

Lower Thames Crossing
6.3 Environmental Statement
Appendices
Appendix 5.5 – Air Quality
Legislation and Policy

APFP Regulation 5(2)(a)

Infrastructure Planning (Applications:
Prescribed Forms and Procedure)
Regulations 2009

Volume 6

DATE: October 2022

Planning Inspectorate Scheme Ref: TR010032
Application Document Ref: TR010032/APP/6.3

VERSION: 1.0

Lower Thames Crossing

Appendix 5.2 – Air Quality Legislation and Policy

List of contents

	Page number
1 Air quality legislation and policy framework	1
1.1 Legislation and Policy	1

List of tables

	Page number
Table 1.1 Legislative requirements	1
Table 1.2 National policy framework and the Project response	3
Table 1.3 Other National policies relevant to air quality	9
Table 1.4 Regional and local policies for air quality	10

1 Air quality legislation and policy framework

1.1 Legislation and Policy

1.1.1 This Air Quality assessment has been undertaken in accordance with relevant legislation, together with national, regional and local plans and policies.

Legislation

1.1.2 Relevant legislation that has been considered in the environmental assessment is presented in Table 1.1. The Planning Statement (Application Document 7.2) provides an assessment of the Project’s strategic alignment and conformity with the National Policy Statement for National Networks (NPSNN).

1.1.3 A number of the sources of legislation referred to throughout the ES, including this chapter, derive from the law of the European Union (EU). Relevant legislation is included in Table 1.1.

1.1.4 The Air Quality Standards Regulations 2010 have been amended by the Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019 now the United Kingdom has left the EU.

Table 1.1 Legislative requirements

Scale	Description of Legislation
European	<p>Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe</p> <p>The 2008 Air Quality Directive (2008/50/EC) sets legally binding limits for concentrations of specific air pollutants. It merges, consolidates and replaces the majority of previous EU air quality legislation, and incorporates the Fourth Daughter Directive. While the UK has now left the EU, the Air Quality Standard Regulations which implement the Directive still apply in UK legislation as ‘retained EU law’.</p>
National	<p>Environment Act 2021</p> <p>The Environment Act has two main functions:</p> <ol style="list-style-type: none"> 1. To give a legal framework for environmental governance in the UK. 2. To bring in measures for the improvement of the environment in relation to waste, resource efficiency, air quality, water, nature and biodiversity, and conservation. <p>The majority of the Act does not make any immediate changes for organisations other than regulators.</p> <p>Legislative requirements relevant to Air Quality include the requirement for the Secretary of State to consult and set targets for PM_{2.5}. Consultation on two targets ended in May 2022 which included proposals for the following targets:</p> <ul style="list-style-type: none"> • Annual Mean Concentration Target (‘concentration target’) – a target of 10 micrograms per cubic metre (µg/m³) to be met across England by 2040. • Population Exposure Reduction Target (‘exposure reduction target’) – a 35% reduction in population exposure by 2040 (compared to a base year of 2018). <p>The targets need to be laid as draft Statutory Instruments by 31 October 2022 and will come into force once approved by Parliament.</p>

Scale	Description of Legislation
	<p>The proposed targets do not currently have a statutory basis. The air quality assessment in Chapter 5: Air Quality (Application Document 6.1) complies with the NPS NN and is based on the current enacted air quality legislation</p>
	<p>The Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019 These regulations amend the Air Quality Standards Regulations 2010 to reflect the UK's departure from the EU.</p>
	<p>Air Quality Standards Regulations 2010 (as amended) The Air Quality Standard Regulations implement EU Directive 2008/50/EC on ambient air quality and cleaner air for Europe and remain in force in domestic law following EU exit as 'retained EU law'.</p>
	<p>Air Quality (England) Regulations 2000/2002 The Air Quality (England) Regulations 2000 and the Air Quality (England) (Amendment) Regulations 2002 set national air quality objective levels for local authorities to meet in England.</p>
	<p>Part IV of the Environment Act 1995 The Environment Act 1995 contains provisions for protecting air quality in the UK and for local air quality management. It requires the UK Government to produce a national Air Quality Strategy, which contains standards, objectives and measures for improving ambient air quality, and defines Local Air Quality Management. It introduced an obligation on local authorities to issue, where the air quality standards are not being met, an order designating an Air Quality Management Area.</p>
	<p>Environmental Protection Act 1990 Part III of the Environmental Protection Act 1990 provides legislation around statutory nuisance, which applies to dust.</p>

Policy

- 1.1.5 National policies are presented in Table 1.2 and Table 1.3, with the Project response to these requirements. Where there is duplication of requirements presented in the various relevant National Policy Statements, these have been combined and a single Project response to the policy issue is provided in the table.
- 1.1.6 Table 1.4 presents regional and local policies that have been considered during the development of the Project and the DCO application.
- 1.1.7 Further detail on policy compliance can be found in the Planning Statement (Application Document 7.2).

Table 1.2 National policy framework and the Project response

Reference	Requirement	Project response
National Policy Statement for National Networks (NPS NN) (Department for Transport, 2014)		
Paragraph 5.6 (Broadly consistent with NPS EN-1 paragraph 5.2.6)	<p><i>‘Where the impacts of the project (both on and off-scheme) are likely to have significant air quality effects in relation to meeting EIA requirements and / or affect the UKs ability to comply with the Air Quality Directive, the applicant should undertake an assessment of the impacts of the proposed project as part of the environmental statement.’</i></p>	<p>An air quality assessment has been undertaken to consider the impacts of the construction and operation of the Project following DMRB LA 105 standards. The assessment has determined the significance of air quality effects and the risk of non-compliance with the Air Quality Directive. The impacts of the Project are presented in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1).</p>
Paragraph 5.7	<p><i>‘The environmental statement should describe:</i></p> <ul style="list-style-type: none"> • <i>existing air quality levels;</i> • <i>forecasts of air quality at the time of opening, assuming that the scheme is not built (the future baseline) and taking account of the impact of the scheme; and</i> • <i>any significant air quality effects, their mitigation and any residual effects, distinguishing between the construction and operation stages and taking account of the impact of road traffic generated by the project.’</i> 	<p>The existing air quality conditions are described in Section 5.4 of Chapter 5: Air Quality (Application Document 6.1) and Appendix 5.2 Baseline Air Quality Conditions (Application Document 6.3). Air quality modelling has been undertaken to determine existing air quality conditions (for the base year) and future air quality at the time of opening both without (Do-Minimum scenario) and with the Project (Do-Something scenario), as presented in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1).</p> <p>The air quality effects of the construction and operation of the Project, taking account of the impact of road traffic generated by the Project, are described in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1), Appendix 5.3 Construction Phase Results (Application Document 6.3), and Appendix 5.4 Operational Phase Results (Application Document 6.3). Section 5.5 of Chapter 5: Air Quality (Application Document 6.1) and Appendix 5.6 Project Air Quality Action Plan (Application Document 6.3) outlines the associated mitigation measures required.</p>

Reference	Requirement	Project response
Paragraph 5.8	<i>‘Defra publishes future national projections of air quality based on evidence of future emissions, traffic and vehicle fleet. Projections are updated as the evidence base changes. Applicant’s assessment should be consistent with this but may include more detailed modelling to demonstrate local impacts.’</i>	The assessment has used the latest Department for Environment, Food and Rural Affairs (Defra) modelling tools available at the time the work was undertaken, including background air quality maps (published August, 2020), and vehicle emission projections (Emission Factor Toolkit v11, published November 2021 which is incorporated into the National Highways speed band emission factors). The air quality tools have been used together with detailed modelling to inform the air quality assessment, as described in Section 5.3 of Chapter 5: Air Quality (Application Document 6.1).
Paragraph 5.9	<i>‘In addition to information on the likely significant effects of a project in relation to EIA, the Secretary of State must be provided with a judgement on the risk as to whether the project would affect the UK’s ability to comply with the Air Quality Directive.’</i>	The assessment has determined the risk as to whether the Project would lead to non-compliance with the Air Quality Directive, as presented in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1).
Paragraph 5.10	<i>‘The Secretary of State should consider air quality impacts over the wider area likely to be affected, as well as in the near vicinity of the Scheme. In all cases the Secretary of State must take account of relevant statutory air quality thresholds set out in domestic and European legislation. Where a project is likely to lead to a breach of the air quality thresholds, the applicant should work with the relevant authorities to secure appropriate mitigation measures with a view to ensuring so far as possible that those thresholds are not breached.’</i>	The air quality assessment has considered impacts at receptors near the Application Site and across the Affected Road Network (ARN), which covers an extensive area. This is described in Section 5.3 of Chapter 5: Air Quality (Application Document 6.1) and shown in Figure 5.2 (Application Document 6.2) for the construction phase and Figure 5.3 (Application Document 6.2) for the operational phase. Air quality effects have been considered in relation to relevant statutory thresholds in order to consider the significance of effects and risk of non-compliance with the Air Quality Directive. The effects are described in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1), Appendix 5.3 Construction Phase Results (Application Document 6.3), and Appendix 5.4

Reference	Requirement	Project response
		<p>Operational Phase Results (Application Document 6.3). The mitigation measures identified are described in Section 5.5 of Chapter 5: Air Quality (Application Document 6.1) and Appendix 5.6 Project Air Quality Action Plan (Application Document 6.3). In addition, where the Project does lead to a breach of air quality thresholds, regardless of whether the Project is considered to have a significant effect, measures have been investigated and discussed with the relevant local authorities to determine whether the impact of the Project could be reduced. These measures are outlined in paragraph 5.6.124 of Chapter 5: Air Quality (Application Document 6.1).</p>
<p>Paragraph 5.11</p>	<p><i>‘Air quality considerations are likely to be particularly relevant where schemes are proposed:</i></p> <ul style="list-style-type: none"> • <i>within or adjacent to AQMA; roads identified as being above Limit Values or nature conservation sites (including Natura 2000 sites and Sites of Special Scientific Interest (SSSIs), including those outside England); and</i> • <i>where changes are sufficient to bring about the need for a new AQMA or change the size of an existing AQMA; or bring about changes to exceedances of the Limit Values, or where they may have the potential to impact on nature conservation sites.’</i> 	<p>Air quality impacts have been considered near the Application Site and within 200m of the ARN. The assessment considers impacts on statutory air quality thresholds, including in AQMAs, and considers impacts on nature conservation sites as discussed in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1), Appendix 5.3 Construction Phase Results (Application Document 6.3), and Appendix 5.4 Operational Phase Results (Application Document 6.3) .</p>

Reference	Requirement	Project response
Paragraph 5.12	<p><i>‘The Secretary of State must give air quality considerations substantial weight where, after taking into account mitigation, a project would lead to a significant air quality impact in relation to EIA and / or where they lead to a deterioration in air quality in a zone/agglomeration.’</i></p>	<p>The air quality assessment has been undertaken in accordance with DMRB LA 105 standards, which provide an assessment of Project impacts on human health, designated habitats and compliance with the Air Quality Directive to determine whether the Project results in significant air quality effects. The outcome of the assessment in relation to the determination of significance is reported in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1).</p>
Paragraph 5.13	<p><i>‘The Secretary of State should refuse consent where, after taking into account mitigation, the air quality impacts of the scheme will:</i></p> <ul style="list-style-type: none"> <i>• result in a zone/agglomeration which is currently reported as being compliant with the Air Quality Directive becoming non-compliant; or</i> <i>• affect the ability of a non-compliant area to achieve compliance within the most recent timescales reported to the European Commission at the time of the decision.’</i> 	<p>The air quality assessment has been undertaken in accordance with DMRB LA 105 standards, which requires a compliance risk assessment to determine if the Project affects the UK’s reported ability to achieve compliance with the Air Quality Directive. The compliance risk assessment has determined whether the Project would result in a zone/agglomeration which is reported as being compliant becoming non-compliant, and whether the Project would delay compliance in an area which is being reported as non-compliant. This is reported in the compliance risk assessment in Section 5.6 of Chapter 5: Air Quality (Application Document 6.1).</p>
Paragraph 5.14	<p><i>‘The Secretary of State should consider whether mitigation measures put forward by the applicant are acceptable. A management plan may help codify mitigation at this stage. The proposed mitigation measures should ensure that the net impact of a project does not delay the point at which a zone will meet compliance timescales.’</i></p>	<p>The mitigation measures identified for the Project are described in Section 5.5 of Chapter 5: Air Quality (Application Document 6.1) and Appendix 5.6 Project Air Quality Action Plan (Application Document 6.3).</p>

Reference	Requirement	Project response
Paragraph 5.15	<p><i>‘Mitigation measures may affect the project design, layout, construction, operation and/or may comprise measures to improve air quality in pollution hotspots beyond the immediate locality of the scheme. Measures could include, but are not limited to, changes to the route of the new scheme, changes to the proximity of vehicles to local receptors in the existing route, physical means including barriers to trap or better disperse emissions, and speed control. The implementation of mitigation measures may require working with partners to support their delivery.’</i></p>	<p>The mitigation measures identified for the Project are described in Section 5.5 of Chapter 5: Air Quality (Application Document 6.1) and Appendix 5.6 Project Air Quality Action Plan (Application Document 6.3).</p>
<p>Overarching National Policy Statement for Energy (NPS EN-1) (Department of Energy and Climate Change, 2011a)</p>		
5.2	<p>The EN-1 acknowledged that infrastructure developments can adversely effect air quality. In paragraph 5.2.7 it describes what should be included in the ES;</p> <p><i>The ES should describe:</i></p> <ul style="list-style-type: none"> • <i>any significant air emissions, their mitigation and any residual effects</i> • <i>distinguishing between the project stages and taking account of any</i> • <i>significant emissions from any road traffic generated by the project;</i> • <i>the predicted absolute emission levels of the proposed project, after</i> • <i>mitigation methods have been applied;</i> • <i>existing air quality levels and the relative change in air quality from</i> • <i>existing levels; and</i> • <i>any potential eutrophication impacts.</i> 	<p>The air quality impacts of the Project relate to the construction impacts, as a result of the changes in infrastructure relating to energy. The items listed in paragraph 5.2.7 are considered in this assessment to determine compliance with the requirements in the NN NPS. As a result considering there are additional requirements such as demonstrating compliance with Limit Values in the NN NPS that are not explicit in EN-1, it is considered that in demonstrating compliance with the NN NPS will also demonstrate compliance with EN 1 in relation to the construction impacts of this Project.</p>

Reference	Requirement	Project response
National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4) (Department of Energy and Climate Change, 2011b)		
There are no additional requirements for Air Quality presented within NPS EN-4 above those set out within the NPS NN described above.		
National Policy Statement for Electricity Networks Infrastructure (NPS EN-5) (Department of Energy and Climate Change, 2011c)		
There are no additional requirements for Air Quality presented within NPS EN-5 above those set out within the NPS NN described above.		
National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2021)		
Paragraph 186	<p>Considers impacts of developments on air quality:</p> <p><i>‘Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.’</i></p>	<p>The assessment has determined the air quality effects in relation to air quality Limit Values and national objectives and has taken into account impacts across the ARN which includes 41 AQMAs and the London Low Emission Zone.</p> <p>The traffic forecasts include traffic growth associated with future developments as explicitly contained within the Project’s Uncertainty Log (produced in line with TAG Unit M4 (Department for Transport, 2019), and as set out within Appendix C: the Transport Forecasting Package of the Combined Modelling and Appraisal Report (Application Document 7.7) and more widely in line with growth forecast by the Department for Transport within the National Trip End Model. This traffic data is used in the air quality forecasts, so they account for cumulative impacts.</p>

Table 1.3 Other National policies relevant to air quality

Reference	Requirement	Project response
<p>Planning Practice Guidance – Air quality (Ministry of Housing, Communities and Local Government, 2019)</p>	<p>The Planning Practice Guidance provides a summary of the further guidance on air quality issues set out in the NPPF. The practice guidance sets out how planning can take account of the impact of new development on air quality. The guidance notes that the extent to which air quality is relevant to a planning decision will depend on the proposed development and its location. The guidance states:</p> <p><i>‘Where air quality is a relevant consideration the local planning authority may need to establish:</i></p> <ul style="list-style-type: none"> • <i>the ‘baseline’ local air quality, including what would happen to air quality in the absence of the development;</i> • <i>whether the proposed development could significantly change air quality during the construction and operational phases (and the consequences of this for public health and biodiversity); and</i> • <i>whether occupiers or users of the development could experience poor living conditions or health due to poor air quality.’</i> <p>Planning Practice Guidance advises that the application should proceed to decision with appropriate planning conditions or planning obligation if the development (with mitigation) does not lead to an unacceptable risk from air pollution, prevent sustained compliance with Limit Values or national objectives; or fail to comply with the requirements of the Conservation of Habitats and Species Regulations 2017. As outlined in Chapter 5 Air Quality, effects from the Project are determined in relation to compliance with Air Quality Strategy (AQS) objectives and Limit Values.</p> 	<p>The assessment has considered baseline air quality (Section 5.4 of Chapter 5: Air Quality (Application Document 6.1)) and the significance of effects from construction and operation (Section 5.6 of Chapter 5: Air Quality (Application Document 6.1)). The air quality effects on biodiversity are discussed in Section 8.6 of Chapter 8: Terrestrial Biodiversity.</p>

Table 1.4 Regional and local policies for air quality

Reference	Requirement
Dartford Borough Council (2017) Corporate Plan 2017 – 2020	Objective ET1 – Improve air quality
Dartford Borough Council (2011) Dartford Core Strategy	Dartford Borough Council (2011) Dartford Core Strategy
Kent and Medway Energy and Low Emissions Strategy (Kent County Council / Medway Council, 2020)	The strategy vision is that <i>“by 2050 the county of Kent has reduced emissions to net-zero and is benefiting from a competitive, innovative and resilient low carbon economy, where no deaths are associated with poor air quality”</i>
Kent County Council (2016) Kent Environment Strategy	Theme Three: Toward a sustainable future
Medway Council (2003) Medway Local Plan (Adopted 2003)	Policy BNE24: Air Quality
Greater London Authority (2021) The London Plan, The Spatial Development Strategy for Greater London	Policy SI 1: Improving Air Quality
Greater London Authority (2018) London Environment Strategy	Chapter 4: Air Quality
Maidstone Borough Council (2017) Maidstone Borough Local Plan 2011 - 2031	Policy DM6: Air Quality
Tonbridge and Malling Borough Council (2010) Managing Developments and the Environment Development Plan Document	Policy SQ4: Air Quality
Gravesham Borough Council (2014) Gravesham Local Plan Core Strategy (Adopted 2014)	Policy CS10: Physical and Social Infrastructure
Thurrock Council (2015) Core Strategy and Policies for Management of Development (Adopted 2015)	Policy PMD1: Minimising Pollution and Impacts on Amenity
London Borough of Havering (2021) Havering Local Plan 2016 - 2031	Policy 33: Air Quality
Brentwood Borough Council (2022) Brentwood Local Plan 2016-2033 (adopted March 2022)	Policy NE08: Air Quality

References

- Brentwood Borough Council (2022). Brentwood Local Plan 2016-2033 (adopted March 2022)
- Dartford Borough Council (2011). Dartford Core Strategy.
- Dartford Borough Council (2017). Corporate Plan 2017 – 2020.
- Department of Energy and Climate Change (2011a). Overarching National Policy Statement for Energy (NPS EN-1)
- Department of Energy and Climate Change (2011b). National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (NPS EN-4)
- Department of Energy and Climate Change (2011c). National Policy Statement for Electricity Networks Infrastructure (NPS EN-5)
- Department for Transport (2014). National Policy Statement for National Networks. Accessed April 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/387223/npsnn-web.pdf/
- Gravesham Borough Council (2014). Gravesham Local Plan Core Strategy.
- Greater London Authority (2018). London Environment Strategy.
- Greater London Authority (2021). The London Plan, The Spatial Development Strategy for Greater London
- Kent County Council (2016). Kent Environment Strategy.
- Kent County Council / Medway Council (2020). Kent and Medway Low Emissions Strategy.
- London Borough of Havering (2008). Core Strategy and Development Control Policies Development Plan Document.
- Maidstone Borough Council (2017). Maidstone Borough Local Plan 2011 – 2031.
- Medway Council (2003). Medway Local Plan.
- Ministry of Housing, Communities and Local Government (2019). Planning Practice Guidance – Air quality. Accessed August 2021 <https://www.gov.uk/guidance/air-quality--3>
- Ministry of Housing, Communities and Local Government (2021). National Planning Policy Framework.
- Thurrock Council (2015). Core Strategy and Policies for Management of Development.
- Tonbridge and Malling Borough Council (2010). Managing Developments and the Environment Development Plan Document.

If you need help accessing this or any other National Highways information, please call **0300 123 5000** and we will help you.

© Crown copyright 2022.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/

write to the **Information Policy Team, The National Archives, Kew, London TW9 4DU**, or email psi@nationalarchives.gsi.gov.uk.

Mapping (where present): © Crown copyright and database rights 2022 OS 100030649. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.

If you have any enquiries about this publication email info@nationalhighways.co.uk or call **0300 123 5000***.

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls.

These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone. Calls may be recorded or monitored.

Printed on paper from well-managed forests and other controlled sources when issued directly by National Highways.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ

National Highways Company Limited registered in England and Wales number 09346363