

Thames Tideway Tunnel Case Team  
The Planning Inspectorate  
3/18 Eagle Wing  
Temple Quay House  
2 The Square  
Bristol  
BS1 6PN

**Our Unique Ref:** 10018171 (EA03)  
**EA Ref:** TTT\_FWQs\_041113  
**Your Ref:** WW010001

**Date:** 4<sup>th</sup> November 2013

Dear Sir or Madam,

**Ref: First Written Questions – Thames Tideway Tunnel Planning Inspectorate Reference: WW010001**

The Environment Agency has considered the first round of written questions and herewith provides responses to those questions addressed either directly to us, or to all relevant parties.

We understand that following submission of answers to these questions on 4<sup>th</sup> November, the Examining Authority will invite comment on other parties responses. We will participate in that process as required.

If you have any questions please get in touch with me, or Isobel Bain, Project Manager, Environment Agency, Ergon House, Horseferry Road, London, SW1P 2AL. Telephone number 07765221928. Email: [Isobel.Bain@environment-agency.gov.uk](mailto:Isobel.Bain@environment-agency.gov.uk).

Yours sincerely



**Simon Hughes**  
**London Executive**

*Contact details:*

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**Responses to first written questions to Examining Authority  
On behalf of the Environment Agency (EA03)**

Question Number	Persons to respond	Question
<b>Air Quality and Emissions</b> <i>Odour</i>		
Q1.13	With regard to both the ES (Doc 6.2.02, volume 2, section 4) and the air management plan (Doc 7.14), can the <b>Environment Agency (EA)</b> comment on:	<p>The sufficiency of the air management plan and its adherence to the Environment Agency Guidance, H4 Odour Management</p> <p><b>EA response</b> The primary remit of the Environment Agency with respect to odour pollution is in relation to activities which require a permit under the Environmental Permitting Regulations 2010 or otherwise regulated activities. This equates to odour coming from landfill sites that we regulate, and where sewage is stored on site in tanks, and we would regulate this as waste. Environment Agency Guidance H4 Odour Management is guidance for odour on regulated sites.</p> <p>TWUL has applied this guidance to odour management of the tunnel, which is not what it is designed for. As such we are unable to check adherence to it.</p>
Q1.14	With regard to both the ES (Doc 6.2.02, volume 2, section 4) and the air management plan (Doc 7.14), can the <b>Environment Agency (EA)</b> comment on:	<p>Whether the adoption of the odour benchmark of 1.5ouE/m<sup>3</sup> for the 98th percentile of hourly average concentrations is an appropriate standard to assess the odour emissions for an infrastructure of this type.</p> <p><b>EA response</b> As discussed in the questions above (1.13) the guidance and our remit relate to regulated sites. As such we would not comment on the appropriateness of using a particular odour benchmark in relation to this application.</p>
<b>Biodiversity, Biological Environment &amp; Ecology</b>		
Q2.1	Can Natural England (NE), the <b>EA</b> , Port of London Authority (PLA) and the Marine	<p>a) Has the Applicant's Habitats Regulations Assessment No Significant Effects Report provided sufficient information to form the basis of any necessary Appropriate Assessment of the proposals?</p> <p>b) If not, set out in the response:</p> <p>i) what is needed in order to achieve sufficient information;</p> <p>ii) the reasoning for this;</p>

	Management Organisation (MMO), relevant local authorities and other relevant nature conservation Interested Parties answer the following questions:	<p>iii) if this is an agreed position with any other party, please identify the Party concerned and the extent of agreement providing supporting documentation from that organisation</p> <p><b>EA response</b></p> <p>a) The EA has considered this document, and is satisfied with its findings. We have discussed this with Natural England (NE) and reached an agreed position that this is adequate.</p> <p>b) We are drafting a statement of agreement on topical leads between ourselves and NE on various matters relating to this application.</p>
<b><i>Development Consent Order Drafting &amp; Related Matters</i></b>		
Q6.1	<b>All parties</b>	<p>Is there a consensus between all Parties that the definition and description as currently drafted encompasses all necessary matters and works in a form that allows all parties to understand the fundamental parameters, structure, approach and limitations of the consents sought?</p> <p>a) if yes please include this in written submissions and/or Statements of Common Ground;</p> <p>b) if no please set out what is required and why.</p> <p><b>EA response</b></p> <p>Yes – further information on this is within our Written Representation</p>
Q6.22	<b>EA</b> Article 19 Discharge of water	<p>Could the EA advise if deemed consent set out at article 19(8) is reasonable or necessary? Does this provide adequate safeguards?</p> <p><b>EA response</b></p> <p>Yes we are content with this Article which has appeared in similar form in other DCOs, e.g. Hinkley Point, as this does not remove the need for a consent to discharge under the Environmental Permitting Regulations 2010, which is our main concern.</p>
Q6.42	Article 41 <b>Statutory Undertakers</b>	<p>Should this article cross refer to protective provisions to be set out at Schedule 16?</p> <p><b>EA response</b></p> <p>Our interpretation is that we are not statutory undertakers for the purposes of s127 Planning Act</p>

		2008 so we have no comment.
Q6.43	Article 42 Apparatus and rights of statutory undertakers in stopped-up Streets	Should this article cross refer to protective provisions to be set out at Schedule 16?
		<b>EA response</b> We do not think Article 42 applies to the EA, as we are not a statutory utility under Highways Act 1980.
Q6.54	Article 53 Discharge of requirements	Is deemed consent justified and reasonable? If so how and why?
		<b>EA response</b>  We would comment that 28 days is a very short period for an organisation to have to respond and may lead to refusals being given simply because the decision maker has not had sufficient time to consider the application.  However our position is that we do not consider that Schedule 17 is an appropriate dispute resolution procedure for the purpose of our protective provisions and we will be seeking a dispute resolution clause within our protective provisions in similar form to that within the Hinkley Point DCO - see our answer below to Q6.59.
Q6.55	<b>Other parties</b> Article 53 Discharge of requirements	Does it provide adequate safeguarding in relation to matters that are the subject of required mitigation particularly in relation to matters that have potential human, cultural, environmental and nuisance effects? Other Parties involved in the approval process are invited to submit their views.
		<b>EA response</b> At present the EA is of the opinion that there is not adequate safeguarding in relation to a number of matters including risk to flood defences, habitat compensation and potential pollution of groundwater. Securing mechanisms have yet to be determined for key elements, affording us the opportunity to review and agree detailed designs, method statements and techniques as they come forward. We explain this in more detail in our Written Representation Sections 10 & 11.

Q6.59	Article 59 Arbitration	<p>Is the President of the Institution of Civil Engineers the appropriate person to make an appointment of a single arbitrator in all circumstances that could result in the need for arbitration? Each response should be explained and supported fully explaining in each instance arbitration may arise how and why this is appropriate.</p> <p><b>EA response</b></p> <p>Our experience from other recent DCOs is that the appropriate person to make decisions about dispute resolution remains the Secretary of State for the Environment. Therefore we intend to seek a dispute resolution clause which would result in the matter being referred to the Secretary of State for the Environment if the parties cannot agree on an appropriate arbitrator.</p> <p>Our proposed clause:</p> <p><i><b>'Disputes and differences:</b> Any dispute arising between the undertaker and the Agency under this Schedule shall, if the parties agree, be determined by arbitration, but shall otherwise be determined by the Secretary of State for Environment, Food and Rural Affairs</i></p>
Q6.60	Schedule 3 Requirements	<p>Are the identified bodies for discharge appropriate in all instances and does this provide an appropriate control and management framework?</p> <p><b>EA response</b></p> <p>Currently we do not appear in the list of bodies at Art53(3) in the DCO, required to give consents in writing. We respectfully request that we are added to this list. We also respectfully request that we are a consultee to the Local Planning Authorities where appropriate, as indicated in our Written Representation.</p>
Q6.65	Schedule 16 Provisions for the Protections of Specified Undertakers	<p>Details of all protective provisions are required. If these are not agreed between the Parties then submissions should be made individually by each party requiring protective provisions setting out full reasoning for the need.</p> <p><b>EA response</b></p> <p>We are in the process of negotiating protective provisions with TWUL and have been in discussions with them for some time on this issue. Our disapplication of the legislation requiring consents to be sought separately from us is subject to agreeing with TWUL protective provisions which are satisfactory to us.</p> <p>We are confident that we will be able to finally agree a form of protective provisions very soon and</p>

		would respectfully suggest that we undertake to provide the Panel with either an agreed set of protective provisions or the form of protective provisions which we seek in the event of being unable to reach agreement with TTT at an appropriate point later in the examination.
Q6.67	Schedule 17 Procedure for Discharge of Requirements etc. and Appeals In relation to 1. and 2.	Could any of the discharging authorities respond on how reasonable the timescales set out are?
		<p><b>EA response</b></p> <p>Currently we are not a discharging authority on any requirements listed in Schedule 3 of the draft DCO. However, we are a consultee on a number of requirements. It is unclear what the timescales outlined in Schedule 17 of the Draft DCO are for a consultee to review information submitted and whether these are reasonable. Under normal planning process we have 21 days to respond to discharge of requirements.</p>
Q6.72	Schedule 19 Miscellaneous Controls	In relation to dis-application of general legislation in Part 1 and local legislation in Part 2 what effect would these powers have on other duties such as the powers to maintain flood defences?
		<p><b>EA response</b></p> <p>The only legislation listed in Part 1 of Schedule 19 which is relevant to the EA is the Flood and Water Management Act 2010 (numbered 12). (The Land Drainage Act 1976 is now only of relevance to local authorities). This relates to designation of features in third party ownership as flood defences. We do not have concerns over the disapplication of this legislation in this context.</p> <p>However we would request that the Metropolis Management (Thames River Prevention of Floods Amendment Act 1879 and the EA's Thames Region Land Drainage Byelaws 1981 be deleted from Part 2. We are satisfied that in relation to the <u>construction</u> of the project s5 of the 1879 Act and the Byelaws can be disapplied without adverse effect on our powers to maintain flood defences (provided that we can first agree satisfactory protective provisions with TWUL).</p> <p>However in relation to ongoing maintenance of the Thames Tideway Tunnel we would wish to retain our powers under the 1879 Act (this allows us to require third parties to rebuild flood defences if they collapse and to oblige them to maintain them whilst the repaired structure is a flood defence). This is important in protecting the integrity and effectiveness of London's flood defences. Also our Byelaws allow us to carry out various kinds of ongoing actions to minimise the risk of flooding and we would not wish to be restricted from exercising these powers after the completion of construction.</p> <p>It may be simpler for the purposes of the drafting of the DCO any disapplication of legislation relevant to the EA is recited in our protective provisions.</p>

<i>CoCP</i>		
Q6.74	<b>All parties</b>	<p>Can the relevant local authorities and other statutory consultees comment on the CoCP detailing any areas of disagreement and omission.</p> <p><b>EA response</b>  Currently we are not satisfied that there are sufficient securing mechanisms in place within the CoCP to allow us to approve detailed methodologies, techniques and future key documents, such as the Construction Environmental Management Plan (CEMP) that come forward post closure of the examination. We respectfully request that we are a consultee to the Local planning Authorities to help secure our approvals. Further detail on this issue is covered in Section 11 of our Written Representation.</p>
<i>Design Principles</i>		
Q6.81	<b>All parties</b>	<p>What would be the advantages and disadvantages of an approach whereby those design principles which are considered to be important and sufficiently precise would be incorporated into the DCO as requirements?</p> <p><b>EA response</b>  The advantages of having key elements of design principles incorporated into the DCO as requirements, is that it gives a securing mechanism for us to approve the detailed design, methodologies and techniques. Further detail relating to this issue is covered in Section 10 of our Written Representation.</p>
Q6.82	<b>All parties</b> There are a number of site	Are the plans correctly described as indicative and, if they are, what would be the mechanism for ensuring that the design intentions shown would be carried through into the final scheme?

	<p>plans, listed in the following table, which are marked indicative.</p> <p>However, there do not appear to be any site-specific requirements in the draft DCO relating to these plans.</p>	<p><b>EA response</b></p> <p>We have no comment as to whether the plans are correctly described as indicative.</p> <p>We have raised issues about relevant Design Principles that relate to some of the river wall design and proposed site features shown in the indicative plans. We are concerned that there are insufficient securing mechanisms to allow us to approve design details relating to these principles as they evolve. Further detail relating to this matter is covered in Section 10 of our Written Representation.</p>
<b>Flood Risk and Climate Change</b>		
Q7.5	<p><b>EA</b></p> <p>The report on Resilience to Change (Doc 7.23) considers the possible changes to climate and population that might influence the performance of the tunnel during its design life of 120 years.</p>	<p>Can the EA comment on the resilience of project to cope with climate change, the impact on Biodiversity UKCP09, and any omissions which should be considered.</p> <p><b>EA response</b></p> <p>With regards to water quality, we discuss the relationship with climate change within the SoCG with TWUL.</p> <p>We believe the best available UKCP09 projections have been adequately considered in terms of assessing the impact of climate change on the scheme.</p> <p>From a water quality perspective this has involved taking into account the effect of climate change and population growth in terms of the scheme's objectives. This assessment makes it clear that meeting the Dissolved Oxygen standards is unlikely to be possible at two of three simulated probability levels in the 2080s medium emission scenario. Without the Thames Tideway Tunnel, compliance is projected to be significantly worse.</p>
<b>Policy</b>		
		<p>Does the policy context for the proposal described in the application documents need to be modified or supplemented to take account of all relevant and up to date policy documentation at the European, UK, English, County, District and local levels?</p>

Q11.1	<b>All parties</b>	<p><b>EA response</b></p> <p>There is reference in the Design Principles to the National Standards for SuDS arising from the Flood and Water Management Act 2010. This document does not have a status as policy and has to date only been issued as a draft for comment. Whilst we accept that the NPS makes reference to the National Standards, we believe Design Principles to use a document that has no status is inappropriate. We believe it is more appropriate for the London Plan to be adhered to.</p>
<b>Water Quality and Resources</b>		
Q18.7	<p><b>EA</b></p> <p>The construction programme for the tunnel provides for early completion of the Lee Tunnel, to reduce the Abbey Mills CSO discharges. However, the final connection of the TTT into the Lee Tunnel would require that the Lee Tunnel is decommissioned for 44 weeks.</p>	<p>Have the EA consented to the decommissioning of the Lee Tunnel for the period of 44 weeks?</p> <p><b>EA response</b></p> <p>There is no requirement for the EA to agree to the unavailability of the Lee Tunnel for 44 weeks. TWUL have been granted planning permission for “Shaft G” at Abbey Mills (planning ref: 12/00180/FUL). The introduction of Shaft G reduces the timescales of unavailability of the Lee Tunnel to less than 8 weeks, and we fully support this as a solution. We have been involved in the planning application as a statutory consultee by the London Borough of Newham, who have subsequently granted planning consent. We are aware that construction of Shaft G has commenced.</p>
Q18.12	<b>EA</b>	<p>Compliance with the River Basin Management Plans, Estuary Management Plan, Water Resources Management Plans and the requirements of the Water Framework Directive.</p> <p><b>EA response</b></p> <p>As outlined in our Relevant Representations, we recognise that the project is at outline design stage at present. In order to comply with WFD, we believe that certain detailed design elements and adequate monitoring and mitigation need to be secured within the DCO. Please see Section 3 of our Written Representation.</p> <p><b>River Basin Management Plan</b></p> <p>River Basin Management Plans are developed under the Water Framework Directive (WFD). The</p>

		<p>current versions of these plans, the first cycle, was published 2009. It should be noted that these are due to be updated in 2015. The project is a key measure within the plan, which will drive improvements in water quality.</p> <p><b>Thames Estuary Management Plan</b>  The Thames Estuary Management Plan was produced by the Thames Estuary Partnership (TEP) (with other stakeholders) in 1999. We consider that this document has been incorporated into other plans on the estuary including the Thames Estuary Habitat Action Plan (also a TEP document) and the Thames Estuary Catchment Plan.</p> <p>The Thames Estuary Habitat Action Plan identifies that encroachment is damaging and that riverside development and regeneration provides opportunities for habitat creation. Issues within the Estuary Management Plan have now been incorporated into the River Basin Management Plan.</p> <p>The Tidal Thames Catchment Plan (also known as Your Tidal Thames Project) constitutes a catchment management plan for the Tidal Thames. It is a joint partnership of the Thames Estuary Partnership, Thames 21, Thames Landscape Strategy Hampton to Kew and Thames Landscape Strategy Kew to Chelsea. This concentrates on upcoming projects that will improve the status of the water bodies for the WFD. The project is ongoing at present, and to date has had limited input from the Thames Tideway Tunnel though hopes to incorporate it in the future.</p> <p><b>Water Resource Management Plans</b>  Construction and operation of the tunnel does not affect the WRMP.</p>
Q18.13	EA	<p>The acceptability of the status of the Middle Thames remaining in the moderate quality zone after completion of the project (Volume 3, plate L.17).</p> <p><b>EA response</b>  We recognise that the Thames Middle Waterbody is predicted to remain at Moderate Ecological Potential following completion of the Thames Tunnel. One of the limiting factor that prevents achieving good ecological potential, is CSO discharges in central London. The project would address this problem. To further improve water quality, and achieve good status for DO it would involve improvement to sewage treatment works rather than alterations to the design of the tunnel.</p> <p>This situation is acceptable as the tunnel is an integral part of a suite of actions, which will all be necessary to achieve good status, and ultimately Good Ecological Potential in the Thames Middle waterbody by 2027.</p>