensuring the inventory and modelling were representative of local site-specific conditions.

The Study identified a **high risk** of visible dust contamination across **107 ha of THC land**, posing a serious threat to THC's ability to fulfil retailer contracts – potentially having a terminal impact on the business.

For context, this 107 ha 'high risk' area accounts for **less than 10% of THC's 1,400 ha** landholding near the **40 km ECC stretch** assessed in the model.

Applicant's Position vs THC's Evidence

Throughout the Examination, the Applicant has sought to discredit THC's assessment rather than present a quantitative counter-study on this specific scenario. Instead, the Applicant relies on a qualitative, project-wide risk assessment, assuming mitigation will eliminate all risk beyond the Order Limits – an unrealistic and unjustified stance.

T.H. Clements' Conclusion

As stated in REP4a-140 [Appendix 3, PDF page 18], the Examining Authority should give due consideration to THC's quantified findings, which:

- Align with latest IAQM guidance and evolving best practice.
- Provide clear, site-specific quantification of dust contamination risk.
- Demonstrate that even with mitigation, significant dust impact remains likely.

T.H. Clements' Detailed Written Responses to Applicant's Review of Dust Modelling Study (REP5-150)

T.H. Clements' written responses to each of the main points raised by the Applicant in their submission at Deadline 5 [REP5-150] in relation to dust contamination are presented in **Table 1** and **Table 2** overleaf. These are presented in a tabulated format, with the left-hand column presenting the Applicant's comments from Pages 65-69 and Pages 74-93 of REP5-150. The right-hand column presents T.H. Clements' responses.

T.H. Clements emphasises that, beyond the specific arguments concerning IAQM guidance, the THC Study [Appendix 14, REP1-050] remains the primary evidence base. This document contains all reasoned and evidence-based justifications relevant to the assessment of dust contamination.

Whilst T.H. Clements may cross-reference their additional written submissions from the Examination process, **Appendix 14 of REP1-050 remains the core document underpinning the issue of dust contamination**.

Table 1: T.H. Clements' Responses to Applicant's Review (Pages 65-69; REP5-150) on Dust Contamination

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
1	The Applicant's and TH Clements' technical reports regarding dust are conflicted and appears there is no resolution that is likely to be reached. The Applicant maintains that their assessment of dust and subsequent Outline Air Quality Management Plan is robust and fit for purpose.	T.H. Clements acknowledges that there is unlikely to be an agreement on the issue of dust contamination. This is a very unique scenario whereby intensive dust-generating construction activities will take place directly adjacent to T.H. Clements' land, within which Brassica crops are subject to zero visible dust contamination as per their commercial contracts. T.H. Clements maintains that, whilst the Applicant's *qualitative* assessment is suitable at a broader project-level scale, it is not suitable nor fit for purpose with respect to the zero tolerance to visible dust applicable to T.H. Clements' land. Although the Applicant proposes best practice mitigation, it is not reasonable to assume zero dust impact on land adjacent to construction activities (i.e. dust mitigation does not represent the removal of all dust sources). For T.H. Clements, for whom, it was both appropriate and necessary to undertake a detailed *quantitative* assessment. The Applicant's assertion that it does not need to quantify dust impact fails to account for the specific commercial risks faced by T.H. Clements. In this regard, the Applicant has not presented an equivalent quantitative assessment of visible dust impacts on T.H. Clements land for the ExA to consider. T.H. Clements' detailed response on pages 1-3 of Appendix 3, REP4a-140 covers this.
2	The Applicant has at D4a updated the Outline Air Quality Management Plan [REP4a-077] in response to Action Point 23 from ISH5 [REP4a-120] and TH Clements have confirmed they are content with the changes made. The Applicant therefore assumes that the Outline Air Quality Management Plan is agreed.	As outlined in T.H. Clements' submission on PDF pages 9-10 Deadline 5 [REP5-173], in response to Action Point 23 from ISH5 and as discussed at ISH8, T.H. Clements has requested that the oAQMP includes a commitment to consider the installation of trackway (or similar) on sections of haul road within the ECC sections that are adjacent to agricultural land that is subject to stringent visible dust contamination standards imposed by commercial contracts (e.g. T.H. Clements' land). This would serve to reduce wheel-generated dust emissions (where ground/soil conditions are suitable for this) and would align with Section 1.16 (Page 17) of the Outline Soil Management Plan [REP5-115]. Following T.H. Clements' request, the Applicant provided T.H. Clements with an updated version of the oAQMP taking these considerations into account. As such, the version of the oAQMP submitted by the Applicant at Deadline 6 is agreed. T.H. Clements understands and welcomes that they, along with other interested parties, would be consulted on this prior to construction commencing adjacent to their land.

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
3	An overview of differences in the construction dust assessment is provided in REP4-107 which is supplemented by REP4-125, and these points remain valid. No new evidence has been presented to challenge them.	In addition to the detailed, robust, and evidence-based submission made by T.H. Clements in Appendix 14, REP1-050, T.H. Clements has provided justified, reasoned, and evidence-based written responses on the matter of dust contamination within REP3-065 (PDF pages 13-17), REP4-150 (PDF pages 8-10), REP4a-140 (Appendix 3), and REP5-173 (Appendix 5). T.H. Clements would query the assertion by the Applicant that "*no new evidence has been presented to challenge them*" in relation to the Applicant's comments on the THC Study. On the contrary, the Applicant has not presented any compelling evidence within their review(s) that the approach adopted by T.H. Clements should be materially altered. Indeed, the Applicant has not undertaken a quantitative assessment of dust impacts of any kind on T.H. Clements land to form a challenge against the approach and outcomes of the THC Study [REP1-050].
4	In fact, written submissions from THC confirms their modelling assessment [REP1-050] overpredicted dust emissions by 20% due to **dust volume clarifications** [REP4-150] and an additional 20% due to **misrepresenting HDD areas** as surface excavation [REP4a-140]. Despite this, THC continues to justify its modelling outcomes without correcting. This response signposts where these issues have already been addressed and provides additional assurances in response to THC's concerns.	This particular comment by the Applicant presents a **fundamental misinterpretation** of the THC Study methodology and dust deposition dispersion modelling in general. **Dust Volume Clarifications** On the issue of an overprediction of dust emissions due to "dust volume clarifications", the Applicant's comment conveniently excludes the ***range*** in dust emission differences given by T.H. Clements in PDF page 9, REP4-150. Following a review of the Applicant's clarification note on soil excavation and bund dimensions [REP3-056], in the interests of transparency, T.H. Clements reported that the difference in mass dust emissions between the initial [REP1-050] and updated totals **ranged from +11% to -20%** when reviewing each construction phase independently (i.e. the THC Study underpredicted, as well as overpredicted). At Deadline 5 [REP5-173, PDF pages 91-92], T.H. Clements provided further analysis of these changes. The analysis used a simple linear relationship between dust emissions and dust deposition impact **to demonstrate that the maximum reported 'high risk' area of visible dust impact, based on the updated emissions inventory (108 ha), remains equivalent to that reported in the THC Study (107 ha).** Applying a simple linear relationship was appropriate in this regard as there was a uniform change to the dust emissions inventory (i.e. applicable to all soil excavation, transfer and wind erosion sources within the ECC). This meant that the relevant modelled dust emission rates would change by an equal and proportionate amount across the entire modelled study area. As such, the model outputs for dust deposition impact would be very likely to change by an equivalent and uniform proportion.

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
		Therefore, T.H. Clements' assertion in REP4-150 – that the differences in dust emissions represent a reasonable level of tolerance – was justified. This confirmed that the project-specific information and assumptions applied to the emissions inventory in the THC Study remain appropriate. **<u>Misrepresenting (trenchless) HDD areas</u>** The Applicant's comment ***incorrectly assumes*** that the THC Study overpredicted dust emissions by 20% by not taking account of HDD areas. As per REP3-065 and REP4a-140, T.H. Clements acknowledged that the exclusion of trenchless technique is a limitation inherent to the THC Study. However, T.H. Clements did issue two requests to the Applicant for the provision of relevant georeferenced spatial information (e.g. shapefiles) relating to activities within the Order Limits – once prior to commencing the dispersion modelling (see Table 4-1 of Appendix 14, REP1-050) and once after the December hearings. **<u>On both occasions, this information was not provided.</u>** As a result, it was not feasible to incorporate emissions reductions in trenchless areas within the modelling, and the assessment had to proceed without this information. The Applicant stated that the trenchless areas accounted for approximately 20% of the THC Study area, which is not challenged. However, it is ***fundamentally incorrect*** for the Applicant to suggest this equates to a 20% overprediction of dust emissions, as this assumes that a reduction in emissions within just 20% of the modelled construction area equates to a 20% reduction in emissions across 100% of the modelled construction area. In other words, the Applicant has incorrectly assumed that emissions reductions in trenchless areas translate proportionally across the entire construction area, which is not the case. There will be a reduction in emissions within the trenchless areas, but this cannot be uniformly applied across the entire construction area that includes all areas where trenches will be present. The reduced emissions will only be applicable to the trenchless areas. T.H. Clements understands from ISH5 that most of the trenchless areas will still include the haul road such that some soil excavation, transfer, and storage activities will inevitably occur, as well as wheel-generated dust from subsequent vehicle movements on the haul road. Therefore, it is apparent that not all dust emissions will be absent from trenchless areas, and it is not possible to apply a linear relationship between the dust emissions inventory and the modelled outputs for dust deposition.
5	The Applicant's assessment follows established best practice, using the latest IAQM Construction Dust Guidance (2024), which has been successfully applied to similar NSIPs	Please see T.H. Clements' responses to Items 1 and 3 above.

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
	traversing farmland, including HS2 and the Sheringham Shoal Extension (SEP). The IAQM framework already accounts for commercially sensitive farmland, and the maximum (high) level of protection has been assigned - higher than agreed in other similar DCOs (e.g., SEP assigned medium protection in agreement with the National Farmers Union).	Again, the use of the IAQM Construction Dust Guidance (2024) is not challenged and as evidenced on a number of occasions in T.H. Clements' written submissions, the same guidance provides justification for the detailed assessment completed by T.H. Clements. Whilst the Applicant cites the use of this guidance and the qualitative assessment approach on other linear infrastructure projects traversing farmland, they have not confirmed whether or not any of those projects specifically intercepted and/or ran adjacent to farmland subject to a zero tolerance to visible dust contamination – a scenario unique to the ODOW application. We would anticipate not. In this regard, the IAQM qualitative framework and, by association the Applicant's assessment, cannot adequately describe the potential impact on T.H. Clements land and its business. Hence, T.H. Clements undertook a detailed modelling assessment to quantify potential impacts, inclusive of key mitigation (e.g. dampening dusty activities, seeding stockpiles) proposed by the Applicant.
6	Despite this, THC conducted a quantitative dust assessment using dust emission factors from mines in the USA and Australia, justifying it based on two concerns. These have been addressed for completeness.	The language and narrative adopted in the Applicant's comment, which has been used on a number of occasions within their written submissions, is ***misleading and fundamentally incorrect***. The justification for the use of the respective dust emissions factors in the THC Study is robustly outlined and justified within the THC Study itself [Section 4.2.2 of Appendix 14, REP1-050] and repeatedly reinforced throughout T.H. Clements' written submissions. It must be emphasised that **the THC Study is, by definition, a construction dust modelling assessment**. The activities taking place (e.g. soil excavation, soil storage, heavy vehicle movements on an unpaved haul road) are common across a number of industry sectors. It is the scale of these activities, the nature of the material being disturbed, and local weather conditions that are key to determining dust emission potential for a specific project. All of these factors are accounted for in the THC Study and the **IAQM Construction Dust Guidance (2024) explicitly allows for detailed dispersion modelling to assess such impacts**. The THC Study relied on **project-level construction activity** information to determine the likely construction activity rates (i.e. scale of activity) and, crucially, applied dust emission factors that took specific account of **local conditions** i.e. site-specific inputs relating to climate (e.g. wind, rainfall) and soil (e.g. silt content, moisture content), which were available for the THC Study. These emission factors are recognised in **live guidance** as **global best practice** in estimating emissions from the activities included in the THC Study and **are not limited for use in specific countries or industry sectors**. As Mr Pawson summarised at ISH8 – put simply, the action of digging a hole, removing soil, and dropping the material onto the ground on a construction site in the UK, is the same as doing it in on a mining site in Australia. The key differences between the two are the nature of the soil, the climate/weather that the material is exposed to, and the scale of the activity (i.e. activity rate). As evidenced within the THC Study, these key differences were accounted for in the development of the dust emissions inventory for the project.

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
		Please also refer to T.H. Clements written submissions in PDF pages 90-91, REP4a-140.
7	**1. The Sensitivity of Crops to Dust Soiling:** a. The IAQM framework already accounts for commercially sensitive horticulture, and the Applicant has assigned the highest level of protection. This is explained in REP4-108 and REP4-125 (Section 3.2.1) with direct extracts from the IAQM Construction Dust Guidance. **2. The Risk of Residual Dust Effects after Mitigation:** a. The full suite of UK IAQM prescribed best practice dust controls are recommended, with 50 measures outlined in the Outline AQMP [REP4a-077]. These measures are designed to control dust at its source. The strategy is inherently resilient, maintaining control even if some measures are less effective. The Outline AQMP [REP4a-077] also includes a proactive communications and monitoring framework whereby the outcomes are reported to the local authority. See Section 4.2.5 REP4-125. b. As outlined in Section 4.2.1 [REP4-125], the Applicant's assessment applied conservative assumptions, assigning the maximum dust emission potential and receptor sensitivity, leading to a high-risk outcome and maximum mitigation. However, once assessed on a phased basis (i.e. for the Final AQMPs), the dust emission potential could reasonably be downgraded to medium, aligning with Outline AQMP [REP4a-077] principles aimed at minimising working areas. Given this, the proposed mitigation already exceeds what is necessary.	See response to Item 5 above. T.H. Clements has been explicit and consistent in justifying the need for a detailed quantitative assessment, citing relevant extracts from the IAQM Construction Dust Guidance (2024).
8	Despite this, THC continues to justify its modelling assessment by citing the IAQM Construction Dust Guidance, which acknowledges that modelling can be undertaken (although outside of the scope of the guidance). However, THC's assessment [REP1-050] is fundamentally flawed, as it relies on emission factors that are not appropriate to represent construction activities and are now withdrawn.	See response to Item 6 above and Item 9 below.

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
9	**1. Use of Inappropriate Emission Factors** a. It relies on mining dust emission factors from coal/metalliferous mines in the USA and Australia, which are unvalidated for the UK climate and do not represent construction activities. See Section 2.1 REP4-125. b. 83% of emissions in the assessment are based on a 1988 wind erosion (dust caused by wind) emission factor equation used for coal stockpiles, which is both inappropriate and now withdrawn. THC claims to have used Australian (NPI) and US (EPA AP-42) mining emission factors (para 4.2.70 [REP1-050]), which are their respective national default sources for mining emissions. However, this factor is not recommended in both sources, which instead prescribe significantly lower default wind erosion emission factors. The 1988 coal stockpile emission factor used by THC is presented in the Australian NPI guidance, which tested and rejected it as a "high estimate for Australian conditions" recommending a default value 20 times lower than the one THC has applied. Additionally, the latest US EPA AP-42 prescribes a default wind erosion emission factor 80 times lower than THC's. Crucially, the 1988 coal stockpile factor itself originates from an outdated version of the US EPA AP-42, which was withdrawn in 1995 and is no longer valid1. An advisory note has been placed on the document, stating it is an early version retained for historical reference only and directing users to the latest version of US EPA AP-42, which prescribes a wind erosion emission factor 80 times lower (as explained above). 83% of emissions in the assessment are based on an emission factor for coal stockpiles which is no longer supported for mining, regardless of whether it is appropriate to represent construction activities.	**On point a)** – See T.H. Clements' response on PDF pages 19-22, REP4a-140, and Item 6 above. **On point b)** – The wind erosion emission factor equation used in the THC Study aligns with the principles outlined above (see Item 6), as it directly depends on **site-specific** data, including soil silt content, wind speed, and rainfall. Furthermore, the use of this emission factor equation is **endorsed by live guidance cited as global best practice by the World Bank**[1] **–** specifically, the *Fugitive Emissions Estimation Techniques Manual (EETM)*[2], published by the Australian Government [see Table 4-1, Appendix 14, REP1-050]. This guidance, which is directly relevant to fugitive emissions from construction activities, references the **same** wind erosion equation used in the THC Study for estimating emissions from material stockpiles. Although this equation was originally developed for stockpiles at a mining site (the *Mining EETM* is referenced in REP1-050), page 21 of the Fugitive EETM explicitly states that the equation "*…can also be tailored operations at a specific facility if information is available on:* • ***silt content*** • *the number of days per year with* ***rainfall*** *above 0.25 mm* • *the percentage of time that* ***wind speeds*** *exceed 5.4 m/s at the mean stockpile height.*"[2] As detailed in Appendix 14, REP1-050 and all relevant T.H. Clements submissions, these **site-specific** data were available and applied accordingly. The EETM further clarifies that *"…default emission factors are supplied for use in the* ***absence*** *of site-specific data."* In other words, **default factors should only be used when site-specific data are unavailable –** which was not the case for the THC Study. Applying site-specific emission factors, rather than default values, aligns with technical best practice, as set out in T.H. Clements' response on PDF pages 22-23 of REP4a-140. This response also explains why wind erosion is the predominant source of dust emissions. Given the volume of excavated material stored within the Order Limits, the **project's location** [see paras. 44-45, Appendix 14, REP1-050], and the **high susceptibility of the excavated soil to wind erosion** [see para. 77, Appendix 14, REP1-050], it is evident that **wind erosion represents the primary dust source for this project.**

[1] IFC / World Bank (2007) EHS General Guidelines [redacted]

[2] Australian Government (Jan 2012) *National Pollutant Inventory EETM for Fugitive Emissions Version 2.0* [redacted]

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
10	c. The IAQM Construction Dust Guidance (Section 5.5) acknowledges emission factors from the European Environment Agency (EMEP 2.A.5.b – Construction and Demolition) as a source to facilitate modelling, which in turn references the latest US EPA AP-42. While THC claims to have followed this approach, a review confirms this is incorrect. The withdrawn 1988 coal stockpile emission factor for wind erosion (83% of emissions) is not included in the EMEP 2.A.5.b – Construction and Demolition (or other sources recommended within it i.e. the latest version of US EPA AP-42). This is because it was withdrawn in 1995. The availability of appropriate wind erosion factors is not an issue, as it signposts to the US EPA AP-42 default wind erosion emission factor (discussed in point b above), which is 80 times lower than the one THC applied.	To quote the IAQM Construction Guidance (2024) in full, Section 5.5, Page 13 of the guidance states: "…. *Emission factors are available from sources **such as** the European Environment Agency (EMEP 2.A.5.b Construction and demolition) to facilitate this process*." Clearly, the IAQM guidance wording is signposting a potential source of emission factors. The European Environment Agency document cites the use of US EPA AP-42 factors when adopting a detailed bottom-up approach to developing a dust emissions inventory, as was done in the THC Study. Page 5 of the European Environment Agency guidance[3] states that, when adopting such an approach, "…*it requires more detailed activity data, for instance on **vehicular movements** and **earth moving activities**. In addition, it needs **basic climatic and soil data***". Again, this explicitly aligns with the principals of the THC Study outlined in the above responses to Items 6 and 9. **All emission factors** used in the THC Study (whether US EPA AP-42 and/or Australian EETMs) are published in live guidance and referenced as global best practice by the World Bank. The use of these factors is justified and evidenced within Appendix 14, REP1-050.
11	**2. IAQM (Mining) Advises it is Inappropriate** a. Given the reliance on mining emission factors, the IAQM's separate Minerals Guidance (2016) is relevant which explicitly advises against using non-UK emission factors in local scale dispersion modelling assessments, describing it as inappropriate. This remains the most up-to-date guidance available.	T.H. Clements provided a robust and justified response on this matter in REP4a-140 (PDF pages 20-22). The IAQM Minerals Guidance (2016) does not explicitly prohibit the use of dispersion modelling; in fact, it acknowledges that modelling may be appropriate in certain circumstances. As noted in the response to Item 6 above, the THC Study is fundamentally a **construction dust assessment**, meaning the 2024 IAQM Construction Dust Guidance is the most relevant. Despite this, at ISH8, the Applicant argued – somewhat inconsistently – that the 2016 IAQM Minerals Guidance should be used to evaluate the THC Study, while the 2024 IAQM Construction Guidance was more appropriate for their own qualitative assessment. As previously stated, IAQM is currently updating its 2016 Minerals Guidance and has explicitly stated that its review will consider: "…*feedback on many aspects including: …**Increased application of dispersion modelling***." At ISH8, the Applicant acknowledged that the updated IAQM Minerals Guidance will retain the same risk assessment concept, but IAQM itself has confirmed that the revision will also account for: "…***issues raised by members, and the legal and technological changes***" (i.e. including the use of dispersion modelling).

[3] European Environment Agency (2023) EMEP/EEA air pollutant emission inventory guidebook 2023 (Accessed via: [redacted]

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
		Given that the **2024** Construction Dust Guidance **–** a direct revision of its 2016 counterpart – now recognises dispersion modelling as an ***appropriate assessment tool***, it is reasonable to anticipate that the updated Minerals Guidance will follow a similar approach. This is particularly relevant since many dust-generating activities in minerals mining are ***identical to those in the construction sector*** (see response to Item 9). Although dispersion modelling for dust impacts is rare in the UK, this case presents a unique and rare scenario: • T.H. Clements land, with a **zero tolerance** to visible dust contamination, is located **immediately adjacent** to the ODOW construction corridor. • Construction activities in this corridor will have a **high potential for dust emissions**. Given these factors, the use of **dispersion modelling is both appropriate and necessary**.
12	**3. THC Acknowledges Overpredictions** a. THC acknowledges up to a 20% overprediction in dust emissions due to clarification of project data [REP4-150] and 20% of the study area is flawed due to assuming surface excavation where HDD is planned [REP4a-140]. Despite this, THC has not quantified the impact on their original 107-hectare assertion. The Applicant has raised this in Q2 LU 1.3 [REP4a-114].	This is definitively responded to in the response to Item 4 above.
13	**4. Other Outstanding Issues:** a. THC's response to REP4-125 only engages with a 2-page summary, oversimplifying the detailed analysis and overlooking key points, which are re-emphasised in Table 1.22. The points made in REP4-125 remain valid.	T.H. Clements' submission at Appendix 3, REP4a-140 provides detailed responses to the issues raised by the Applicant within REP4-125. The responses given by T.H. Clements cross-references, where appropriate, the content of the Applicant's submission throughout. T.H. Clements also cross-references the to the THC Study [Appendix 14, REP1-050] on a frequent basis, given that it provides a robust, evidence-based, and transparent 61-page technical modelling report submitted as Appendix 14 to REP1-050. In T.H. Clements' view, the Applicant has not presented any compelling evidence within their review(s) that the approach adopted by T.H. Clements should be materially altered, hence REP1-050 is the principal document of evidence that is relied on for this matter.

Item	Applicant's Statement (Pages 65-69; REP5-150)	T.H. Clements Response
14	The flawed inputs suggest that, even with the implementation of the Outline AQMP [REP4a-077], residual dust effects would extend beyond 150m from the Order Limits (confirmed by THC in REP4a-140). This is highly unusual, given the Outline AQMP [REP4a-077] offers the maximum level of mitigation afforded under UK Technical Guidance and is described as robust and compliant with Local Policy in the Local Impact Report prepared by the local authorities [REP1-052]. Further, the construction techniques align with other NSIPs. If the IAQM Construction Dust impact assessment and mitigation framework were as ineffective as THC assert, even under maximum IAQM recommended mitigation, it would not remain the industry standard.	Again, the Applicant's comment **fails to recognise the unique scenario** at hand with respect to the strict sensitivity of T.H. Clements' land and proximity to the Project. T.H. Clements provided a detailed, justified response to this matter on PDF pages 29-30 of REP4a-140. Please also see response to Item 5 above.
15	While the IAQM Construction Dust Guidance acknowledges that dispersion modelling can be undertaken, it does not provide further guidance on its application and explicitly states that detailed modelling is outside its scope. Although it references emission factors that can facilitate modelling, THC has not followed this approach, instead applying an emission factor that is 80 times higher.	See above responses to Items 9-11 inclusive, in addition to Appendix 3 of REP4a-140.

Table 2: T.H. Clements' Responses to Applicant's Submission (Pages 74-93; REP5-150) on Dust Contamination

ID	Applicant's Statement (Pages 74-93; REP5-150)	T.H. Clements Response
16	ID 3. The Applicant's assessment inherently accounts for dust soiling on commercially sensitive horticulture, applying the highest level of dust risk and protection. In response to specific points raised of THC's assessment: • The benchmarks used are not industry-standard and lack regulatory recognition.	See above response to Item 5. **On bullet point 1 (benchmarks) –** T.H. Clements conducted a detailed literature review of national and international dust deposition benchmarks, as presented in Section 2 of Appendix 14, REP1-050. To clarify, **no statutory UK standards exist** for dust deposition. This is primarily because defining a universal benchmark for "annoyance" from dust soiling is difficult – perceptions and tolerances vary between individuals.

ID	Applicant's Statement (Pages 74-93; REP5-150)	T.H. Clements Response
	• The dust control factors applied in the mitigated scenario underpinning the 107-hectare assertion do not fully account for the 50 mitigation measures outlined in the Outline AQMP [REP4a-077]. This includes key controls such as solid screens or barriers around dusty activities (e.g., stockpiles), which will significantly reduce emissions. • The assessment assumes continuous construction over the entire 48.3km onshore ECC segment for three years, failing to reflect the spatial progression of works. In response, THC asserts that its assessment treats the three construction phases (each lasting a year) independently. However, while each phase is assessed separately, the model still represents a live construction site spanning the full 48.3km segment for an entire year per phase—effectively up to three years of emissions. This assumption disregards the phased spatial progression of works. The assumed working area is equivalent in scale to London's Hyde Park, which does not align with how construction will progress in practice within each phase (per year) or over the full construction period.	However, "annoyance" is not the issue in this case. The crops grown on T.H. Clements land must be entirely free from visible dust contamination in order to meet T.H. Clement's customers strict quality requirements. Because of this, assessing dust deposition becomes more objective. Through a comprehensive literature review, T.H. Clements identified appropriately stringent benchmarks – specifically, dust deposition levels above which there is the potential for dust to be visible on growing crops. **On bullet point 2 (dust control factors) –** See above responses to Items 1, 3, and 5, in addition to Section 4.2.4 of Appendix 14, REP1-050 that provides a detailed account of the dust control factors included in the assessment. At the time of completing the dispersion modelling assessment [REP1-050], it was not evident that the Applicant had considered T.H. Clements' land to be a sensitive receptor (there was no mention of sensitive horticultural land of any kind within the Applicant's air quality assessment, REP4a-014). As such, T.H. Clements could not assume that solid screens/barriers will be erected around all dusty activities, including soil stockpiles, adjacent to T.H. Clements' land. **On bullet point 3 (continuous construction) –** T.H. Clements provided a detailed and justified response on this issue at PDF Pages 25-17 of Appendix 3, REP4a-140. T.H. Clements does not understand the Applicant's reference to the size of London's Hyde Park or its relevance to the THC Study. The **outcomes of the dispersion modelling were not, at any stage**, presented as total annual dust deposition results (this would have assumed continuous construction over the entire study area).
17	ID 4. **1. THC claims that the study's mining emission factors used in the assessment represent best practice…** **2. THC claims that mining emission factors can be used for construction dust…**	**On point 1. –** See above response to Item 9 and PDF pages 22-23 of Appendix 3, REP4a-140. **On point 2. –** See above responses to Items 6 and 9-11 inclusive, in addition to Appendix 3 of REP4a-140.
18	ID 5.	See above responses to Items 6 and 9-11 inclusive, in addition to Appendix 3 of REP4a-140.

ID	Applicant's Statement (Pages 74-93; REP5-150)	T.H. Clements Response
	Appropriate Application of Guidance This point has already been addressed in Point 16 [Table 1.20], where the Applicant has demonstrated why the emissions used in the modelling assessment are both inappropriate to represent construction activities and outdated. In summary, 83% of emissions in THC's assessment relies on a 1988 wind erosion emission factor for coal stockpiles which is both inappropriate and withdrawn: • THC claims to have used Australian NPI and US EPA AP-42 mining emission factors, which are their respective national default sources for mining emissions. However, this is incorrect, as neither source recommends the 1988 wind erosion emission factor for coal stockpiles. Instead, the Australian NPI prescribes a default value 20 times lower than the one THC applied, while the latest US EPA AP-42 prescribes a default wind erosion emission factor 80 times lower. • The 1988 coal stockpile factor originates from an outdated US EPA AP-42 version withdrawn in 1995. An advisory note has been placed on the document, stating it is retained for historical reference only and directs users the latest version of US EPA AP-42, which prescribes a wind erosion emission factor 80 times lower (as explained above), confirming it is no longer a valid emission factor. • The IAQM Construction Dust Guidance acknowledges emission factors from the European Environment Agency (EMEP 2.A.5.b – Construction and Demolition) as a source to facilitate modelling. However, the withdrawn 1988 coal stockpile wind erosion factor used by THC is not included. Instead, it signposts to the latest US EPA AP-42 default wind erosion emission factor, which is 80 times lower than the one THC applied.	

ID	Applicant's Statement (Pages 74-93; REP5-150)	T.H. Clements Response
	Additionally, the IAQM Minerals Guidance confirms that using non-UK dust emission factors in local-scale modelling assessments is inappropriate.	
19	**1. With regards to the IAQM's Mining Briefing Update…**	See above response to Item 11, in addition to Appendix 3 of REP4a-140.
20	ID 6 **1. Aligns with the latest IAQM guidance and evolving best practice…** **2. Provides a clear, site-specific quantification of dust contamination risk…** **3. Demonstrates that even with mitigation, significant dust impact remains likely…**	All of these points are responded to above, at Appendix 3 of REP4a-140, and at Appendix 5 of REP5-173.
21	ID 8 **1. THC claims that the USA and Australian mining emission factors used in the assessment represent global best practice and can be used for construction…** **2. THC claims the USA and Australian mining emission factors are used in UK emission projects (NAEI) to validate their use in the UK…** **3. With regards to the IAQM's Mining Briefing Update…** **4. THC states their assessment is appropriate and aligned with the IAQM Construction Dust Guidance…**	Aside from point 2., which is responded to below, all other points are responded to above, at Appendix 3 of REP4a-140, and at Appendix 5 of REP5-173. **On point 2. (Emissions factors used in UK emission projects)** – The Applicant has misunderstood the reason for T.H. Clements referencing the UK Government's National Atmospheric Emissions Inventory (NAEI). The Applicant has suggested, within all of its submissions on this matter, that the use of published emission factors from USA and/or Australian documents (e.g. US EPA AP-42) is "inappropriate" and "not recommended" within the UK. The purpose of T.H. Clements' submission at PDF page 19 of REP4a-140 and at paragraph 4.2.72, page 31 of REP1-050 was to **provide assurance to the ExA that, even at the UK Government level, non-UK international emissions factors from sources are used**, such as US EPA AP-42. The NAEI acknowledges that[4] – "*Reference sources for* ***emission factors for many industries are researched by environmental institutions around the world****. Many of the key sources of emission factor data that are incorporated into the UK NAEI are as follows…US EPA AP-42*..." T.H. Clements did not state or suggest that the specific dust emission factors used in the THC Study (REP1-050) are used by the NAEI, but simply provided evidence that non-UK emission factors are applied within the UK.

[4] NAEI Emissions Factors (18 November 2024) Accessed via: [redacted]

ID	Applicant's Statement (Pages 74-93; REP5-150)	T.H. Clements Response
22	ID 9 **1. Flawed wind erosion factor…** **2. Inappropriate Wind Erosion Modelling…**	See above response to Item 9 and PDF pages 22-23 of Appendix 3, REP4a-140. In addition, a detailed account of the emissions inventory and dispersion modelling approach, limitations and assumptions, are presented in Appendix 14 of REP1-050.
20	ID 10. **No Model Validation** THC has not fully addressed the point made in REP4-125. To clarify, model validation can be achieved through two methods: 1. Site-Specific Survey Measurement Data: which, as stated, cannot be performed here and this is agreed. 2. Published Validation Studies: In the absence of site-specific survey data, published studies that have compared site survey data with model predictions in other similar scenarios can be used as a proxy for validation. This is the point the Applicant has raised in REP4-125, specifically the THC study does not cite any validation studies to support their assessment technique (using USA and Australian emission factors) for use in the UK. These two approaches should not be conflated, as they are distinct. Moreover, REP4-125 does not suggest that model outputs should be adjusted by a factor of four. Instead, it references published validation studies indicating overpredictions in dust emissions, highlighting a potential source of uncertainty. THC dismisses these studies without offering any reflection on the inherent uncertainty. Furthermore, the THC Study fails to quantify 'uncertainty' at any point.	The THC Study [Appendix 14, REP1-050] explicitly addresses uncertainty associated with the assessment within Section 5 (Limitations and Assumptions) of Appendix 14, REP1-050. Furthermore, it provides clear reasoning on how uncertainty was minimised within the assessment, as detailed in paragraphs 138-153 of Appendix 14. Principally, the choice of emission factors, that **directly relied on project-level activity data and site-specific soil and climatic conditions**, was **key in minimising uncertainty** when developing the dust emissions inventory. In addition, the model incorporated a number of location-specific variables to ensure the modelled dust deposition outputs would be representative of local conditions – namely the use of hourly sequential meteorological data and a particle size distribution (dust particle data) relating to in-situ soils. Where deemed necessary, Section 5 of Appendix 14, REP1-050 also outlines the optimism built into the assessment to minimise the risk of an overprediction of dust emissions. Further to this, it is important to note the context of the assessment criteria, whereby a 'high risk' of visible dust deposition was only assigned to areas where dust deposition was modelled to exceed the benchmarks at a frequency of 120 days / four months or more (i.e. a high probability that weather conditions in these locations will promote the deposition of dust from adjacent construction activities). These lenient assessment thresholds were deliberately applied to acknowledge the limitations applicable to the THC Study. In reality, however, visible dust deposition on T.H. Clements land could feasibly occur over much shorter timescales (i.e. days) than those applied by the assessment.
21	IDs 11-16 inclusive	These ID items from Table 1.19 of REP5-150 submitted by the Applicant are primarily responded to within Appendix 3 of REP4a-140, T.H. Clements' responses to the above items in this document, and/or inherently within the detailed, transparent THC Study presented in Appendix 14 of REP1-050.