

DOGGER BANK D WIND FARM

Preliminary Environmental Information Report

Volume 2

Appendix 20.1 Consultation Responses for Air Quality
and Dust

Document Reference No: 2.20.1

Date: June 2025

Revision: V1



www.doggerbankd.com

Document Title:	Volume 2, Appendix 20.1 Consultation Responses for Air Quality and Dust
Document BIM No.	PC6250-RHD-XX-ON-RP-EV-0130
Prepared By:	Royal HaskoningDHV
Prepared For:	Dogger Bank D Offshore Wind Farm

Revision No.	Date	Status / Reason for Issue	Author	Checked By	Approved By
V1	22/05/2025	Final	DH / EW	AG	FC

Table of Contents

20.1. Consultation Responses for Air Quality and Dust..... 5

References 17

List of Tables..... 18

List of Acronyms 18

Glossary

Term	Definition
Design	All of the decisions that shape a development throughout its design and pre-construction, construction / commissioning, operation and, where relevant, decommissioning phases.
Development Consent Order (DCO)	A consent required under Section 37 of the Planning Act 2008 to authorise the development of a Nationally Significant Infrastructure Project, which is granted by the relevant Secretary of State following an application to the Planning Inspectorate.
Effect	An effect is the consequence of an impact when considered in combination with the receptor's sensitivity / value / importance, defined in terms of significance.
Environmental Impact Assessment (EIA)	A process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information and includes the publication of an Environmental Statement.
Environmental Statement (ES)	A document reporting the findings of the EIA which describes the measures proposed to mitigate any likely significant effects.
Evidence Plan Process (EPP)	A voluntary consultation process with technical stakeholders which includes a Steering Group and Expert Topic Group (ETG) meetings to encourage upfront agreement on the nature, volume and range of supporting evidence required to inform the EIA and HRA process.
Expert Topic Group (ETG)	A forum for targeted technical engagement with relevant stakeholders through the EPP.
Impact	A change resulting from an activity associated with the Project, defined in terms of magnitude.
Mitigation	Any action or process designed to avoid, prevent, reduce or, if possible, offset potentially significant adverse effects of a development. All mitigation measures adopted by the Project are provided in the Commitments Register.
Scoping Opinion	A written opinion issued by the Planning Inspectorate on behalf of the Secretary of State regarding the scope and level of detail of the information to be provided in the Applicant's Environmental Statement. The Scoping Opinion for the Project was adopted by the Secretary of State on 02 August 2024.
Scoping Report	A request by the Applicant made to the Planning Inspectorate for a Scoping Opinion on behalf of the Secretary of State.

Term	Definition
	The Scoping Report for the Project was submitted to the Secretary of State on 24 June 2024.
The Applicant	SSE Renewables and Equinor acting through 'Doggerbank Offshore Wind Farm Project 4 Projco Limited'.
The Project	Dogger Bank D (DBD) Offshore Wind Farm Project, also referred to as DBD in this PEIR.

20.1. Consultation Responses for Air Quality and Dust

1. **Volume 1, Chapter 20 Air Quality and Dust** for the Dogger Bank D (DBD) Offshore Wind Farm (herein referred to as ‘the Project’) has been informed by consultation with the Planning Inspectorate and stakeholders following the publication of the Scoping Report (Royal HaskoningDHV, 2024) and the comments contained within the Scoping Opinion (Planning Inspectorate, 2024). This appendix contains details of the comments for **Chapter 20 Air Quality and Dust** and the Applicant’s responses in **Table 20.1-1**.
2. The Applicant previously submitted a Scoping Report in 2023 based on project parameters at that time. The 2024 Scoping Report (Royal HaskoningDHV, 2024) and adopted Scoping Opinion (Planning Inspectorate, 2024) have superseded the 2023 Scoping Report and as such consultation responses on the 2023 Scoping Report are not considered further in this document except where they are included in the 2024 consultee responses and remain relevant to the Project.

Table 20.1-1 Consultation Responses for Air Quality and Dust

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Emissions of dust on human and ecological receptors – operation</p> <p>The Scoping Report states that activities associated with the operation and maintenance of the onshore elements of the Proposed Development are unlikely to generate dust and therefore this phase of the development is unlikely to result in significant effects. The Inspectorate agrees that these activities can be scoped out of the assessment based on the information provided.</p>	<p>Noted.</p> <p>Impacts from operational dust emissions on human and ecological receptors have been scoped out of the assessment.</p>

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Emissions from plant and machinery on human health and ecological sites – operation</p> <p>The Inspectorate considers that the information in the Scoping Report on the likely emissions to air during operation and the receptors which could be affected is limited. The Inspectorate also notes that back-up generators have the potential to result in air quality effects during the operational phase. Accordingly, the Inspectorate does not agree that these matters can be scoped out. The ES should provide an assessment of these matters where significant effects are likely to occur, or information demonstrating agreement with the relevant consultation bodies and the absence of a LSE. Cross-reference should be made to the assessments of effects on ecology and on human health.</p>	Impacts from operational plant and machinery emissions on human health and ecological sites has been considered in Section 20.7.2.1 of Volume 1, Chapter 20 Air Quality and Dust.
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Emissions from road traffic on human health and ecological sites – operation</p> <p>The Inspectorate agrees it is unlikely that road traffic associated with operation and management activities would result in significant effects in respect of air quality. However, the ES should confirm that the anticipated road vehicle movements are below the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK) screening values, and if values are exceeded then an assessment of LSE should be provided.</p>	<p>Operational road vehicle exhaust emissions have been considered in Section 20.7.2.2 of Volume 1, Chapter 20 Air Quality and Dust.</p> <p>The number of anticipated road vehicle movements during the operation phase is provided in Chapter 26 Traffic and Transport.</p>

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Cumulative effects – operation</p> <p>The Inspectorate considers that the Scoping Report has provided insufficient detail regarding the rationale for scoping out cumulative effects during operation. In the absence of information such as evidence demonstrating clear agreement with relevant statutory bodies, the Inspectorate is not in a position to agree to scope this matter out from the assessment. The Environmental Statement (ES) should include an assessment of this matter or the information referred to demonstrating agreement with the relevant consultation bodies and the absence of a LSE.</p>	<p>Where there is potential for cumulative operational effects, these have been considered in the cumulative effects assessment (CEA) provided in Section 20.8 of Volume 1, Chapter 20 Air Quality and Dust.</p> <p>Details on the number, size and proximate location of emergency back up within the OCS zone are not confirmed at this stage. Therefore, should further information become available, cumulative air quality effects from backup generators will be assessed in the ES.</p>
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Impacts</p> <p>Impacts from ammonia emissions from road traffic during construction and decommissioning should be assessed in the ES where significant effects are likely to occur. The Applicant's attention is drawn to the scoping consultation response from Natural England in this regard (Appendix 2 of this Opinion).</p>	<p>Impacts of ammonia emissions from construction road traffic at ecological receptors within 200m of the affected road network have been considered in Section 20.7.1.3.2 of Volume 1, Chapter 20 Air Quality and Dust. Further discussion on the effect significance of construction road vehicle exhaust emissions on ecological receptors is provided in Volume 1, Chapter 23 Onshore Ecology and Ornithology.</p>

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
			Details of decommissioning traffic movements are not known at this stage. Impacts of ammonia emissions from decommissioning road traffic at ecological receptors will be assessed in the Onshore Decommissioning Plan (see Table 20.7 of Volume 1, Chapter 20 Air Quality and Dust , Commitment ID CO56).
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Baseline Data collection</p> <p>The Scoping Report states that it is not proposed to collect any primary air quality data sets for the assessment as it is expected there will be sufficient data from monitoring undertaken by the relevant local authorities. Effort should be made to agree the requirement for any additional baseline survey data with the relevant consultation bodies. The assessment in the ES should be carried out with reference to a robust baseline position reflecting the relevant study area, including an understanding of relevant pollutant concentrations. Where required, further monitoring should be conducted to supplement available data taken from the relevant local authorities monitoring.</p>	Baseline monitoring data has been taken from the Hull City Council and East Riding of Yorkshire Council 2024 air quality annual status reports as agreed via email with the Environmental Protection Officers at East Riding of Yorkshire Council (dated 9 th October 2024) and Hull City Council (dated 21 st January 2025).

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Study Area</p> <p>The ES should include a figure(s) to identify the final study areas for each element of the air quality assessment, including the location of human and ecological receptors that have been considered. The Applicant's attention is drawn to NE's scoping consultation response (Appendix 2 of this Opinion) regarding the consideration of impacts of dust during construction on designated sites within 200m of a dust source.</p>	<p>A figure showing the Air Quality Study Area is provided as Figure 20-1 in Volume 1, Chapter 20 Air Quality and Dust. Figures showing the human and ecological receptors considered in the assessment are provided in Figure 20-3 and Figure 20-4 respectively.</p>

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
The Planning Inspectorate	Scoping Opinion (02/08/24)	Offshore Air Quality The Applicant proposes that an Offshore Air Quality aspect assessment is scoped out of the ES in its entirety. The Inspectorate agrees with this approach as detailed in the comments below. An Offshore Air Quality aspect assessment can be scoped out of further assessment in the ES.	Noted. Impacts from offshore air quality impacts on human and ecological receptors, including cumulative effects, have been scoped out of the assessment.
The Planning Inspectorate	Scoping Opinion (02/08/24)	Offshore air quality impacts on human and ecological receptors – all phases The Inspectorate agrees that this matter may be scoped out of further assessment in the ES on the basis that the main source of emissions would be exhaust emissions from vessels, temporary generators and, due to the nature and location of the Proposed Development, associated vessel movements and temporary generators would only generate a small increase in emissions, which is unlikely to result in significant effects on human and ecological receptors.	
The Planning Inspectorate	Scoping Opinion (02/08/24)	Cumulative effects – all phases The Inspectorate agrees that due to the nature and location of the Proposed Development it is unlikely that offshore air emissions would combine with other offshore proposals to result in significant cumulative effects. This matter can therefore be scoped out of further assessment in the ES.	

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
The Planning Inspectorate	Scoping Opinion (02/08/24)	<p>Transboundary effects – all phases</p> <p>The Applicant proposes to scope this matter out on the basis that although the array area is located adjacent to Dutch Territorial Water, it is unlikely that exhaust emissions from project related vessels would give rise to any significant transboundary effects.</p> <p>As noted under Table 2.2 above, the Inspectorate has not yet concluded its separate transboundary re-screening exercise. However, the Inspectorate agrees that this matter may be scoped out on the basis that due to the nature of the Proposed Development associated vessel movements would only generate a negligible increase in emissions in all phases which is unlikely to result in significant transboundary effects.</p>	<p>Noted.</p> <p>Effects from transboundary air quality impacts have been scoped out of the assessment.</p>
Natural England	Scoping Opinion (02/08/24)	<p>Designated sites within 200m of a road which will experience a significant increase in traffic movements during the construction phase should be assessed for impacts due to air pollution from traffic. When undertaking an assessment of the potential impacts during the construction or operation phase of the development there will need to be clarification provided on which roads will be used to access the development site, and the number of predicted vehicle movements. Natural England has produced guidance for assessing the impacts of air pollution due to traffic.</p> <p>Ammonia emissions from road traffic could make a significant difference to nitrogen deposition close to</p>	<p>Natural England guidance on the assessment of road traffic impacts on designated ecological sites (Natural England, 2018) references the screening criteria contained in the Design Manual for Roads and Bridges LA105 air quality guidance (Highways England, 2024). As such, these criteria were used to screen the potential for air quality impacts at ecological receptor locations.</p> <p>To enable quantification of the impact of ammonia from road traffic, the Air Quality Consultants tool 'CREAM V1A' was used to provide ammonia emission factors for</p>

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
		<p>roads. As traffic composition transitions toward more petrol and electric cars (i.e., fewer diesel cars on the road) – catalytic converters may aid in reducing NOx emissions but result in increased ammonia emissions – therefore consideration of the potential for impacts is needed (see https://www.aqconsultants.co.uk/news/february-2020-(1)/ammonia-emissions-from-roadsfor-assessing-impacts).</p> <p>There are currently two models which can be used to calculate the ammonia concentration and contribution to total N deposition from road sources. One of these models is publicly available and called CREAM (Air Quality Consultants - News - Ammonia Emissions from Roads for Assessing Impacts on Nitrogen-Sensitive Habitats (aqconsultants.co.uk), and there is another produced by National Highways. Potential impacts which may arise due to dust during construction should also be considered. Designated sites within 200m of a dust source should be screened in for impacts. Suitable mitigation for these impacts could be outlined within a Construction Environmental Management Plan (CEMP).</p> <p>Consideration should also be given to the potential for air quality impacts due to increased vessel movements during construction and operation.</p>	<p>inclusion within the model (Air Quality Consultants, 2020b).</p> <p>Impacts of ammonia emissions from construction road traffic at ecological receptors within 200m of the affected road network have been considered in Section 20.7.1.3.2 of Volume 1, Chapter 20 Air Quality and Dust. Further discussion on the effect significance of construction road vehicle exhaust emissions on ecological receptors is provided in Volume 1, Chapter 23 Onshore Ecology and Ornithology.</p> <p>Impacts of construction dust emissions at ecological receptors within 200m of the Onshore Development Area have been considered in Section 20.7.1.1 and site-specific dust mitigation measures have been outlined.</p> <p>The air quality impacts of emissions associated with nearshore vessel movements during construction and operation on onshore sensitive receptors are considered in Sections 20.7.1.4 and 20.7.2.3 respectively.</p>

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
Hull City Council	Scoping Opinion (02/08/24)	Do you agree with the characterisation of the existing environment? Yes, as far as it relates to the Hull City Council administrative area.	Agreement from the Environmental Protection Officer at Hull City Council through the Scoping Opinion's responses has been noted. The assessment scope and methodology as agreed has been used within the air quality assessment.
Hull City Council	Scoping Opinion (02/08/24)	Have all the onshore air quality impacts resulting from the Project been identified in the Scoping Report? Yes, with regard to the Hull City Council administrative area.	
Hull City Council	Scoping Opinion (02/08/24)	Do you agree with the onshore air quality and dust impacts that have been scoped in for / out from further consideration within the EIA? Yes, with regard to the Hull City Council administrative area.	
Hull City Council	Scoping Opinion (02/08/24)	Do you agree with the onshore air quality and dust impacts that have been scoped in for / out from further consideration within the EIA? Yes, with regard to the Hull City Council administrative area.	
Hull City Council	Scoping Opinion (02/08/24)	Do you agree with the proposed assessment approach? Yes, generally, except for the omission referred to below. Para 1087	The Supplementary Planning Document 3 'Air Quality Guidance for Planners and Developers' (Hull City Council, 2018) has been considered in Section 20.5.3.3.5.5 of Volume 1, Chapter 20 Air Quality and Dust.

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
		It is recommended that the Air Quality Assessment and assessment of significance of impacts is undertaken with regard to the Air Quality guidance contained within Hull City Council Supplementary Planning Document 3 – Environmental Quality.	
Hull City Council	Scoping Opinion (02/08/24)	The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced.	The assessment of effects relating to air quality has been presented in Section 20.7 of Volume 1, Chapter 20 Air Quality and Dust.
East Riding of Yorkshire Council <i>(Hull City Council not in attendance)</i>	ETG11 Meeting 02 minutes (meeting held on 27/08/24)	East Riding of Yorkshire Council confirmed agreement in writing with the proposed scope, study areas and methodology for the air quality assessment and the proposed data sources and survey approach for baseline characterisation.	Agreement from the Environmental Protection Officer at East Riding of Yorkshire Council through the second ETG11 meeting and subsequent email technical consultation has been noted.
East Riding of Yorkshire Council	Technical consultation via email (09/10/24)	Thank you for your email and the detailed explanation of how you'll approach the assessment of air quality for this scheme. I have no issues with your approach and confirm that we'd be happy for you to use the ERYC 2024 ASR data (from 2023 monitoring year) for verification.	The assessment scope and methodology as agreed has been used within the air quality assessment.

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
Hull City Council	Technical consultation via email (21/01/25)	I have reviewed the scope provided and am broadly in agreement with the proposed methodology. I welcome the intention to observe the Air Quality Guidance for Planners and Developers contained in Appendix E of the Council's Environmental Quality Supplementary Planning Document (SPD3). As part of the assessment I would ask that the cumulative impact of other developments in the area is also taken into account.	Agreement from the Environmental Protection Officer at Hull City Council. The assessment scope and methodology as agreed has been used within the air quality assessment. Only a preliminary assessment of cumulative traffic and transport effects has been undertaken for the PEIR (see Volume 1, Chapter 26 Traffic and Transport). Therefore, cumulative effects from road vehicle exhaust emissions will be assessed in the ES.
Forestry Commission	Non-statutory consultation response, letter (16/10/24)	Thank you for seeking the Forestry Commission's advice about the impacts that this application may have on the woodland identified in this proposed application. As a Non-Ministerial Government Department, we provide no opinion supporting or objecting to an application. Rather, we are providing information on the potential impact that the proposed development could have on woodland. It is Government policy to refuse development that will result in the loss or deterioration of irreplaceable habitats including ancient woodland, unless "there are wholly exceptional reasons and a suitable compensation strategy exists" (National Planning Policy Framework paragraph 186c).	Impacts of road vehicle exhaust emissions at ecological receptors, including ancient woodlands, within 200m of the affected road network have been considered in Section 20.7.1.3.2 of Volume 1, Chapter 20 Air Quality and Dust . Further discussion on the effect significance of construction road vehicle exhaust emissions on affected ancient woodlands is provided in Volume 1, Chapter 23 Onshore Ecology and Ornithology .

APPENDIX 20.1 CONSULTATION REPONSES FOR AIR QUALITY AND DUST

Stakeholder	Document / Meeting, Date	Comment	How and Where Addressed in the PEIR
		<p>For more information on the impacts of development on ancient woodland and how to assess these, please see the joint Forestry Commission /Natural England Standing Advice on Ancient Woodland – “Ancient woodland, ancient trees and veteran trees: advice for making planning decisions”, the supporting guidance included within it, and Keepers of Time – A Statement of Policy for England’s Ancient and Native Woodland (published June 2005).</p> <p>The standing advice also provides information on mitigation, including the use of buffers. Proposals in proximity to ancient woodland should have a buffer zone of at least 15m from the boundary of the woodland to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, for example the effects of air pollution from increased traffic, the proposal is likely to require a larger buffer zone. We would be keen to engage further with the developer in relation to any mitigation and compensation strategies.</p>	

References

Royal HaskoningDHV (2024). Dogger Bank D Scoping Report (Part 1 & 2). Available at: <https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010144-000069-Dogger%20Bank%20D%20Scoping%20Report%20Part%201.pdf> [Accessed September 2024].

The Planning Inspectorate (2024). Scoping Opinion adopted by the Secretary of State on 02 August 2024. Available at: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010144-000071-Dogger%20Bank%20D_Scoping%20Opinion%202017%20EIA%20Regs_draft.pdf [Accessed September 2024]

List of Tables

Table 20.1-1 Consultation Responses for Air Quality and Dust	5
--	---

List of Acronyms

Term	Definition
CEMP	Construction Environmental Management Plan
CEA	Cumulative Effects Assessment
DBD	Dogger Bank D Offshore Wind Farm Project
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EPP	Evidence Plan Process
EPUK	Environmental Protection UK
ES	Environmental Statement
ETG	Expert Topic Group
IAQM	Institute of Air Quality Management
OCS	Onshore Converter Station