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Project Team  
Planning Inspectorate

Our reference: DCO/2018/00015  
Your reference EN010092

**By email only**

25 January 2021

Dear Sir/Madam,

**APPLICATION BY THURROCK POWER LTD FOR AN ORDER GRANTING  
DEVELOPMENT CONSENT FOR THE THURROCK FLEXIBLE GENERATION  
PLANT**

**MMO Deadline D Response**

This document comprises the Marine Management Organisation's (the "MMO") Deadline D response in respect of the above Development Consent Order ("DCO") Application. This is without prejudice to any future representation the MMO may make about the DCO Application throughout the examination process. This is also without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.

The MMO reserves the right to modify its present advice or opinion in view of any additional matters or information that may come to our attention.

Yours faithfully,

Nicola Wilkinson  
Marine Licensing Case Officer



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**INVESTORS  
IN PEOPLE**

Bronze

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## 1. The Role of the MMO

The MMO was established by the Marine and Coastal Access Act, 2009 (the “2009 Act”) to contribute to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas.

The responsibilities of the MMO include the licensing of construction works, deposits and removals in English inshore and offshore waters and for Northern Ireland offshore waters by way of a marine licence<sup>1</sup>. Inshore waters include any area which is submerged at mean high water spring (“MHWS”) tide. They also include the waters of every estuary, river or channel where the tide flows at MHWS tide. Waters in areas which are closed permanently or intermittently by a lock or other artificial means against the regular action of the tide are included, where seawater flows into or out from the area. The MMO is an interested party for the examination of DCO applications for Nationally Significant Infrastructure Projects (NSIPs) in the marine area.

As a prescribed consultee under the Planning Act, 2008 (the “2008 Act”), the MMO advises developers during pre-application on those aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction, deposit or removal within the marine area, this also includes assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works.

In the case of NSIPs, the 2008 Act enables DCO’s for projects which affect the marine environment to include provisions which deem marine licences (“DML”)<sup>2</sup>. Where a marine licence is deemed within a DCO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a DML enable the MMO to fulfil these obligations.

Alternatively, developers can look to have the marine elements of NSIP’s consented via a marine licence under Part 4 of the 2009 Act. The MMO is the Licensing Authority for the purpose of Part 4 of the 2009 Act, and is also responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. Where a marine licence is sought under Part 4 of the 2009 Act for an NSIP, the MMO will engage with PINS throughout the DCO process to ensure that NSIPs are considered in their entirety, and do not conflict with any licence issued under Part 4 of the 2009 Act.

The MMO is responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment of consents issued under both Acts. Further information on licensable activities can be found on the MMO’s website<sup>3</sup>. Further information on the interaction between the Planning Inspectorate and the MMO can be found in our joint advice note<sup>4</sup>

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<sup>1</sup> Under Part 4 of the 2009 Act <http://www.legislation.gov.uk/ukpga/2009/23/contents>

<sup>2</sup> Section 149A of the 2008 Act

<sup>3</sup> <https://www.gov.uk/topic/planning-development/marine-licences>

<sup>4</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/04/Advice-note-11-v2.pdf>

## **2. The Proposed Development**

2.1. The DCO Application is for the development of a flexible generation plant on land north of Tilbury Substation in Thurrock, London. Thurrock flexible energy plant will comprise the construction and operation of:

- reciprocating gas engines with rated electrical output totalling 600 Megawatts (MW);
- batteries with rated electrical output of 150 MW and storage capacity of up to 600 MWh;
- gas and electricity connections;
- creation of temporary and permanent private access routes for construction and access in operation, including a causeway for the delivery of abnormal indivisible loads (AILs) by barge; and
- designation of exchange Common Land and habitat creation or enhancement for protected species translocation and biodiversity gain.

The proposed development will be designed to operate for up to 35 years, after which time ongoing operation and market conditions will be reviewed. If it is not appropriate to continue operating after that time, one or both generating and storage elements of the development (gas engines or batteries) will be decommissioned.

## **3. General Comments**

3.1. The MMO note the removal of Saltmarsh creation within the intertidal zone following pre-application discussions with stakeholders. The MMO has no further comment regarding this matter.

3.2. Given the UK's departure from the EU and the end of the transition period on the 31 December 2020, the MMO recommend that the Applicant reviews all documentation to ensure that the correct terminology is referenced.

## **4. Deemed Marine Licence Co-ordinate Plan – Application Document Reference A2.14**

4.1. There appears to be a typographic error with 'licence' being spelt incorrectly. MMO advise this should be amended.

4.2. The MMO wish to highlight that it is the responsibility of the applicant to ensure that the area covered by coordinates are adequate for all activities in the marine environment, such as maintenance dredging etc.

## **5. Table of amendments to the DCO between Version 2 - Version 3**

5.1. With regard to new Article 37 (Power to dredge), the MMO suggests sediment sampling requirements should be included. For reference the MMO has included the sampling requirements that were included within Tilbury's DML:

*“Sediment sampling.—*

*(1) If the licence holder considers that sediment sampling is required to demonstrate the appropriateness of a construction methodology to be included in a construction method statement submitted to the MMO for approval under condition 10, prior to submitting that construction method statement to the MMO, the licence holder must submit a sediment sampling plan for approval by the MMO.*

*(2) The licence holder must not submit the relevant construction method statement mentioned in sub-paragraph (1) to the MMO until sediment sampling has been undertaken in accordance with the approved sediment sampling plan, unless otherwise agreed in writing by the MMO”.*

5.2. The MMO note that the Port of London Authority (PLA) as the statutory harbour authority may have comments on the new Article 37 (Power to dredge). The MMO suggest that maintenance dredging is included within the DML.

5.3. With regard to new requirement (4) 4 – the MMO note that it mentions the potential creation of culverts, however, it is unclear if these culverts will be located within the marine environment, and therefore under the jurisdiction of the MMO. The MMO would welcome clarification from the Applicant.

5.4. With regard to new requirement 18 (causeway decommissioning plan) – it states that the causeway decommissioning plan must be submitted ‘*to the relevant planning authority for approval*’. The MMO would like to highlight to the Applicant that the MMO should be included in the consultation and approval process. Please note that any licensable marine activities not included in the DML may mean that a separate marine licence or variation to the DML may be required.

5.5. With regard to new requirement 19 (bird monitoring) – the MMO advise that this requirement is included as a condition within the DML. The MMO can then consult with Natural England as the Statutory Nature Conservation Body (SNCB). The MMO suggest the following wording:

*‘19 (1) – No part of the Works 10 or 11 must commence until a plan for the carrying out of foreshore bird passage and wintering bird survey and monitoring has been approved in writing by the MMO. The plan must include:*

*(a) details of pre-commencement surveys to be carried out by the undertaker;*

*(b) details of the monitoring to be carried out by the undertaker during the construction of work 10;*

*(c) details of post-construction monitoring to be carried by the undertaker; and*

*(d) how the results of surveys and monitoring are to be provided to Natural England, has been submitted to and approved by the relevant planning authority in consultation with Natural England. (2) The surveys and monitoring must be carried out in accordance with the approved*

*details and to a reasonable standard in accordance with recognised codes of good practice.*

5.6. With regard to requirement 12, new sub paragraphs (3), (4) and (5) – the MMO would like to note the risk to the Applicant by carrying out sampling close to the commencement of construction. Any delays may have knock-on effects to other aspects of the project. For example, sample plans have a 13 week turnaround time, with further time required for analysis. Further information can be found in Section 13.5-13.5.4 of this response

## **6. Draft Development Consent Order – Application Document Reference A3.1 Version 3**

6.1. The MMO have reviewed the revised Draft Development Consent Order and DML and note that many of our previous comments provided in the Relevant Representation (RR-014) have not been actioned. For convenience the MMO has included these comments in this response along with new comments.

6.2. The MMO welcomes the inclusion of bird monitoring and would defer to Natural England as a SNCB regarding results and any condition requirements for the DML. Please note any seasonal restrictions for Work No.10 need to be within the DML; the MMO welcome engagement from the Environment Agency, Natural England and the Applicant on this matter. The MMO are aware of neighbouring projects that have a seasonal restriction for Water Injection Dredging (WID), such as:

*‘Water injection dredging must not be undertaken in the period 01 June to 30 June inclusive’*

6.3. As recommended previously in our Relevant Representation (RR-014), the MMO suggest that the Construction Management Plan should also be submitted for consultation with Natural England (NE).

6.4. With regard to Schedule 8 – Part 1 (1) – Interpretation: “*marine written scheme of investigation*” is missing as an interpretation. The Applicant could use: “*means the marine archaeological written scheme of investigation contained in document reference [to be confirmed], [appendix/section] of the environmental statement*”. The MMO suggest that the Applicant engage with Historic England on this matter.

6.5. With regard to Schedule 8 – Part 1 (1) – Interpretation: The MMO advise the following as the most suitable wording: “*Marine Management Organisation*” or “*MMO*” means the body created under the 2009 Act which is responsible for the monitoring and enforcement of this licence’

6.6. With regard to Schedule 8 – Part 2 (12) - Spills, etc - The MMO request that

Article 12 (b) contain the contact details for the MMO Marine Pollution Response Team, as below:

*'The licence holder must report any oil, fuel or chemical spill within the marine environment to the MMO Marine Pollution Response Team within 12 hours [in line with the approved marine pollution contingency plan if one is available].*

*Within office hours: 0300 200 2024.*

*Outside office hours: 07770 977 825.*

*At all times if other numbers are unavailable: 0345 051 8486.*

*[dispersants@marinemanagement.org.uk](mailto:dispersants@marinemanagement.org.uk)*

6.7. MMO note that the DML (Schedule 8) contains two 'Table 2's', and it appears that the coordinates table should be relabelled as 'Table 3'

6.8. With regard to Schedule 8 Part 3 article(s) 15 - Further information regarding application and 17 – Notice of determination state that:

*'15 (1) The MMO may request in writing such further information from the licence holder as is necessary to enable the MMO to consider the application.*

*(2) If the MMO does not make a request under sub-paragraph within 20 business days of the day immediately following that on which the application is received by the MMO, it is deemed to have sufficient information to consider the application and is not entitled to request further information after this date without the prior agreement of the licence holder'.*

*'17 (1) Subject to sub-paragraph (2) or (3), the MMO must give notice to the licence holder of the determination of the application within 30 business days of the day immediately following that on which the application is received by the MMO.*

*(2) Where the MMO has made a request under condition 16, the MMO must give notice to the licence holder of the determination of the application no later than 30 business days of the day immediately following that on which the further information is received by the MMO.*

*(3) The MMO and the licence holder may agree in writing a longer period of time for the provision by the MMO of a notice under sub-paragraph (1) such period to be no more than 60 days from the day immediately following that on which the application is received.*

*(4) Where the MMO refuses the application the refusal notice must state the reasons for the refusal.*

*(5) Where notice is not given by the MMO in accordance with sub-paragraph (1) or (2) the application is deemed to have been refused.'*

The MMO consider that the time periods proposed by the applicant (detailed above) does not provide sufficient time for the MMO to consider the submitted documentation. These documents may require in depth review by both MMO staff and require consultation with our statutory consultees. The MMO has set consultation deadlines with our consultees – many of which are 20 working



days themselves as a minimum. Please note that several rounds of consultation may be required to address stakeholder concerns which means that further information may need to be requested. In addition, this does not account for any additional work that may be required either from the MMO or by the applicant. As a regulator and to manage the Applicant's expectations the MMO considers that a more suitable response time would be within 6 months.

6.9. With regard to Schedule 8 – Part 2 (12) - Spills, etc - The MMO request that Article 12 (b) contain the contact details for the MMO Marine Pollution Response Team, as below:

*'The licence holder must report any oil, fuel or chemical spill within the marine environment to the MMO Marine Pollution Response Team within 12 hours [in line with the approved marine pollution contingency plan if one is available].*

*Within office hours: 0300 200 2024.*

*Outside office hours: 07770 977 825.*

*At all times if other numbers are unavailable: 0345 051 8486.*

*[dispersants@marinemanagement.org.uk](mailto:dispersants@marinemanagement.org.uk)*

6.10. Part 7 - Article 43, Arbitration: proposes that any difference shall be referred to and settled in arbitration and are presumed to apply to Schedule 8 of the Order. Article 43 sets out significantly different conditions and timeframes, which the MMO does not consider to be acceptable. Please refer to our earlier comments regarding Arbitration.

6.11. With regard to Schedule 8 – Part 1 (1) – Interpretation: The MMO suggest an interpretation is required for 'UK marine area' and prescribe the following wording:

*"has the meaning given to it in section 42 (UK marine area) of the 2009 Act";*

6.12. The MMO consider the following should be included within the DML:

*'Archaeological monitoring and mitigation of works associated with the dredging activities associated with the construction of the causeway (Stage 2); Any marine geotechnical site investigation works (boreholes and riverbed samples), which are to be reviewed by specialist geoarchaeologists, with the results of these investigations to be linked to the results of the ongoing terrestrial geoarchaeological monitoring and deposit-modelling works (Stage 2)'*

The MMO suggests the Applicant engages with Historic England regarding any conditions related to this.

6.13. The DML, as proposed, is missing conditions relating to breeding and wintering birds, the historic environment, and matters relating to dredging including methodology and disposal. It also lacks seasonal restrictions as a result of the WID. It is our understanding that Tilbury 2 has conditions within their DML which may provide an idea of what could be included.



6.14. The MMO consider the following condition should be included within the DML:

*‘Coatings and treatments: The licence holder must ensure that any coatings and any treatments are suitable for use in the River and are used in accordance with either guidelines approved by the Health and Safety Executive or the Environment Agency.’*

## **7. Habitats Regulations Assessment Report (HRA) - Application Document Reference A5.2**

7.1. The MMO have noted that several comments provided previously in our Relevant Representation (RR-014) have yet to be addressed. For your convenience they have been included below.

7.2. Further consideration into the long-term impacts on the designated sites has not been considered from the effects of the increase in vessel activity. The MMO recommend the consideration of a worst-case scenario from the deliveries and likely routes for the transport of AILs.

7.3. With regard to Figure 1 – the MMO note a 15-kilometre (km) buffer has been used, with no justification as to why this buffer has been selected as appropriate.

7.4. The project description should contain more detail and assessment regarding the dredging and disposal activities which may be required and the MMO recommend it be updated to include the worst-case scenario. For example, Section 3 (Methodology) lacks sufficient detail in which to assess the HRA against. In order to provide a robust assessment further elaboration is required on the types of activities likely to be carried out and the worse-case scenario. The MMO would expect to see more detail in the methodology such as how the causeway will be built, and the timeframe associated with that, as well as further information on the dredging work to be carried out.

7.5. Where qualifying features have been listed (tables 4.1- 4.5) the conservation objectives of the designation should be listed (e.g. restore/maintain), as this is an important aspect of how they are then considered in the assessments that follow. For example, dunlin have a ‘restore’ objective for Thames Estuary and Marshes SPA.

7.6. With regard to paragraph 6.2.5 – the MMO advise that this should also include sampling; this is to ensure that activities such as dredging do not release potentially harmful chemicals into the environment. This is important considering the history of the River Thames and whether the thresholds for low pressures in Natural England’s Advice on Operations (“AoO”) have been exceeded and should be considered further.

7.7. The MMO defer to Natural England regarding the scope, survey design and any

functionally linked sites/land to be included within the HRA as the SNCB. The MMO recommend that if restrictions are required for activities contained in the DML (e.g. seasonal restrictions/mitigation) then the MMO must be informed directly (via Natural England or the Applicant) so discussion can be held regarding the addition of conditions on the DML.

7.8. The MMO reiterate that the potential for in-combination effects could change and should be an iterative process, therefore the MMO would recommend that section 7 is updated regularly to reflect any new plans or projects which may need consideration. This will also ensure that your baseline remains appropriate.

7.9. With regard to paragraph 6.4.60 – the MMO note that it contains a typographic error. ‘Pplovers’ should be corrected to ‘plover’.

7.10. With regard to paragraph 6.5.2 (1) ‘*A crane will lift out a section of the sea wall and, depending on barge model, may also move down to the causeway to lower the barge unloading ramp*’. The MMO would like further clarification on this process, e.g. why a section of the sea wall requires removal.

7.11. As previously noted, any restrictions need to be placed within Schedule 8 Part 2 of the Deemed Marine Licence “conditions applying to construction activities”, the wording of these conditions need to meet the MMO’s 5 tests;

1. *The condition must be Necessary.*
2. *The condition must Relate to the activity or development.*
3. *The condition must be Precise.*
4. *The condition must be Enforceable.*
5. *The condition must be Reasonable.*

The MMO note that the HRA suggests restrictions such as timings in which works are able to be carried out (paragraph 6.4.66). The MMO advise that these should be specific to ensure they are enforceable. For example, the Applicant’s suggestion to pause works during freezing conditions is insufficiently precise.

## **8 Environmental Statement Volume 6 Appendix 17.3 - Water Framework Directive Assessment (WFD)**

8.1. With regard to paragraph 6.3.4 – MMO notes that there will be habitat loss from the dredging of the berthing pocket during the construction phase, and that this is expected to be both temporary and reversible. While the MMO agree with this, no details regarding potential maintenance dredging during the operational phase in order to maintain access for deliveries (e.g. methodology/volumes).

8.2. The MMO defer to Natural England on the Applicant’s assessment of habitat loss and percentage loss as the SNCB.

8.3. The MMO defer to both Natural England and the Environment Agency on survey design and survey results.

## 9. Environmental Statement Volume 3 Chapter 17 – Marine Environment

9.1. With regard to the 'List of Figures' on page ii – the MMO note that Figure 3.4 is incorrectly labelled and requires updating.

9.2. With regard to Table 1.3 - it confirms WID as a primary method for dredging. It is not clear that this is an option within the WFD Assessment methodology for dredging impacts to the risk of the waterbody.

9.3. With regard to 3.1.6 – the MMO note a typographic error. 'Ringer plover' should be amended to 'ringed plover'.

9.4. It appears that there is some discrepancy between dredge figures within this chapter (Marine Environment) and the WFD Assessment Appendix 17.3. (paragraph 6.4.6). For example, paragraph 4.1.30 of this chapter references that *"during the construction phase, dredging of the vessel grounding pocket at the seaward end of the causeway will result in the removal of approximately 13,200 m<sup>3</sup> of sediment over a footprint of up to 14,200 m<sup>2</sup>"* while the WFD Assessment suggests that this figure is 13,900m<sup>3</sup> (paragraph 6.3.4) and that *"the total dredging and excavation quantities are estimated to be circa 16,100 m<sup>3</sup>"*. The MMO understands that 16,100m<sup>3</sup> is taken from the combined dredging of the berthing pocket and causeway, however, it is presented in an unclear manner and the applicant should make it clear in all documents where dredging is referred to.

9.5. With regard to 4.4 - the MMO welcome the inclusion of a Marine Conservation Zone ("MCZ") Screening for Swanscombe MCZ. Given the distance between the proposed causeway/dredge area and the MCZ (6km), the MMO consider the conclusion to be reasonable, however, defer to Natural England as SNCB.

9.6. The MMO have noted the Applicant has ruled out an impact to Tentacled Lagoon Worm, which are a feature of Swanscombe MCZ. The MMO defer to Natural England regarding sensitivity and impacts to this species. As previously advised in Section 5 of our Relevant Representation (RR-014), this is a Schedule 5 protected species under the Wildlife and Countryside Act, 1981 (the "1981 Act"). As such the MMO recommend that the Applicant liaise directly with Natural England and the MMO's Marine Conservation Team (MCT) regarding known locations, and considerations to make. The MCT email address has been provided below for any queries the Applicant may have: [conservation@marinemanagement.org.uk](mailto:conservation@marinemanagement.org.uk). Further guidance regarding protected species and wildlife licensing is available on the MMO's website, link here: <https://www.gov.uk/guidance/understand-marine-wildlife-licences-and-report-an-incident>.

9.7. Table 1.3 confirms that the primary method for dredging will be WID, with the potential for a smaller amount of sediment to be disposed of onshore at a licensed disposal site. In this case it might be sensible to confirm this in the

Applicant's WFD Assessment, due to the impacts to the waterbody caused by dredging. The dredging methodology for the removal of the material to onshore is not made clear. Other documents suggest that a backhoe excavator will be used in the construction of the causeway. The Applicant should confirm if this is the method for dredging the causeway area and state this in any descriptions of dredging activity.

9.8. The Applicant has outlined several proposals for monitoring the marine environment during the construction, operational and decommissioning phases. The MMO would defer to Natural England on the suggested designs and wish to highlight that further information will be required if licensable marine activities under the 2009 Act are required. As noted earlier any activities not covered by the DML may require a variation to the DML or a separate marine licence.

9.9. With regard to section 4.4 (MCZ Assessment Screening) – the MMO welcome the inclusion of this information and defer further comment to Natural England as the SNCB.

## **10. Environmental Statement Volume 3 Chapter 9 – Onshore Ecology**

10.1. The MMO note the Applicant's response to comments raised by the MMO in regard to Important Bird Areas in September 2018 (page 10) and that receptors will be addressed by the Habitats Regulation Assessment Report (HRAR). This would appear appropriate.

10.2. The MMO defer to Natural England regarding the potential impacts on breeding and wintering birds through pressures such as noise and visual disturbance.

10.3. With regard to paragraph 4.1.126 – it refers to the dredging pocket, which '*will need to be maintained for the duration of the period over which the engines are delivered to the site*'. The MMO advise that information such as expected volumes, campaigns and methods will need to be included in order to assess the whole project. MMO note that sampling requirements are still required, and as such should be included within the DML.

10.4. MMO defer to Natural England regarding the Foreshore Wintering Bird Surveys 2019-2020.

## **11. Procedural Deadline C Cover Letter**

11.1. The MMO note in the letter from RPS Group to the Planning Inspectorate dated 11 December 2020 under 'update on potential change request' that a material change to the gas pipeline route is required, in order to accommodate changes to the engineering requirements for the Lower Thames Crossing proposal. It is not made clear if these changes will be terrestrial or within the marine environment and further clarification is requested.

## 12. Explanatory Memorandum – Application Document Reference A3.2 Version 2

- 12.1. With regard to Schedule 8 (Deemed Marine Licence) – the MMO note several typographic errors of the word ‘conditions’.
- 12.2. With regard to new Article 37 – please see the MMO’s comments in Section 5 paragraph 5.1 & 5.2.
- 12.3. With regard to 5.21 (Schedule 8 – Deemed Marine Licence) – the MMO wish to highlight the comments provided in paragraph 4.4 of our Relevant Representation (RR-014) regarding Arbitration. The following has been referenced from Tilbury 2, Deadline 7 Response: Any disagreements which arise between the Applicant and the MMO should be resolved by the appeal routes that already exist, i.e. via the MMO’s complaint procedure, by complaint to the Ombudsman, by the statutory appeal routes where they apply, or ultimately via Judicial review. To apply arbitration to any regulatory decisions made by the MMO in its role as regulator for the DML undermines the MMO’s role as regulator, is wholly unacceptable, and creates inconsistency with marine licences granted outside of the DCO process which are not subject to arbitration.
- 12.4. The MMO is not in agreement with section 4.5 (a) “permitted preliminary work” as this may include licensable activities under the 2009 Marine Works Regulations. The MMO requests the Applicant to provide further clarification on the activities required. If any of the activities are licensable under the 2009 Act then the Applicant may require a separate marine licence or DML variation.

## 13. Environmental Statement Volume 2 Chapter 2 – Project Description

- 13.1. With regard to paragraph 1.2.13 – where it references the ‘operation of a permanent causeway’. Following the proposal to potentially remove the causeway if a suitable land option is agreed, it would be worth updating this to reflect the update and provide consistency across documents.
- 13.2. Further to comments above in 9.4 (‘Marine Environment’) there seems to be some discrepancy/inconsistency between documents over the dredge amounts discussed. As above it would be beneficial to provide a consistent approach of description to prevent confusion.
- 13.4. With regard to paragraph 3.6.4 - the causeway structure is referenced, citing that it is expected to be a permanent structure. The MMO consider that the wording is contradictory to other documents within the ES which consider it as a temporary structure.
- 13.5. With regard to 3.2.24 states that ‘*Initial sediment analysis, detailed in Volume 6, Appendix 17.2: Hydrodynamic Modelling and Sediment Assessment, indicates that the dredged material is unlikely to contain contamination of concern*’. The MMO would like to remind the applicant of our response provided in our Relevant Representation (RR-014) regarding sediment sampling

requirements, to ensure it is accordance with the MMOs advice:

13.5.1. The MMO note that whilst the number of samples and determinants tested for (Section 2.1.4 and Section 5 of Appendix 17.1) is applicable for the dredge volumes (as per OSPAR guidelines) and location, Section 2.2.2 (Appendix 17.1) states that the laboratories used were not accredited by the MMO for analysis of all determinants tested: “*The RPS laboratory has United Kingdom Accreditation Service (UKAS) accreditation to carry out the tests for all the contaminants listed and is accredited by the MMO for the all listed contaminant groups except for PCBs [polychlorinated biphenyls], THC [total hydrocarbons], PAHs [polycyclic aromatic hydrocarbons] and organochlorine pesticides*”. Following review of the current list of MMO accredited laboratories (<https://www.gov.uk/guidance/marine-licensing-sediment-analysis-and-sample-plans>) RPS is now accredited for metals tins, PCBs, and THC. Therefore, although results are discussed in more depth in response, further information is required on the analysis on PAHs before a final determination can be made if required. This should include information on the methods of preparation and analysis, as this will enable more accurate determination of whether the existing values can be used for the assessment of PAH levels.

13.5.2. In addition to point 13.5.1 above, although this has been undertaken and reported in Appendix 17.1, an MMO results template was not included with the information. The MMO require the analysis in this template to ensure all relevant information is provided. This includes preparation and analysis methods, and limits of detection which are required for OSPAR reporting purposes. If a non-accredited laboratory is used for an analysis, a greater level of information would be required to be able to further assess the suitability of the results obtained. This would be in addition to the usual assessments of dredge material sample results made and be far more labour intensive. The MMO provides a list of laboratories accredited for methods that meet certain criteria (link provided in 13.5.1, above). This means the laboratories have undergone a lengthy assessment process and take part in intercalibration exercises to demonstrate competence. This gives the required confidence the MMO needs to assess risk from the results presented (without lengthy scrutiny of the methods of preparation and analysis each time they receive a set of samples). Even with the additional information that would be required, there is no guarantee that the laboratory is competent in meeting the standard requirements. To avoid undue delay and the possibility that an unaccredited laboratory may still supply results that are not fit for purpose at the end of the assessment, the MMO requires only laboratories accredited as specified on their website are used for analysis for characterisation of dredged material. The annex does not include sufficient detail to provide confidence in the data from un-accredited laboratories. Even though the results might remain unsuitable the minimum level of detail required for an assessment includes:

- Method of preparation
- Accreditation record
- Results of Blanks including reagent and sampling
- Results of Certified reference material (including how many per number of samples)



- Limit of detection
- Limit of Quantification
- Sample results

13.5.3. The Applicant will need to provide accurate information on the volumes of maintenance and capital dredge as well as the dredge depths, vessels and methods etc. in sufficient time for the MMO to make an assessment. This is to ensure that the volumes provided are accurate and that the samples and analysis undertaken remain representative of the area to be dredged and disposed. In relation to maintenance dredging there is presumed to be a requirement for future maintenance dredging of the vessel grounding pocket, estimated to be 2,000–6,000m<sup>3</sup> per year. Unlike for the capital dredge, no disposal site is suggested. If this is to be beneficial use as per the capital dredge this needs to be stated as it could affect the suitability of beneficial use area.

13.5.4 In addition, the full suite of required PAHs have not been analysed. To be able to assess hydrocarbon contamination robustly and consistently, all the MMO specified PAHs should be analysed. Due to the above the MMO cannot provide further comment on the suitability of the dredged material for disposal at sea.

#### **14. Environmental Statement - Historic Environment Settings Analysis – Further Information**

14.1. The MMO would defer to Historic England for comments, however, would suggest the inclusion of archaeological findings as a condition on the DML, as suggested in paragraph 15.2. This is due to the potential of finding previously unknown heritage assets during construction of the causeway and during the capital dredge. Please refer to our comments for Section 15 (Procedural Deadline C Letter - Cultural Heritage).

#### **15. Procedural Deadline C Letter - Cultural Heritage**

15.1. The MMO have previously commented on archaeological findings in our Relevant Representation (RR-014), in which the MMO commented on the inclusion of conditions within the DML for the reporting of archaeological findings. The MMO would either require the document to be submitted with evidence of approval from Historic England, or approval would be required from the MMO following consultation with Historic England. The MMO recommend early engagement with Historic England on the drafting of the Written Scheme of Investigation (WSI) and historic knowledge of the area.

15.2. The MMO consider the following should be included within the DML:

*‘Archaeological monitoring and mitigation of works associated with the dredging activities associated with the construction of the causeway (Stage 2);*

*Any marine geotechnical site investigation works (boreholes and riverbed samples), which are to be reviewed by specialist geoarchaeologists, with the results of these investigations to be linked to the results of the ongoing terrestrial geoarchaeological monitoring and deposit-modelling works (Stage 2)'*

15.3.If restrictions are applied to activities covered by the DML, then Historic England/the Applicant should contact the MMO directly to discuss adding conditions to the DML. The MMO defer to Historic England on risk to historical assets.

15.4.The MMO recommends that the Applicant considers the risk that unexploded ordinance (UXO) could have on historical assets. The Applicant should discuss this matter further with the MMO and Historic England as surveys/DML conditions may be required.

#### **16. Environmental Statement Volume 5 Chapter 33 - Summary of Further Mitigation, Residual Effects & Monitoring**

16.1.With regard to impacts on wintering birds, the MMO defer to Natural England as SNCB regarding the conclusion of 'negligible' impacts.

#### **17. Environmental Statement Volume 6 Appendix 15.1 - Flood Risk Assessment**

17.1.The MMO would like to note that if any work (e.g. paragraph 4.3.4) is required within our jurisdiction then the Applicant should consider if activities are licensable under Section 66 of the 2009 Act. If so, the MMO would recommend engagement from the Applicant.

#### **18. Environmental Statement - Historic Environment Updated Baseline & Significance of Effect Report Further Information – Revision**

18.1.The MMO defer to Historic England on the methodology and conclusions drawn from the assessment.

#### **19. Environmental Statement - Assessment of Causeway Decommissioning Revision 0**

19.1.The MMO would need to be included in the discussions regarding 'alternative options', as this may have implications under the Marine and Coastal Access Act (2009) as these options may require licensable activities. It is considered the MMO is a 'relevant planning authority' under 17 (review of access for indivisible loads).

19.2.The MMO note that the Causeway decommissioning Plan (paragraph 18) may require a separate marine licence; the MMO should be included in any consultation regarding this matter.

## **20. Preliminary Navigation Risk Assessment for the Thurrock FPG Plant Causeway - Revision R03-00**

20.1. The MMO defers to the Port of London Authority (PLA) as Statutory Harbour Authority. The MMO suggests the Applicant engages with the PLA, Trinity House and the Maritime and Coastguard Agency (MCA) on these matters.

## **21. Historic or Scheduled Monument Sites Plan – Application Document Reference A2.11**

21.1. From the diagram provided it appears either to not include marine heritage features or none have been identified. The MMO would appreciate some clarification on this matter.

## **22. Conceptual Drainage Strategy – Application Document Reference A7.3 Version P05**

22.1. With regard to paragraph 2.13 – outfalls and the impacts tidal influences have on drainage and blockage are referenced. The MMO cannot find within the Appendix the location of any outfall pipes to ascertain if they fall within the MMO's jurisdiction.

## **23. Submission for Procedural Deadline C - Outline Ecological Management Plan - Application Document Reference A8.7 Version 1**

23.1. Paragraph 9.1.6 notes that: *post-construction monitoring will be undertaken of the mudflat in the area around the causeway where accretion and potential colonisation by pioneer saltmarsh species is expected. The purpose of this monitoring will be to observe the extent and rate of saltmarsh colonisation and the condition of the mudflat and any saltmarsh habitat in this area, with this information to be provided to Natural England and the Port of London Authority for information. Details of the monitoring programme will be developed when this Outline EMP is updated prior to construction, in consultation with Natural England.*

As the Applicant has removed the creation of saltmarsh habitat from the application, the MMO would seek clarification in regard to if this is still required.

23.2. With regard to paragraph 9.1.6 and post construction monitoring, please see MMO's comments in Section 5 paragraph 5.5 of this response.

Nicola Wilkinson  
Marine Licensing Case Officer

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