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Silvertown Tunnel Case Team
The Planning Inspectorate (by email only)
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Your Reference: TR010021
Our reference: DCO/2014/00018

15 November 2016

Dear Sir or Madam,

Silvertown Tunnel - Examining Authority's First Written Questions - MMO Response and MMO Written Representation

The Marine Management Organisation (MMO) is an interested party for the examination of Development Consent Order (DCO) applications for Nationally Significant Infrastructure Projects (NSIPs) in the English marine area. Also the MMO is the enforcing body for the Deemed Marine Licence (DML(s)) issued as schedules of the DCO. In our role as interested party and enforcing body, the MMO sets out its response to the Examining Authority's First Written Questions below and its Written Representation.

Heritage and Townscape (Visual Impact)

HT3 – (a) Would the WSI cover any archaeological work needed offshore in relation to the proposed jetty and dredging? If so, please can the Applicant, Historic England and the MMO explain their various roles in agreeing the drafting and contents of these aspects of the WSI?

(b) Should the offshore aspects of a WSI be addressed in a separate document, as the ExA understands that the onshore WSI would be secured through a requirement whereas the offshore WSI would be secured through a condition in the deemed marine licence?

MMO response

(a) The MMO note that there is no condition held within the DML as currently drafted that requires the formal submission and sign off of a WSI, and request that a condition is included.

Upon receipt of a WSI, the MMO will review internally, and will consult Historic England, as statutory advisor on the historic environment, on the content of the WSI. Following the consultation, the MMO will advise the Applicant whether the WSI is satisfactory or whether



amendments need to be made. The MMO will then provide notification of discharge of this condition if appropriate.

(b) Historic England is the MMO's primary advisor on the historic environment, and as such the view of Historic England should be considered. It is not considered a necessity for the offshore WSI to be held within a separate document; if it is included in the same document then the MMO would only consult Historic England on, and comment on, the relevant part. If the Applicant chooses to submit one WSI, then the MMO ask that the part of the document relevant to works in the river is clearly signposted.

However, the drafting of relevant WSI provisions in the DCO and DML should consider the overlapping jurisdiction in the intertidal area in order to streamline approvals.

ME - Marine Ecology

ME1 - *No surveys were undertaken to establish the marine mammal, fish and shellfish baseline; this was limited to desk based research.*

Please can IPs confirm that they are content with this approach?

MMO response

The marine ecology baseline was established not just with a desk-based assessment but also with a phase 1 intertidal habitat survey including sampling at nine locations, together with a subtidal grab survey.

The subtidal grab survey only managed to successfully sample 2 out of 10 stations and, after consultation with our technical advisor, The Centre for the Environment, Fisheries and Aquaculture Science (CEFAS), the MMO feel that the 2 samples may not reflect the marine ecology of the entire area, and that some further sampling maybe required to obtain a more accurate characterisation of marine ecology in the area.

ME2 - *(a) Please can the MMO/NE give the anticipated timescales for designation of the Thames Estuary recommended Marine Conservation Zone (rMCZ) and comment on whether the Silvertown tunnel development could delay any such designation?*

(b) Please can the MMO/NE/Applicant provide a view to the ExA on how the rMCZ should be weighted as part of the planning examination?

(c) Please can the MMO/NE explain the process and timescale for the designation of the MCZ and whether it is possible that the designation would not occur?

MMO response

(a)The consultation on the third tranche of rMCZ (including Thames Estuary) is due to occur in 2017 with designations being made, where appropriate, in 2018. The Silvertown Tunnel will not delay the designation.

(b)It is our opinion that until a rMCZ is formally designated, there is no statutory obligation to consider the proposed features of the rMCZ that are to be afforded protection. However, the evidence base which has informed the rMCZ should be considered. However, should

the Secretary of State determine that there is an urgent need to protect the proposed features, the MMO has the power under Section 132 of the Marine and Coastal Access Act 2009 to enact an interim byelaw (for up to 12 months) to protect the features.

(c) The Department for the Environment, Food and Rural Affairs (Defra) has been conducting discussions with a range of marine stakeholders on the proposed third tranche of rMCZ. We understand that formal consultation will begin in 2017 but further advice should be sought from Defra.

ME7 - *The EA, in its RR [RR-299] identifies a discrepancy between the information provided in the CMS [APP-046] in relation to the techniques to be used in piling and those described in paragraph 10.6.69 of the ES [APP-031]. The EA also makes a request for a piling method statement to be secured through the dDCO.*

(a) Can the Applicant please confirm the techniques to be used for piling, including providing a map showing the location and duration at each piling site;

(b) Should this be different to that assessed in the ES, the Applicant is requested to provide a revised assessment; and

(c) Do other IPs consider that there should be a piling method statement secured through a Requirement in the dDCO or condition in the dDML which identifies piling methods, locations, duration (number of days and hours per day), seasonal limitations on piling and where/how soft start procedures would be implemented?

MMO response

The requirement to provide a method statement for approval for any aspects of the works that may require a marine licence should be included as a condition in the DML, as was raised in our Relevant Representation. The MMO are aware the Applicant is working on providing an updated DML which is intended to include such a condition. The MMO reserve further comment until the revised DML has been provided and reviewed.

Dredging and Navigation

DN6 - *The ES sets out various maximum limits in relation to dredging [APP-031] for the area to be dredged, the footprint of the dredging and the amount of material to be removed within a period of two months.*

(a) Please can the Applicant explain how the restriction to the sub-tidal area and the maxima of areas and volumes of dredging that are assessed in the ES are limited within the dDCO?

(b) Please also explain how these matters will be controlled during operation?

(c) Please can the MMO provide a comment on how these limitations should be provided for in the dDCO/DML?

MMO response

The co-ordinates of the area to be dredged must be provided in the Licensed Activities section of the DML.

With regards to the amount of material that is to be dredged, as raised at the DCO Issue Specific Hearing on 12 October 2016, there are different ways that the volume of dredged material can be managed in the DML;

1. The dredge quantities are detailed within the DML, allowing for a specified amount of dredged material, and detailing the number of dredge campaigns allowed per year, and any other restrictions necessary. This is the preferred approach of the MMO as it is less onerous in its post consent requirements;
2. The MMO understand that it is not always possible to determine exact quantities of dredge material before detailed design is undertaken, which may be subject to the award of tender contracts, etc. As such specifics of the project may not be known at this point; in such instances it may be more suitable for specifics of the dredge not to be held directly within the DML but, as per the MMO's response to question ME7, the requirement for submission and sign off of a method statement would allow the MMO to have a secondary approvals process to ensure that any works undertaken are in line with the assessment undertaken for the Environmental Statement (ES).

DN8 - *Work No.20 of the dDCO includes scour protection for the temporary jetty. The only reference to scour protection within the ES [APP-031] appears to be at paragraph 8.5.6 which states it may be considered if deemed necessary through further consultation with Historic England and the Greater London Archaeological Advisory Service.*

(a) Please provide further details of whether scour protection will be necessary, including location and volumes?

(b) Please can the IPs listed, as well as any other IP with an interest in the river provide their views on the need for scour protection and likely volumes?

MMO response

The proposed scour protection outlined in paragraph 8.5.6 of the ES would be for the purposes of protecting significant archaeological finds, should any be found, during the monitoring of the dredging.

The requirement to provide a method statement for approval for any aspects of the works that may require a marine licence should be included as a condition in the DML, as was raised in our Relevant Representation. The MMO are aware the Applicant is working on providing an updated DML which is intended to include such a condition. The MMO reserve further comment until the revised DML has been provided and reviewed.

DN9 - *Paragraphs 10.1.3 and 10.3.4 of the ES [APP-031] confirm that the marine related works are temporary (4 years). The dDCO, in the dDML (Schedule 12, paragraph 10) states that the jetty must be removed upon completion of the authorised development. However, there is no specified time limit.*

(a) Is the MMO content with this approach? Would the MMO wish to see the removal secured as part of the dDCO through a decommissioning requirement or explicit provision in the DML?

(b) Can the Applicant please explain why removal after 4 years is not secured in the dDCO?

MMO response

It should be stated as a condition in the DML how soon it will take for the jetty to be removed following the completion of the authorised development.

DN11 - *The re-commissioning of the NAABSA berth facility does not appear to be a work within the authorised development of the dDCO. Paragraph 10.3.5 of the ES [APP-031] states that it “would require minimal works to make it suitable for use”.*

(a) Can the Applicant please explain what works are required to re-commission the NAABSA and whether further planning permissions and/or licences will be required to facilitate this.

(b) Do the MMO and/or PLA have a view on the re-commissioning works?

(c) Should these works be secured through the dDCO?

MMO response

The MMO consider that the works to re-commission the berth facility are included in Schedule 1, and associated works plans, namely the maintenance works on the quay wall, and dredge activity, but await the Applicants response to this question to confirm that no other works that should be covered by the DML are required.

DN13 - *The MMO, in its RR [RR-383], requests that an ‘eco-bucket’ should be used to dredge the area.*

(a) Please can the Applicant respond to this suggestion and, if relevant, set out how the use of an ‘eco-bucket’ will be assessed?

(b) Will the Applicant please explain how the method of dredging would be secured through the dDCO?

MMO response

As detailed for question DN6, the MMO accept that detailed design of the project may not be finalised at this time; in such instances it may be more suitable for specifics of the dredge not to be held directly within the DML but, as per the MMO’s response to question ME7, the requirement for submission and sign off of a method statement would allow the MMO to have a secondary approvals process to ensure that any works undertaken are in line with the assessment undertaken for the ES.

MMO Written Representation

Following consultation with the MMO's technical advisor, CEFAS, the MMO has further comments to make on the proposed activities;

1. Benthic Ecology

Major concerns

- 1.1. The subtidal survey was conducted during December using a 0.1m² Day grab deployed from a vessel at 10 proposed stations. However, only 2 stations were successfully sampled. These 2 stations are not considered to accurately reflect the marine ecology of the survey area as the sediment at stations which could not be successfully sampled is presumably coarser, reflecting different habitat conditions and an altered ecology. Further sampling therefore may be required using a grab more suited to coarser sediments (e.g. a mini hamon grab) to obtain an accurate representation of the subtidal area and to fully understand the potential impacts of the proposed works, and presence of designated or rare species associated with the habitats that have not been successfully sampled. The MMO seek to discuss possible solutions with the Applicant and our technical advisors but, it is possible further samples would still be required.

Minor concerns

- 1.2. There is some confusion in the text regarding the description of the biotopes within Section 10.4.19 of the ES '*The western section of the intertidal area in the immediate vicinity of the Scheme is composed of coarse sand, while the eastern section contains a larger amount of silt and small areas of mudflat*'. The biotopes mapped in the relevant Figure appear to show the opposite trend from this textual summary.
- 1.3. Section 10.4.19 also states '*no visible fauna or signs of fauna (such as casts, trails or burrows) were recorded in the survey*' is symptomatic of an *impoverished intertidal community*'. The MMO do not agree with this statement as the community may be diverse and densely populated even in the absence of any visual features, only the community appears to lack those taxa which leave evidence of feeding on the sediment surface.
- 1.4. It is difficult to assess the suitability of the statement '*the extent of mudflat habitat in this area is small and is considered to be of limited ecological importance*' in Section 10.4.20 without data to support this. It should be clarified how large the mudflat is and the spatial extent and location of other mudflat habitats in the vicinity of the site.

2. Underwater Noise

Major concerns

- 2.1. The potential behavioural impacts for fish from impact piling activities have not been adequately addressed. It has been assessed solely using the dBht metric which is not supported by peer-reviewed literature. The impact criteria should be

derived from peer-reviewed scientific literature and relevant to the specific source (i.e. impact piling). This was raised to the Applicant in advice on the PEIR in 2015.

Minor concerns

- 2.2. The MMO has concerns relating to propagation loss model outlined in the Underwater Noise Assessment in Appendix 10C of the ES. It should be clarified if field measurements had been carried out to test and validate model predictions of sound propagation loss.
- 2.3. The source of the major and minor disturbance thresholds attributed to Southall *et al.*, (2007) for proposed sound pressure level (SPL) criteria should be clarified.
- 2.4. The assessment states that vibro piling techniques will result in an estimated mean unweighted zero-to-peak vibro piling SL of 196 dB re 1 μ Pa m. It should be clarified how this source level has been derived as no references or explanation has been included.
- 2.5. Clarification is requested on how the distances for behavioural reactions from marine mammals have been derived.
- 2.6. The full reference to Anthony *et al.*, (2009) is missing in the reference list of the assessment and provision is requested.

3. Coastal Processes

Major concerns

- 3.1. The MMO understand that detailed design may not be possible at this stage. If possible the details of all planned dredging operations and seabed preparation as part of the scheme should be provided in a table, with related size of the area/areas to be dredged, the depth of the proposed dredging, as well as the total dredge volume. If it is not possible to provide this detail at this time, then the MMO would like to reiterate the requirement for the inclusion of a condition within the DML requiring a method statement to be signed off for all activities covered by the DML, to allow for thorough assessment and approval post consent.
- 3.2. The modelling used for suspended sediment transport did not consider the worst case scenario. It was based on the surface sediments collected during December 2015, rather than the more consolidated clays collected during January 2016. A higher percentage contribution of fines from the sediment to be dredged needs to be considered for the modelling. The worst case scenario is to consider the total amount of sediment fines to be dispersed and contributed as a plume in the water column.
- 3.3. The cumulative effects of the scheme with other developments nearby (e.g. the redevelopment of the Learmouth Peninsular adjacent to Bow Creek and the

redevelopment at the Greenwich Peninsula) with regards to sediment transport needs to be considered.

- 3.4. To prevent or further reduce water quality impacts from resuspension (Suspended Sediment Concentration (SSC) and contaminants), further mitigation measures to limit resuspension from dredging and eventually also from disposal are required. These can be addressed through a Waste Disposal Strategy and a Construction Environment Management Plan (CEMP).

Minor concerns

- 3.5. No monitoring measures were included (e.g. bathymetry for scour and dredging) were outlined in the main ES or in Volume 7.6 Monitoring Strategy.

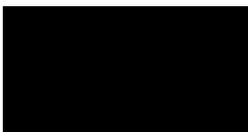
4. Nature Conservation

- 4.1. The MMO have been in contact with Natural England regarding their concerns on protected species and nature conservation. Natural England is the Statutory Nature Conservation Body (SNCB) for all projects within 12 nautical miles. The MMO understand that Natural England have entered into a Statement of Common Ground with the Applicant and as such defer to Natural England on issues of protected species and nature conservation.

5. Conclusion

The MMO intends to offer the Applicant the opportunity to discuss the points raised by our technical experts to resolve the points raised in the MMO Written Representation response. This will be recorded in the Statement of Common Ground with the Applicant.

Yours faithfully



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