

Humber Low Carbon Pipelines

Preliminary Environmental Information Report
Volume II Chapter 6 Air Quality
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nationalgrid

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6. Air Quality

6.1 Introduction

- 6.1.1 This Chapter reports the results of the preliminary assessment of the potential impacts and effects of the Project on air quality and describes:
- Relevant, legislation, policy and guidance;
 - Engagement undertaken to date;
 - The proposed assessment methodology and associated significance criteria;
 - Preliminary baseline conditions;
 - Potential impacts of construction, operation, and decommissioning;
 - Potential design, mitigation, and enhancement measures;
 - Summary of the preliminary assessment of potential significant effects; and
 - Next steps.
- 6.1.2 This assessment considers the simultaneous construction of a dual pipeline system (one for carbon dioxide and one for hydrogen), as well as the associated Above Ground Installations (AGIs). The majority of the carbon dioxide pipeline would be up to 600 mm (24") nominal diameter and the hydrogen pipeline would be up to 900 mm (36") nominal diameter. This is referred to as the Base Case in this Preliminary Environmental Information Report (PEIR). Also under consideration is the possibility of deploying a larger carbon dioxide pipeline, with a diameter up to 750 mm (30") (with the hydrogen pipeline remaining the same diameter as within the Base Case). This is referred to in this PEIR as Sensitivity 1. Further details regarding the Base Case and Sensitivity 1, as well as the diameter and capacity of the pipelines are provided in Sections 2.3 and 2.4 of Chapter 2: Project Description (Volume II). This chapter assesses the impacts and effects associated with the Base Case. It is anticipated that the types of potential impacts for the Base Case and Sensitivity 1 would be the same, although the magnitude of impacts may differ. A full assessment of Sensitivity 1 would be undertaken and recorded within the Environmental Statement (ES) if the larger carbon dioxide pipeline diameter is taken forward into the Development Consent Order (DCO) application.
- 6.1.3 This Chapter (and its associated figure and appendices) is intended to be read as part of the wider PEIR.

6.2 Legislation, policy and guidance

- 6.2.1 A summary of the international, national, and local legislation, planning policy and guidance relevant to the air quality assessment for the Project is set out below.

Legislation

Environmental Protection Act 1990 (Ref 6.1)

- 6.2.2 Generally, dust is only a cause of annoyance but when of sufficient scale and frequency, it may become a statutory nuisance. The relevant legislation dealing with statutory nuisance is given in Part III of the Environmental Protection Act 1990 (Ref 6.1). Statutory nuisances in relation to dust and deposits are defined in Section 79(1)(d) and (e) of the Act as follows:

“Any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance.

any accumulation or deposit which is prejudicial to health or a nuisance”.

- 6.2.3 Under the provisions of the Act where a local authority is satisfied that a statutory nuisance exists, it is under a duty to serve an abatement notice requiring abatement or cessation of one or more activities deemed to be causing the nuisance. In the absence of any kind of standard, identification of a nuisance is dependent on the professional judgment of the local authority as to whether Best Practical Means (BPM) are being employed to control emissions. Where BPM is evident or can be clearly demonstrated then a particular activity cannot be deemed to be causing a Statutory Nuisance.

Air Quality Standards Regulations (Ref 6.2)

- 6.2.4 Part IV of the Environment Act (1995) (Ref 6.3) requires the UK Government to produce a national Air Quality Strategy (AQS) which contains standards, objectives and measures for improving ambient air quality. The AQS (Ref 6.4) sets out objectives that are maximum ambient pollutant concentrations not to be exceeded either without exception or with a permitted number of exceedances over a specified timescale. The regulations referred to in the AQS have been supplemented by the Air Quality Standards Regulations 2010 (SI 2010/1001) (Ref 6.2) which came into force on 11 June 2010 and transpose the European Union (EU) Air Quality Directive (2008/50/EC) (Ref 6.5) into UK law. Limit Values were published in Part 2 of these regulations which covered seven pollutants, in addition to Target Values for an additional five pollutants. These are generally in line with the AQS objectives, although the requirements for the determination of compliance vary.
- 6.2.5 Pursuant to the European Union (EU) (Withdrawal) Act 2018 (Ref 6.6), law derived from the EU has been converted into domestic law following the UK's withdrawal from the EU. The Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019 (Ref 6.7) made amendments to the Air Quality Standards Regulations 2010 (Ref 6.2) to transpose provisions of the EU Ambient Air Quality Directive (2008/50/EC) (Ref 6.5).
- 6.2.6 Table 6.1 presents the AQS objectives set out in Part 2 of the Air Quality Standards Regulations 2010 for the pollutants considered applicable within this assessment.

Table 6.1 – Air Quality Strategy Objectives

Pollutant	Air Quality Objective	
	Concentration ($\mu\text{g}/\text{m}^3$)	Averaging Period
Nitrogen Dioxide (NO_2)	40	Annual mean
	200	1-hour mean; not to be exceeded more than 18 times a year
	40	Annual mean

Pollutant	Air Quality Objective	
	Concentration ($\mu\text{g}/\text{m}^3$)	Averaging Period
Particulate Matter less than 10 microns in diameter (PM_{10})	50	24-hour mean; not to be exceeded more than 35 times a year
Particulate Matter less than 2.5 microns in diameter ($\text{PM}_{2.5}$)*	25	Annual mean

* It should be noted that the $\text{PM}_{2.5}$ objective is a target value and is not in the 2010 regulations as a legal requirement to be achieved by local authorities.

- 6.2.7 It is a requirement of the Environment Act 1995 (Ref 6.3) that local authorities review current and future air quality within their area of jurisdiction under the system of Local Air Quality Management (LAQM). Any areas of relevant exposure where the AQS objectives are not, or are unlikely to be, achieved should be identified.
- 6.2.8 Where it is anticipated that an AQS objective will not be met, it is a requirement that an Air Quality Management Area (AQMA) be declared. Where an AQMA is declared, the LA is obliged to produce an Action Plan in pursuit of the achievement of the AQS objectives.

Policy

The Air Quality Strategy for England, Scotland, Wales and Northern Ireland

- 6.2.9 The AQS (Ref 6.4) sets out air quality objectives (detailed in Table 6.1) and policy options to further improve air quality in the UK, for sources including international, road sources, industrial and domestic sources. Air quality policies are set out detailing the role of local authorities with regards to planning and local air quality management including producing Air Quality Action Plans in conjunction with Local Transport Plans where relevant.

Overarching National Policy Statement for Energy (Ref 6.8) and (Ref 6.9)

- 6.2.10 The Overarching National Policy Statement (NPS) for Energy (EN-1) (Ref 6.8) and Draft Overarching NPS for Energy (EN-1) (Ref 6.9) suggests that if a project is likely to have adverse effects on air quality an assessment of the impacts should be included in the ES.
- 6.2.11 EN-1 references the Air Quality Standards Regulations (Ref 6.2) which set out the levels for pollutants in ambient air, and which are reiterated in the national Air Quality Strategy. These are set out in the Legislation section above and will be utilised within the assessment of air quality for this Project.
- 6.2.12 Paragraph 5.2.7 puts forth a number of aspects associated with the assessment of air quality that should be included in the ES, for example, “existing air quality levels and the relative change in air quality from existing levels” (Ref 6.8). Section 5.2 of the Overarching NPS for Energy (EN-1) (Ref 6.8) states the air quality assessment information which should be described within a project’s air quality assessment.

National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (Ref 6.10 and 6.11)

- 6.2.13 The NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (Ref 6.10) states that *“the effects of gas emissions and the specific effects of flaring or venting gas should be assessed”* following the guidance set out in section 5.2 of EN-1 Ref 6.9). The Draft NPS for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) (Ref 6.11) does not include any specific policy relating to air quality.

The National Planning Policy Framework (Ref 6.12)

- 6.2.14 The National Planning Policy Framework (2021) (NPPF) (Ref 6.12) sets out the UK Government’s core policies and principles with respect to land use planning. These include in relation to conserving and enhancing the natural environment. Paragraph 186 of the Framework states: *‘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’.*

Selby District Core Strategy Local Plan (Ref 6.13)

- 6.2.15 Selby District Core Strategy Local Plan (Ref 6.13) sets out a spatial vision for Selby District and strategic objectives to achieve that vision including a development strategy with detailed policies and guidance.
- 6.2.16 The following policy is related to air quality:
- 6.2.17 Policy SP18 – Protecting and Enhancing the Environment
- “The high quality and local distinctiveness of the natural and manmade environment will be sustained by [...] ensuring that new development protects soil, air and water quality from all types of pollution.”*

Selby Pre-Submission Publication Local Plan (Ref 6.14)

- 6.2.18 A new Local Plan is being prepared to supersede the current adopted Selby District Core Strategy Local Plan (Ref 6.13) which is currently under consultation. The Pre-Submission Publication Local Plan (Ref 6.14) contains the following policy for Air Quality:
- 6.2.19 Policy NE7 – Air Quality
- “A. Development will not be supported where it;*
- 1. Results in further significant air quality deterioration, or the need to declare further Air Quality Management Areas (AQMAs); and*
 - 2. Results in any increase in the number of people exposed to poor air quality; and*
 - 3. Conflicts with elements of an Authority Air Quality Action Plan (AQAP).*
- B. Developments will only be permitted if the impact on air quality is acceptable and mechanisms are in place to mitigate adverse impacts and prevent further exposure to poor air quality. This will help to protect human health.*

C. This will be achieved by:

1. All developments promoting the uptake of low emission mitigation (such as through electric vehicle charging provision) and supporting sustainable travel to reduce air quality impacts.
2. Developments in or affecting an Air Quality Management Area or where pre-application discussions have indicated that the development could result in the designation of an Air Quality Management Area or where the grant of planning permission would conflict with, or render unworkable, elements of the Authority Air Quality Action Plan, applicants must submit an Air Quality Assessment and/or a Dust Assessment Report and identify mitigation measures to ensure no significant adverse effects where development may:
 - i. Involve agricultural developments which have the potential to produce ammonia emissions and particulates which could affect residents; or
 - ii. Create emissions of dust during demolition, earth moving and construction, or through site operations associated with mineral extraction, waste disposal or agriculture; or
 - iii. Impact on the air quality of a Special Area of Conservation (SAC), Special Protection Area (SPA), or Site of Special Scientific Interest (SSSI), or on a non-statutory site where there is a relevant sensitivity
 - iv. Create significant amounts of traffic (the level at which it has the potential to increase local air pollution, either individually or cumulatively), as determined through a Transport Assessment and/or air quality modelling specific to a planning application.

D. Mitigation measures should ensure consistency with the Council's Air Quality Action Plan and the Habitats Regulation Assessment where impacts are related to the diversity of ecosystems, and where impacts are traffic related, the North Yorkshire Local Transport Plan."

East Riding Local Plan (Ref 6.15)

- 6.2.20 East Riding Local Plan 2016 (Ref 6.15) provides a framework for managing development in East Riding and sets out the strategic policies to guide decisions on planning applications.
- 6.2.21 The following policy is related to air quality:
- 6.2.22 Policy EC5 – Supporting the energy sector
- "Proposals for the development of the energy sector [...] will be supported where any significant adverse impacts are addressed satisfactorily and the residual harm is outweighed by the wider benefits of the proposal. Developments and their associated infrastructure should be acceptable in terms of:
[...]*
- The effects of development on local amenity, including noise, air and water quality, traffic, vibration, dust and visual impact".*
- 6.2.23 A new local plan is being prepared to update the current Local Plan. Consultation for the Draft Local Plan Update has been undertaken with Pre-submission Local Plan Update expected late 2022 for submission mid-2023.

North Lincolnshire Local Development Framework Core Strategy (Ref 6.16)

- 6.2.24 North Lincolnshire Local Development Framework Core Strategy (2011) (Ref 6.16) sets out a plan for development across the area to 2026.
- 6.2.25 Paragraph 4.27 of the Core Strategy sets out following spatial objective relevant to air quality:
- 6.2.26 Spatial Objective 7: Efficient Use and Management of Resources
- “To ensure the efficient use of resources, maximising recycling of minerals and waste products, minimising pollution, maintaining and improving air, soil and water quality, and employing sustainable building practices in new development.”*

North Lincolnshire Local Plan (Ref 6.17)

- 6.2.27 North Lincolnshire Council is preparing a new single Local Plan for North Lincolnshire. Once adopted (expected 2023) it will replace the current North Lincolnshire Core Strategy (Ref 6.16).
- 6.2.28 The Publication Draft Addendum Plan (Ref 6.17) contains the following policy relevant to this assessment:
- 6.2.29 Policy DQE8: Renewable Energy Proposals
- “1. North Lincolnshire Council will support opportunities to maximise renewable energy capacity within North Lincolnshire. Support will be provided to community-led initiatives for renewable and local carbon energy and those brought forward in neighbourhood plans.*
- 2. Proposals for renewable energy development will be supported where any significant adverse impacts are satisfactorily minimised, and the residual harm is outweighed by the public benefits of the proposal. Development and their associated infrastructure will be assessed on their merits and subject to the following impact considerations, taking account of individual and cumulative effects:*
- [...]*
- local amenity including noise, air quality, traffic, vibration, dust and visual impact”.*

Central Lincolnshire Local Plan (Ref 6.18)

- 6.2.30 Central Lincolnshire Local Plan (2017) (Ref 6.18) sets out policies for the growth and regeneration of Central Lincolnshire through to 2036.
- 6.2.31 The following policy is related to air quality:
- 6.2.32 Policy LP26: Design and Amenity
- “All development, including extensions and alterations to existing buildings, must achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all.*
- [...]*
- The amenities which all existing and future occupants of neighbouring land and buildings may reasonably expect to enjoy must not be unduly harmed by or as a result of development. Proposals should demonstrate, where applicable and to a degree proportionate to the proposal, how the following matters have been considered, in relation to both the construction and life of the development:[...]*
- Adverse impact upon air quality from odour, fumes, smoke, dust and other sources”.*

- 6.2.33 A proposed submission of the updated Central Lincolnshire Local Plan (Ref 6.19) is currently under review to replace the current adopted Local Plan. The following policy relates air quality:
- 6.2.34 Policy S56: Development on Land Affected by Contamination
- “Development proposals must take into account the potential environmental impacts on people, biodiversity, buildings, land, air and water arising from the development itself and any former use of the site, including, in particular, adverse effects arising from pollution.”*

Hull Local Plan (Ref 6.20)

- 6.2.35 Hull Local Plan (Ref 6.20) is part of the statutory development plan for Hull and will be used to guide new development in the city for the next 15 years, up to 2032.
- 6.2.36 The following policy is related to air quality:
- 6.2.37 Policy 47 – Atmospheric Pollution
- 6.2.38 *“[...] 2. An assessment of air quality must accompany applications for major development which could individually, or cumulatively within planning permissions and /or developments under construction:*
- a. worsen air quality within an Air Quality Management Area;*
 - b. lead to the creation of a new Air Quality Management Area;*
 - c. increase the number of sensitive receptors within an Air Quality Management Area; or*
 - d. have a detrimental impact on air quality anywhere in the city.*
- 3. The scope of any assessment of air quality should be agreed prior to the submission of a planning application and will be required to:*
- a. identify the site, development proposal and area in which the impacts will be assessed;*
 - b. assess the existing air quality;*
 - c. assess the impact of the proposal on air quality individually and in conjunction with any outstanding planning permission or development under construction; and*
 - d. identify mitigation measures and quantify the impact of those measures.*
- 4. In addition to criteria 2 and 3 above, if the development is located within 200 m of the Humber Estuary SAC, the application should specifically address the impact of the proposal on the SAC designated saltmarsh. Where effects cannot be avoided, appropriate mitigation measures should be provided to ensure that there is no adverse effect on the integrity of the Humber Estuary SAC.*
- 5. Development which cannot appropriately mitigate air quality concerns, including dust and odour, will only be supported where the social and economic benefits significantly outweigh the negative impact on air quality”*
- 6.2.39 In addition to Policy 47 within the Local Plan, in 2019 Hull City Council produced an air quality supplementary planning document related to environmental quality– SPD3 (March 2019). Appendix E of the SPD comprises Air Quality Guidance for Planners and Developers (originally published in June 2018) to advise on how the requirements of the

current National Planning Policy and Hull City Council's Local Plan can be complied with.

Guidance

The National Planning Practice Guidance (Ref 6.21)

- 6.2.40 The National Planning Practice Guidance (NPPG) (Ref. 6.21) includes guidance relating to: planning and air quality; the role of Local Plans with regard to air quality; when air quality is likely to be relevant to a planning decision; what should be included within an air quality assessment and how impacts on air quality can be mitigated. The assessment follows the guidance which contains recommendations when undertaking an air quality assessment for the purpose of applying NPPF policy. The guidance encourages early communication with local planning and environmental health departments, which has been included in the Project assessment work undertaken to date.

Institute of Air Quality Management Guidance on the assessment of dust from demolition and construction (January 2014) (Ref 6.22)

- 6.2.41 The Institute of Air Quality Management (IAQM) construction dust guidance (Ref 6.22) provides a mechanism for the assessor to consider both the magnitude of emissions and sensitivity of an area in order to define the level of risk of dust soiling and human health impacts during the construction phase. Defining the construction dust risk levels allows appropriate mitigation measures to be adopted.

Institute of Air Quality Management and Environmental Protection UK: Land-use Planning & Development Control: Planning for Air Quality (January 2017) (Ref 6.23)

- 6.2.42 The IAQM and Environmental Protection UK (EPUK) Land Use Planning and Development Control: Planning for Air Quality guidance (Ref 6.23) hereby referred to as the 'IAQM development control guidance' is applicable in assessing the effect of changes in exposure of members of the public resulting from developments such as the Project. It provides guidance on how to decide whether an air quality assessment is required, how to undertake a suitable assessment of operational impacts and whether these are to be considered significant or not, and how to identify whether additional mitigation is required.

Local Air Quality Management Technical Guidance (Ref 6.24)

- 6.2.43 Local Air Quality Management Technical Guidance (LAQM.TG(16)) (Ref 6.24) provides best practice principles for the technical assessment of local air quality including the use of monitoring data, selection of receptors and verification procedure. LAQM.TG(16) also provides guidance for the application of DEFRA tools and resources used for the technical assessment of air quality.

6.3 EIA Scoping Opinion and engagement

- 6.3.1 A summary of the Environmental Impact Assessment (EIA) Scoping Opinion from the Planning Inspectorate (PINS) and responses to this EIA Scoping Opinion are outlined below. Furthermore, all relevant engagement undertaken to date is outlined in this Section.

Response to the EIA Scoping Opinion

- 6.3.2 An EIA Scoping Opinion (Appendix 1.2: EIA Scoping Opinion (Volume III)) was received by the Applicant from PINS on 20 May 2022. Table 6.2 lists the comments that PINS and consultation bodies made in relation to Air Quality and shows how the Applicant is responding to these.

Table 6.2: Summary of EIA Scoping Opinion in relation to Air Quality

Section reference	Applicant's proposed matter	Inspectorate's / consultation bodies comments	Response
Table 5.2	Emissions from Non-Road Mobile Machinery (NRMM) – construction and decommissioning phases	<i>The Applicant proposes to scope out this matter on the basis that NRMM emissions will represent a small source of emissions relative to ambient local conditions in the vicinity of the locations of demolition, construction and earthworks activities and that the potential impacts would therefore be temporary in nature and negligible overall. In addition, suitable mitigation measures will be incorporated into the CEMP to comply with NRMM standards. Whilst the Inspectorate considers that emissions from NRMM are unlikely to be significant in most cases, in the absence of detail regarding the location of temporary compounds with respect to receptors and the type and duration of NRMM to be deployed, the Inspectorate does not consider that this matter may be scoped out based on current evidence. The ES should include an assessment of emissions from NRMM on sensitive receptors where significant effects are likely.</i>	Comment noted. The ES will include detail of NRMM including the use of diesel generators and assess the impact at sensitive receptors where significant effects are likely.
Table 5.2	Vehicle emissions – all phases	<i>The Applicant proposes to scope out this matter on the basis that traffic trip generation is not anticipated to exceed Institute of Air Quality Management (IAQM) criteria and best practice mitigation measures will be incorporated into the CEMP, therefore the overall impact would be negligible.</i>	Agreement noted. Indicative traffic data and proposed construction routes reviewed at the PEIR stage have confirmed vehicle emissions assessment is required as the IAQM traffic screening criteria has been met. Detailed dispersion modelling will be undertaken for the ES.

Section reference	Applicant's proposed matter	Inspectorate's / consultation bodies comments	Response
		<i>The Inspectorate is content that, if the traffic trip generation is confirmed to be less than IAQM criteria for a detailed assessment (including relevant criteria for Air Quality Management Areas (AQMA)), vehicle emissions associated with the construction, operational and decommissioning phases of the Proposed Development are unlikely to give rise to significant effects and this matter can be scoped out from further assessment. If such confirmation is not possible, an assessment should be provided. The ES should also demonstrate that cumulative vehicle movements with other developments would not exceed IAQM thresholds during all phases of the Proposed Development.</i>	
Paragraphs 5.5.4 and 5.5.5	Non-statutory sites designated for nature conservation and protected species	<i>Paragraphs 5.5.4 and 5.5.5 of the Scoping Report set out a provisional list of statutory ecological sites as sensitive receptors that will be considered in the assessment of air quality. The Applicant should also provide an assessment of air quality impacts on non-statutory sites for nature conservation, including Local Wildlife Sites (LWS) and protected species where significant effects are likely to occur and cross-reference to the ecology chapter (and vice-versa) where relevant.</i>	Comment noted. The air quality assessment at the ES stage will include all ecological sites within the Study Area including non-statutory sites.
Paragraph 5.8.4	Flaring of hydrogen	<i>The ES should confirm whether flaring of hydrogen will be required when depressurising the high-pressure hydrogen</i>	Comment noted. Venting of hydrogen may be required for depressurising the pipeline to allow for maintenance activities such as

Section reference	Applicant's proposed matter	Inspectorate's / consultation bodies comments	Response
		<i>pipeline for maintenance or any other purposes at the AGIs or anywhere else on the network. If flaring is required, the resulting impacts should be assessed in the ES where significant effects are likely. The Applicant's attention is drawn to the consultation response from the Environment Agency in this regard.</i>	repairing damage or replacing pipeline sections. However, this event would be infrequent and venting would be in small volumes and short term, therefore significant effects are not considered likely.
n/a	Study Area	<i>The ES should include a figure/ figures 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</i>	Comment noted. Draft Study Area figures in PEIR. Figures showing final Study Area and receptors will be included with the ES.

Engagement undertaken to date

- 6.3.3 Engagement has been undertaken with relevant local authorities to agree the proposed methodology and approach for the air quality assessment. These local authorities comprised East Riding of Yorkshire, North Lincolnshire Council, Selby District Council and West Lindsey District Council. Neither Lincolnshire County Council or North Yorkshire County Council were consulted with regards to air quality as they do not have a remit with regards to the topic, which is dealt with by the District Councils. No additional engagement has been undertaken since EIA Scoping stage for Air Quality as we await details of further screening information required such as construction traffic data. Engagement will continue throughout the EIA process. Table 6.3 provides a summary of the engagement undertaken to inform the preliminary assessment undertaken to date.

Table 6.3: Summary of engagement undertaken to date

Consultee	Date and method of engagement	Summary of issues raised	Response
East Riding of Yorkshire Council	26 November 2021 (letter issued via email).	<p>A note outlining the methodology for the Air Quality assessment was provided.</p> <p>Response received 29 November 2021.</p> <p>East Riding of Yorkshire agrees with the proposed approach and they provided confirmation of the most recent baseline air quality monitoring data.</p>	Agreement noted.
North Lincolnshire Council	26 November 2021 (letter issued via email).	<p>A note outlining the methodology for the Air Quality assessment was provided. Response received 1 December 2021.</p> <p>North Lincolnshire Council agreed with the proposed approach. They requested all details of vehicle trips and screening criteria are included in future reports in order to confirm vehicle emissions can be scoped out.</p>	Agreement noted. Traffic data will be included in the ES.
Selby District Council	26 November 2021 (letter issued via email).	<p>A note outlining the methodology for the Air Quality assessment was provided. Response received 3 December 2021.</p> <p>Selby District Council agreed with the proposed approach. They would like to see justification for the siting of construction compound areas where/if in close proximity to sensitive receptors. They confirmed that Scoping out of vehicle emissions is dependent on the potential for impact along New Street AQMA in Selby, anticipated to be negligible upon review of traffic data. They requested</p>	<p>Agreement noted. Construction dust Study Areas will be displayed along with sensitive receptors in a figure.</p> <p>Cumulative impacts from the Drax Power Station Bioenergy with Carbon Capture and Storage Project to be included within the assessment.</p>

Consultee	Date and method of engagement	Summary of issues raised	Response
		that to an acknowledgement of cumulative impacts from the Drax Bioenergy with Carbon Capture and Storage Project at Drax Power Station was included in the assessment.	
West Lindsey District Council	26 November 2021 (letter via email).	<p>A note outlining the methodology for the Air Quality assessment was provided. Response received 17 February 2022.</p> <p>West Lindsey District Council agreed with the proposed methodology and approach for air quality assessment with no queries or comments.</p>	Agreement noted.

6.4 Assessment methodology and significance criteria

Study Area

- 6.4.1 The IAQM construction dust guidance (Ref. 6.22) requires that construction dust impacts are assessed up to 350 m from the locations of demolition, construction and earthworks activities for human receptors and up to 50 m for ecological receptors. The construction phase Study Area also includes the first 50 m from any local road within 500 m from the main site entrance(s) used by the site construction vehicles, as per IAQM construction dust guidance (Ref 6.22).
- 6.4.2 The Proposed Order Limits are split into five sections, listed below:
- Section 1 – Drax to Keadby;
 - Section 2 – Keadby to Scunthorpe;
 - Section 3 – Scunthorpe to Killingholme;
 - Section 4 – Killingholme to Hedon (Humber Crossing); and
 - Section 5 – Hedon to Easington.
- 6.4.3 A construction dust Study Area has been determined for each section based on up to 350 m from the construction working width areas, and up to 500 m from the main site entrances.
- 6.4.4 A Study Area for the assessment of construction vehicle emissions will be defined based on the following IAQM development control (Ref 6.23) affected road network criteria:
- A change in Light Duty Vehicle (LDV) flows of >100 Annual Average Daily Traffic (AADT) within or adjacent to an AQMA, or >500 AADT elsewhere;
 - A change in Heavy Duty Vehicle (HDV) flows of >25 AADT within or adjacent to an AQMA, or >100 AADT elsewhere;
 - Where a road is realigned by 5m or more and is within an AQMA;
 - Where a junction is added or removed close to existing receptors; and
 - Where there are one or more substantial combustion processes where there is a risk of impacts at relevant receptors.
- 6.4.5 LAQM.TG(16) (Ref 6.24) suggests a Study Area of up to 200 m from the affected road network for air pollutant concentrations to be assessed at sensitive receptor locations. Impacts from vehicle exhaust emissions beyond 200 m of the emission source are generally accepted to be negligible, and on smaller roads such as single carriageway A-roads there are rarely significant impacts beyond 50 m.
- 6.4.6 Screening of indicative construction traffic data and proposed construction traffic routes have identified a number of roads that are anticipated to exceed the IAQM development control (Ref 6.23) screening criteria. A draft affected road network has been determined which is displayed in Figure 6.1 (Volume IV).

Baseline data collection

Desk study

- 6.4.7 Baseline conditions of the Project were established during a desk study using the following sources:
- DEFRA UK Air website (Ref 6.25) – to establish predicted background concentrations for NO₂, PM₁₀ (10 µm) and PM_{2.5} (2.5 µm).
 - Local authority websites and annual Air Quality Status Reports – to determine existing AQMAs and local air quality monitoring results:
 - Selby District Council 2021 Air Quality Annual Status Report (Ref 6.26);
 - East Riding of Yorkshire Council 2021 Air Quality Annual Status Report (Ref 6.27);
 - North Lincolnshire Council 2020 Air Quality Annual Status Report (Ref 6.28);
 - West Lindsey District 2021 Air Quality Annual Status Report (Ref 6.29); and
 - Hull City Council 2022 Air Quality Annual Status Report (Ref 6.30).
 - MAGIC website (Ref 6.31) – to identify ecological sites within the air quality Study Area.

Site visits and surveys

- 6.4.8 No air quality surveys have been or will be undertaken as there is sufficient existing local authority monitoring data available for the air quality assessment within the Study Area.

Impact assessment methodology

Construction Dust

- 6.4.9 There is the potential for fugitive dust emissions to occur as a result of construction phase activities. These will be assessed in accordance with the methodology outlined in the IAQM construction dust guidance (Ref 6.22). The methodology is summarised in the following paragraphs and detailed assessment steps are presented in Appendix 6.1 (Volume III).
- 6.4.10 Ecological and human receptors have been identified within 350 m of the Proposed Order Limits and within 50 m of the haul routes (up to 500 m from the site entrance(s)), therefore the need for a construction dust assessment has been screened in.
- 6.4.11 The most common air quality impacts that may arise during construction and demolition activities are:
- Dust Deposition, resulting in the soiling of surfaces and reduction in amenity; and
 - Elevated PM₁₀ concentrations, as a result of dust generating activities on site.
- 6.4.12 These impacts may affect human and ecological receptors. The IAQM construction dust guidance (Ref 6.22) defines in section 4.2 a human receptor as:

“any location where a person or property may experience the adverse effects of airborne dust or dust soiling, or exposure to PM₁₀ over a time period relevant to the Air Quality Objectives. In terms of annoyance effects, this will most commonly relate to dwellings, but may also refer to other premises such as buildings housing cultural heritage collections (e.g. museums and galleries), vehicle showrooms, food manufacturers, electronics manufacturers, amenity areas and horticultural operations (e.g. salad or soft-fruit production).”

6.4.13 An ecological receptor is defined in section 4.2 as:

“any sensitive habitat affected by dust soiling. This includes the direct impacts on vegetation or aquatic ecosystems of dust deposition, and the indirect impacts on fauna (e.g. on foraging habitats)”.

6.4.14 Section 4.3 of the guidance states that the risk of dust emissions from construction/demolition activities causing an adverse effect on human or ecological receptors depends on:

- The type of construction activities being undertaken, and the duration of these activities;
- The size of the construction site;
- The meteorological conditions (such as wind speed, wind direction and rainfall);
- The proximity of the receptors to the construction activities;
- The effectiveness of the dust deposition mitigation measures; and
- Receptors' sensitivity to dust.

6.4.15 Activities on the proposed construction site have been divided into four types to reflect their different potential impacts. These are:

- Demolition (site clearance for construction phase);
- Earthworks;
- Construction; and
- Trackout (the vehicle-borne transfer of mud and debris onto the highway).

6.4.16 The potential for dust emissions was assessed for each activity that is likely to take place and considers three separate dust effects:

- Annoyance due to dust soiling;
- Harm to ecological receptors; and
- The risk of health effects due to a significant increase in exposure to PM₁₀.

Vehicle Emissions

6.4.17 Detailed dispersion modelling of nitrogen dioxide and particulate matter (the main pollutants of concern particularly associated with traffic emissions) will be undertaken at ES stage using Atmospheric Dispersion Modelling Software (ADMS), as agreed following engagement with local authorities.

6.4.18 The assessment will consider worst case sensitive receptor locations within 200 m of affected vehicle routes. Modelling predictions will be compared against UK AQS objectives as appropriate. The results of the modelling would be analysed and if there

are areas with the Study Area where AQS objectives are being exceeded, then further modelling would be carried out to ensure that impacts from the Project are fully captured.

- 6.4.19 The geographical locations to be assessed would include sensitive receptors within 200 m of the affected road network, such as residential units, schools, and medical facilities where the public and/or sensitive groups are likely to be exposed to pollutants across the various averaging periods to which the Air Quality Standards and Objectives apply. Ecological sites sensitive to air quality, including designated and non-statutory sites, will also be assessed for changes in nitrogen deposition.

NRMM Emissions

- 6.4.20 Emissions from Non Road Mobile Machinery (NRMM) are unlikely to be significant however there is limited detail available at this stage to confirm. The ES will include an assessment of emissions from NRMM on sensitive receptors where significant effects are likely, using ADMS detailed dispersion modelling if required.

Significance criteria

- 6.4.21 The IAQM construction dust guidance (Ref 6.22) categorises the unmitigated risk of dust impacts on human health and amenity (rather than ascribe a significance of effect) as a means of identifying the level of dust emissions mitigation required to ensure that residual impacts are 'not significant'. A higher dust risk rating requires more stringent mitigation measures in order to limit residual effects.
- 6.4.22 Detailed dispersion modelling of emissions will be undertaken at the ES stage. The significance of impacts will be assessed in accordance with the IAQM development control guidance (Ref 6.23) dependent upon the percentage change in concentration between the 'without and with Project' scenarios, relative to the relevant air quality objectives, as presented in Table 6.4.

Table 6.4 – IAQM Impact Descriptors for Individual Receptors

Long Term Average Concentration at Receptor in Assessment Year	% Change in Concentration Relative to Air Quality Assessment Level (AQAL)			
	1	2-5	6-10	>10
75% or less of AQAL	Negligible	Negligible	Slight	Moderate
76 – 94% of AQAL	Negligible	Slight	Moderate	Moderate
95 – 102% of AQAL	Slight	Moderate	Moderate	Substantial
103 – 109% of AQAL	Moderate	Moderate	Substantial	Substantial
110% or more of AQAL	Moderate	Substantial	Substantial	Substantial

Assumptions and limitations

- 6.4.23 To ensure transparency within the EIA process, the following limitations and assumptions have been identified:

- It is assumed that potentially dusty construction activities would take place within the construction working width and temporary construction compounds.
- There is limited detail available for NRMM during the construction and decommissioning phases and regarding the use of diesel generators for the pre-commissioning works for the offshore pipeline at this stage. It should be noted that the offshore pipeline is not part of this DCO application however any onshore works associated with its construction will be considered as part of the cumulative assessment. It is assumed that emissions would be temporary and transient in nature and therefore negligible in terms of air quality impacts and significance; however, further detail is required at the ES stage to confirm.
- It is assumed that emissions from operational/maintenance venting would be infrequent and temporary in nature and therefore, negligible in terms of air quality impacts and significance.
- It is assumed that similar best practice dust control mitigation measures would be applied for the decommissioning phase as determined from the outcome of the construction dust risk assessment.

6.5 Baseline conditions

Existing baseline

Local Air Quality Management

- 6.5.1 As required by the Environment Act (1995) (Ref 6.3), the local authorities covering the Proposed Order Limits and Air Quality Study Area have undertaken assessments and reviews of air quality within their area of jurisdiction. This process has identified the following Air Quality Management Areas (AQMA) due to exceedances of the AQS objectives within those boroughs:
- Scunthorpe AQMA – declared 2005 and amended 2018 by North Lincolnshire Council. An area incorporating part of the town of Scunthorpe and an area to the east of Scunthorpe including the site of the steelworks. Declared for exceeding PM₁₀ 24 hour mean AQS objective.
 - Low Santon AQMA – declared 2008 by North Lincolnshire Council. A small area of land surrounding 3 houses at Low Santon. Santon is a small village adjacent to the North Eastern boundary of the local integrated steel works. Declared for exceeding PM₁₀ annual mean AQS objective.
 - AQMA No.1 – declared 2016 by Selby District Council for exceeding nitrogen dioxide annual mean AQS objective. The designated area incorporates 1 to 21 New Street odd number inclusive, 16 to 30 New Street even numbers inclusive, 50 Ousegate, 1 to 5 The Crescent inclusive, Park House, The Crescent and Thornden Buildings, New Street.
 - Hull AQMA 1 (A) – declared 2005 by Kingston Upon Hull City Council for exceeding nitrogen dioxide annual mean AQS objectives. This AQMA is an area of the City centre, bordered to the west by Coltman street, Hessle Road and Strickland Street and to the north by Anlaby Road and Carr lane.
- 6.5.2 There are currently no declared AQMAs within the East Riding of Yorkshire or West Lindsey District areas of jurisdiction.

Local Authority Air Quality Monitoring Data

- 6.5.3 A review of the most recent local authority Annual Status Reports has been undertaken to identify the local air pollutant concentrations from a combination of passive diffusion tube and automatic monitoring. The collated local authority monitoring data is detailed in Appendix 6.2 (Volume III).
- 6.5.4 East Riding of Yorkshire Council undertook non-automatic monitoring of nitrogen dioxide at 92 diffusion tube sites during 2020. The results reported in the most recent ASR (Ref 6.27) did not record any exceedances of air quality objectives during 2020, however these results can be considered non-typical due to Covid-19 and associated lockdown measures. There were three diffusion tube sites in 2019 which monitored exceedances of the annual mean nitrogen dioxide AQS objective. These locations were at the A63/Gibson Lane North in Melton, A63 East (The Old Foundry) in Welton and the A63 Eastbound in Welton. There was no automatic or particulate matter monitoring undertaken by East Riding of Yorkshire Council.
- 6.5.5 North Lincolnshire Council undertook air quality monitoring at seven automatic monitoring sites and 22 diffusion tube sites during 2020. The results reported in the most recent ASR (Ref 6.28) recorded no exceedances of the AQS objectives for nitrogen dioxide during 2016-2020. PM₁₀ and PM_{2.5} monitoring results reported no exceedances of the AQS objectives in 2019 or 2020.
- 6.5.6 Selby District Council undertook nitrogen dioxide diffusion tube monitoring at 34 sites within and around the District during 2020. The results reported in the most recent ASR (Ref 6.26) recorded no exceedances of the AQS objectives for nitrogen dioxide in 2020. However, two diffusion tube sites measured exceedances of the annual mean nitrogen dioxide AQS objective during 2019, located at the Rose & Crown and 21 New Street within the AQMA. There was no automatic or particulate matter monitoring undertaken by Selby District Council during 2020.
- 6.5.7 West Lindsey District Council undertook automatic monitoring at one site and non-automatic monitoring at 12 diffusion tube sites during 2020 which measured no exceedances of the annual mean nitrogen dioxide AQS objective during 2016-2020 (Ref 6.29). There was no particulate matter monitoring undertaken by West Lindsey District Council.
- 6.5.8 Hull City Council has undertaken nitrogen dioxide diffusion tube monitoring at 49 sites within and around the city in 2020. No exceedances of the AQS objectives were reported for nitrogen dioxide in 2020 (Ref 6.30). However, there were two exceedances of the annual mean nitrogen dioxide AQS objective in 2019 at S22 (Paragon square (roadside)) and S24 (St Stephens Crossing) which are outside of the AQMA. Nitrogen dioxide and PM₁₀ monitoring results reported no exceedances of the AQS objectives in 2019 and 2020.

DEFRA Background Concentrations

- 6.5.9 Predictions of background pollutant concentrations are periodically produced by DEFRA to assist local authorities in their review and assessment of air quality. These are produced for every 1 km Ordnance Survey grid square in the UK. The Proposed Order Limits are located across a number of grid squares. Data for the grid squares that cover the Study Area were downloaded from the DEFRA website (Ref 6.25) for the purposes of the assessment. Table 6.5 summarises the range of background concentrations for the current year 2022 relating to the grid squares covering the Proposed Order Limits and surrounding Study Area.

Table 6.5 – DEFRA Background Pollutant Concentrations (2022)

Pollutant	Minimum Concentration (µg/m³)	Maximum Concentration (µg/m³)	Average Concentration (µg/m³)	Annual Mean Air Quality Objective (µg/m³)
Nitrogen dioxide (NO ₂)	4.5	24.0	7.1	40
PM ₁₀	9.6	21.0	14.3	40
PM _{2.5}	6.1	11.1	7.8	25

6.5.10 Table 6.5 shows that 2022 background nitrogen dioxide and particulate matter concentrations in the vicinity of the Project are below the relevant annual mean air quality objective values.

Future baseline

6.5.11 Air pollutant concentrations are predicted to decrease in future years due to improvements in vehicle emissions technologies and increased uptake of electric vehicle use, as observed in predicted DEFRA background concentrations.

6.5.12 Data for the grid squares that cover the local authorities within the air quality Study Area were downloaded from the DEFRA website (Ref 6.25) for the purposes of the assessment. Table 6.6 summarises the range of background concentrations for the earliest construction year of 2025 relating to the grid squares covering the Study Area.

Table 6.6 – DEFRA Background Pollutant Concentrations (2025)

Pollutant	Minimum Concentration (µg/m³)	Maximum Concentration (µg/m³)	Average Concentration (µg/m³)	Annual Mean Air Quality Objective (µg/m³)
NO ₂	4.1	23.5	6.5	40
PM ₁₀	9.2	20.6	13.9	40
PM _{2.5}	5.8	10.8	7.5	25

6.5.13 Table 6.6 shows that 2025 background nitrogen dioxide and particulate matter concentrations in the vicinity of the Project are below the relevant annual mean air quality objective values.

6.5.14 Data for the grid squares that cover the local authorities within the air quality Study Area were downloaded from the DEFRA website (Ref 6.25) for the purposes of the assessment. Table 6.7 summarises the range of background concentrations for the proposed operational year (2027) relating to the grid squares covering the Study Area.

Table 6.7 – DEFRA Background Pollutant Concentrations (2027)

Pollutant	Minimum Concentration (µg/m³)	Maximum Concentration (µg/m³)	Average Concentration (µg/m³)	Annual Mean Air Quality Objective (µg/m³)
NO ₂	4.0	23.3	6.3	40
PM ₁₀	9.2	20.6	13.9	40
PM _{2.5}	5.6	10.7	7.5	25

6.5.15 Table 6.7 shows that 2027 background nitrogen dioxide and particulate matter concentrations in the vicinity of the Project are below the relevant annual mean air quality objective values.

6.6 Design development, impact avoidance and embedded mitigation

6.6.1 A dust risk assessment will be completed at the ES stage to identify appropriate mitigation measures based on the risk of dust impacts. These measures would be incorporated into the Construction Environmental Management Plan (CEMP). Likely dust control measures include:

- Site Management (logging of incidents/complaints);
- Monitoring (site inspections, soiling checks, compliance with Dust Management plan, etc);
- Preparing and maintaining the site (locating dust causing activities away from receptors, provision of barriers, cleaning, enclose specific operations with high potential for dust production, cover stockpiles, etc);
- Operating vehicle/machinery and sustainable travel (comply with NRMM standards, no idling of plant and machinery, use mains electricity, have a travel plan in place etc);
- Operations (employ dust suppression, use enclosed chutes, minimise drop heights, etc);
- Demolition measures (damp down, avoid explosive blasting, soft strip interiors before demolition, etc);
- Earthworks measures (revegetate promptly, use hessian mulches and cover with topsoil, etc);
- Construction measures (avoid scabbling (roughening of concrete services), keep aggregates damp, ensure fine powder materials are delivered enclosed and stored in silos, ensure bags are sealed after use); and
- Trackout measures (wash access and local roads, avoid dry sweeping of large areas, ensure vehicle-borne materials are covered, install hard surface haul routes, wheel washing, etc).

6.7 Preliminary assessment of potential impacts

- 6.7.1 This Section details the preliminary assessment of potential impacts for the Project during the construction, operation and decommissioning phases.

Construction

- 6.7.2 A construction dust risk assessment will be undertaken at the ES stage following the methodology steps detailed in Appendix 6.1 (Volume III).
- 6.7.3 For each of the five sections of the Proposed Order Limits, the sensitivity of the area to dust impacts will be determined at the ES stage once the final construction areas and AGIs have been confirmed, to assess the risk of potential dust impacts for human health, dust soiling and ecological effects. The risk of potential dust impacts will be determined as either “high”, “medium” or “low” and appropriate mitigation measures will be identified accordingly. It is anticipated that with the implementation of effective site-specific mitigation measures the environmental effect would not be significant. However, a robust assessment of the dust impact risk is necessary in order to determine the level of site-specific mitigation that should be applied.
- 6.7.4 A high-level equipment list has identified potential air quality emissions sources from NRMM including a diesel driven flooding pump for the dewatering of the offshore pipeline and diesel generators for the onshore construction works. The potential air quality impacts from these will be assessed at the ES stage.
- 6.7.5 Potential impacts of construction vehicle emissions will be assessed at the ES stage following confirmation of traffic numbers and construction routes. Screening of indicative traffic data and proposed construction routes has identified a number of roads as part of the affected road network in accordance with IAQM development control guidance (Ref 6.23). One of the affected roads identified is Mortal Ash Hill (A18) which is adjacent to the Scunthorpe AQMA declared for exceeding PM₁₀ AQS objectives. Detailed dispersion modelling at the ES stage will determine the potential impacts at this location.
- 6.7.6 The following sensitive ecological receptors have been identified within 200 m of the affected road network:
- Crowle Borrow Pits (Site of Special Scientific Interest (SSSI)).
 - Hatfield Chase Ditches (SSSI).
 - Eastflow Meadow (SSSI).
 - Low Wood (Ancient Woodland).
 - Thomas Wood (Ancient Woodland).
 - Sugar Mill Ponds (Local Nature Reserve (LNR)).
 - Ashbyville (LNR).
- 6.7.7 Potential air quality impacts for sensitive ecological receptors include increased nitrogen deposition rates as a result of construction vehicle emissions. This will be assessed at the ES stage.

Operation

- 6.7.8 Operational air quality impacts have not been assessed as effects and are considered to be negligible and not significant.

Decommissioning

- 6.7.9 Decommissioning impacts would be localised around the AGI locations as the current options involve leaving the pipelines in situ. The AGIs would be dismantled, all equipment would be removed, and the land returned to agricultural or other appropriate uses. It is therefore reasonable to assume that potential air quality impacts would be less than the construction phase and effects would be negligible with the implementation of best practice mitigation measures identified for the construction phase as a worst-case approach. These measures would be incorporated into the Decommissioning Environment Management Plan (DEMP).

6.8 Mitigation and enhancement measures

- 6.8.1 This Section sets out the preliminary avoidance, mitigation and compensation measures which are likely to be required to address the potential impacts as assessed in Section 6.7.

Construction

- 6.8.2 Specific construction dust mitigation measures will be identified following the outcome of the construction dust risk assessment. No additional construction mitigation measures are anticipated for air quality.

Operation

- 6.8.3 Operational air quality impacts have not been assessed as effects are considered to be negligible and not significant. Therefore, no mitigation or enhancement measures are required.

Decommissioning

- 6.8.4 The same air quality mitigation measures are assumed for the decommissioning phase as implemented for the construction phase.

6.9 Summary of preliminary assessment of potential significant effects

- 6.9.1 Table 6.8 below summarises the preliminary assessment of potential significant effects associated with the Project.

Table 6.8: Summary of the preliminary assessment of potential significant effects

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
Scunthorpe AQMA	Construction	High	Potential increase of PM10 concentrations as a result of construction vehicle emissions – would be determined at the ES Stage.	N/A	Unlikely but will be determined at the ES stage
Hull AQMA 1 (A)	Construction	High	Potential increase of nitrogen dioxide concentrations as a result of construction vehicle emissions – would be determined at the ES Stage.	N/A	Unlikely but will be determined at the ES stage
Sensitive human receptors within 200 m of affected road network.	Construction	High	Potential increase of nitrogen dioxide, PM10 and PM2.5 concentrations as a result of construction vehicle emissions.	N/A	Unlikely but will be determined at the ES stage
Designated ecological sites within 200 m of affected road network	Construction	High	Potential increase in nitrogen deposition rates as a result of construction vehicle emissions – would be	N/A	Unlikely but will be determined at the ES stage

Resource/receptor	Stage	Sensitivity of resource/receptor	Description of potential impact/change	Mitigation	Potential significant effects
			determined at the ES stage.		
Sensitive human receptors up to 350 m of construction working width, construction compounds and haul routes.	Construction	High	Potential human health impacts and dust soiling as a result of fugitive dust emissions	Specific dust control mitigation measures would be identified at the ES stage following the outcome of the construction dust risk assessment	Not significant
Ecological receptors within 50 m of construction working with, construction compounds and haul routes.	Construction	Will be determined at ES stage	Potential dust soiling impacts from dust deposition.	Specific dust control mitigation measures would be identified at the ES stage following the outcome of the construction dust risk assessment	Not significant

6.10 Next steps

Engagement

- 6.10.1 Additional engagement will be undertaken with the local authorities to confirm the outcome of the construction traffic data screening as requested from initial scoping engagement. Engagement with local authorities is ongoing to finalise the construction traffic routes. Reference should be made to Chapter 15: Traffic and Transport (Volume II) for details regarding emerging construction routes.
- 6.10.2 No additional stakeholder engagement is anticipated for air quality.

Surveys

- 6.10.3 No air quality surveys are required for the ES as sufficient local authority monitoring data is available.

Assessment

- 6.10.4 A construction dust risk assessment will be undertaken at the ES Stage to determine the risk category for both human and ecological receptors and associated mitigation measures for each of the five Proposed Order Limits sections.
- 6.10.5 Detailed dispersion modelling of construction vehicle emissions will be undertaken at the ES stage once preferred construction routes are confirmed to determine potential air quality impacts and significant effects against AQS objectives for nitrogen dioxide and particulate matter, at both human and ecological receptors.
- 6.10.6 Further details of the NRMM and diesel generators are required to determine potential air quality impacts associated with the construction phase. These will be assessed for the ES.

6.11 References

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