

SILVERTOWN TUNNEL

Volume 8

# Development Consent Order Application

Response to ExA's Notification of Request for Further  
Information (Rule 17)

The Infrastructure Planning (Examination Procedure)

Rules 2010

November 2016

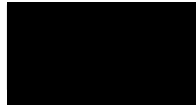
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# Silvertown Tunnel

## Development Consent Order Application Response to ExA's Notification of Request for Further Information (Rule 17)

*Document Reference:* 8.23

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Rev.	Date	Approved By	Signature	Description
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## INTRODUCTION

On 9 November the Examining Authority (ExA) issued a notification letter requesting further information under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010. This request was made in the light of Mr Justice Garnham's High Court Judgement of 2 November 2016, in relation to the Department of the Environment Food and Rural Affairs (DEFRA) 2015 Air Quality Plan. The ExA addressed a number of questions directly to the Applicant. The Applicant's initial response to these questions are set out within this report.

# 1 RULE 17 RFI

## 1.1 Question

**Please confirm whether the air quality modelling used in the preparation of the ES, chapter 6 on air quality [APP-031] or the later version of chapter 6 accepted into the Examination as part of the Panel's Rule 8 letter of 18 October 2016 [AS-022] is in any way affected by the quashing of the AQP or the critique in the judgement of the modelling used by DEFRA. Please explain why you consider that this is indeed the case (or not) with particular reference to assumptions made in relation to emissions from Euro 6 diesel cars.**

## Response

- 1.1.1 In addressing this question, it is important to recognise the distinction between 'compliance with the EU Limit Values' and 'achievement of Air Quality Strategy (AQS) Objectives within an Air Quality Management Area (AQMA)'. Both are addressed in chapter 6 of the ES [AS-022] and both contribute to the determination of the overall significance of the air quality effects (see Table 6-21 on pages 6-122 to 6-124).
- 1.1.2 Compliance with the EU Limit Values is the responsibility of the Secretary of State, while working to meet the Objectives is a responsibility imposed on local authorities. Local authorities are required to have plans in place to work in pursuit of the achievement of the AQS Objectives, whereas the UK Government has a legal obligation to achieve EU Limit Values.
- 1.1.3 There are also important differences between the modelling undertaken to determine compliance with EU Limit Values and the modelling approaches used in the assessment of whether AQS objectives are met. The modelling to determine compliance with the Limit Values is undertaken by the Department for Environment Food and Rural Affairs (Defra) using their Pollution Climate Mapping (PCM) model. The PCM model is a national model and is different from the detailed local modelling necessary to assess the air quality impacts of a scheme such as Silvertown Tunnel, as part of an Environmental Impact Assessment (EIA).
- 1.1.4 The recent High Court Judgement that is referred to in this question deals solely with compliance with the EU Limit Values (in particular those for nitrogen dioxide). The High Court judgement quashed the Government's Air Quality Plan (AQP) which was designed to meet the EU Limit Values.

The judgement of Mr Justice Garman had three particular concerns, paraphrased here as being:

- a) the AQP was not clearly developed to meet the EU Limit Values in the shortest time possible;
- b) the target year for meeting the EU Limit Values of 2025 for London was too coarsely based on modelling carried out at 5 year intervals; and
- c) in developing the AQP the model adopted for future emissions (the PCM model) was too optimistic in relation to the emission reductions that could be achieved for diesel cars.

1.1.5 In relation to Silvertown Tunnel, this translates into two matters that need to be addressed; a) a new more ambitious AQP will be required from the Government, which should lead to the EU Limit Values for nitrogen dioxide being achieved in the quickest time possible, and b) the modelling of future year concentrations should address the under-performance of diesel vehicles in real-world driving.

1.1.6 In relation to the first matter, as a result of the judgement Defra will need to update both the air quality modelling as part of their PCM model and review the actions to ensure that compliance with the Limit Values is achieved in the quickest time possible. It is not possible for the Applicant to comment on the outcome of any updated assessments and advice relating to this matter would need to be sought from Defra.

1.1.7 In relation to the second matter the air quality assessment carried out against the Objectives and reported in Chapter 6 of the ES [AS-022] already accounts for the optimism in the published emission factors. Although the Scheme assessment utilises the Defra emission factors, based on COPERT (Computer Programme to Calculate Emissions from Road Transport), which were criticised as part of the judgement for being too optimistic, the modelled results are uplifted to account for vehicle performance in the real world. This is because the Scheme assessment followed the procedure set out in Highways England's guidance in IAN 170/12v3. This guidance allows for the under-performance of vehicle emissions in the real world - particularly light duty diesel vehicles (cars and vans), which has led to concentrations not falling as fast as expected - being corrected in the air quality modelling. This is undertaken by uplifting the modelled concentrations utilising the Defra published modelling tools against projections in IAN 170/12v3 that were generated assuming that the only vehicles that would generate a benefit in emissions were Euro 6/VI. In building the guidance there was also an allowance that



Euro VI/6 vehicles would not perform as projected in the Emission Factor Toolkit. To restate this, the modelling of future year concentrations set out in Chapter 6 of the ES [AS-022] has not relied solely on the emission factors used by Defra that were criticised in the High Court judgement.

- 1.1.8 There will, however, be some implications arising from the High Court judgement for the compliance assessment against the EU Limit Values. This assessment, set out in Chapter 6 of the ES [AS-022] (beginning at paragraph 6.6.48 on page 6-124) used the results from the detailed modelling of the effects of the Silvertown Tunnel, discussed above, and added these to the roadside concentrations from Defra's PCM model. It will not be possible to update the EU Limit Value compliance assessment until Defra re-issues the PCM model projections taking account of the new AQP and the updated emission factors (this is addressed further in the answers to 1.2, 1.3 and 1.4 below).

## 1.2 Question

**Will the Judgement's conclusion in paragraph 95(ii), that the relevant Secretary of State fell into error in relation to Article 23 of Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008, in fixing on a projected compliance date of 2025 for London, (or any other parts of the Judgement) have any implications for the air quality assessment and conclusions in chapter 6 of the ES?**

## Response

- 1.2.1 The air quality assessment has utilised the information that Defra published in relation to the projections of compliance with Directive 2008/50/EC, which was the subject of the legal challenge. The compliance risk assessment undertaken in accordance with IAN 175/13 is the current approach to determining whether the scheme has a risk of impacting on the date that Defra reports that the zone/agglomeration will become compliant with the Directive (2008/50/EC).
- 1.2.2 The judgement criticised the use of five yearly intervals in terms of the projections, given that it does not provide the Secretary of State the evidence needed to identify whether measures could be introduced to enable compliance to be achieved at a year in between the years that have been modelled. To a certain extent the methodology in IAN 175/13 already makes allowances to project concentrations to a specific year, this is achieved by taking the modelled results from the PCM model either side of the opening year (if it doesn't align with Defra's projections) and undertaking a linear interpolation between the two years to identify a year specific compliance concentration.
- 1.2.3 It is not currently known when Defra are likely to update their action plans/modelling. It is however likely that Defra would need to produce annual forecasts rather than relying on five yearly modelled intervals. Advice relating to this matter would however need to be sought from Defra.
- 1.2.4 The implication of the judgement for the Silvertown Tunnel assessment is that the Defra modelling (the PCM model) used for compliance assessment in future years in Greater London is likely to change, as the modelling will need to incorporate the new Action Plan and the revised vehicle emission factors based on the latest understanding of diesel vehicle emissions. It would, however, be for Defra to respond in relation to how and when the judgement is likely to impact on future compliance reporting against the EU Limit Values and it is not possible for the

Applicant to determine what future assessments undertaken by Defra in relation to compliance will determine.

- 1.2.5 It is worth noting, however, that the Silvertown Tunnel Scheme is beneficial in terms of air quality, particularly at locations with the highest concentrations (above the AQS Objectives/EU Limit Values). This is based on a more pessimistic assessment than Defra's compliance modelling as explained above in response to 1.1.

## 1.3 Question

**If so, what is the likely timescale for the preparation and submission to the Examination of any revised assessments and documents now needed?**

### Response

- 1.3.1 The assessment of whether the scheme has a significant impact in terms of the AQS Objectives, and in relation to the local authority Air Quality Management Areas (AQMAs), will not change as a result of the judgement. These impacts were shown in Chapter 6 of the ES [AS-022] to not be significant (Table 6-21 on pages 6-122 to 6-124).
- 1.3.2 Until new information is released by Defra based on any revised action plan and further PCM modelling for the Greater London Urban Agglomeration, the Applicant cannot update its compliance risk assessment or revise current documents submitted as part of the Application, insofar as they relate to the compliance assessment.

## 1.4 Question

**In the light of the foregoing, please indicate whether you can remain confident that implementation of the DCO scheme will not delay the earliest possible achievement of limit values within relevant Air Quality Management Areas and that achievement for London as a whole.**

## Response

- 1.4.1 As highlighted in the earlier responses the applicant would like to draw the ExA's attention to the distinction between compliance with the Limit Values and the achievement of AQS objectives within AQMAs.
- 1.4.2 Whilst AQS Objectives and EU Limit Values are identical in relation to the concentrations that are applied, they are different in their application and it is therefore important to understand how they are interpreted and therefore assessed. Local authorities are required to have plans in place to work in pursuit of the achievement of the AQS Objectives, whereas the UK government has a legal obligation to achieve EU Limit Values. AQMAs are therefore not relevant in the assessment of compliance against EU Limit Values.
- 1.4.3 It is not possible for the Applicant to determine what Defra's future action plans will contain as a result of the judgement. However, the aim will need to be to ensure compliance in the Greater London Urban Agglomeration is achieved in the quickest time possible. It is the Applicant's view, nevertheless, that it is unlikely that the Scheme would hinder future Defra actions, especially as the Scheme has an overall beneficial impact, in particular at locations with the highest concentrations, and because the scheme introduces a user charge that can help manage traffic demand. In view of this, the Scheme could potentially be used, if appropriate, to complement future Defra actions to improve air quality (for example by increasing the charge on the more polluting vehicle types).
- 1.4.4 In addition, it is the Applicant's view that the judgement provides further justification for the proposed approach in relation to the flexibility in setting the user charge prior to the Scheme opening. The Applicant has committed to re-running the air quality assessment prior to the Scheme opening utilising the latest evidence at that time, which would include the pre-scheme air quality monitoring, latest vehicle emissions information and consideration of future Defra AQPs, to ensure that the scheme would not lead to a significant impact on air quality or delay compliance with the directive.

- 1.4.5 Therefore, despite the outcome of the High Court challenge, the Applicant is confident that the impact of the Scheme on air quality will not be significant and will not in itself delay the date that the Greater London Urban Agglomeration will become compliant with the directive.