HyNet North West Hydrogen Pipeline

Delivering clean growth

Cadent

Your Gas Network

Appendix 9B

Air Quality Consultation

October 2024

Revision 1
Volume 0001
Document ref. 852552-WSPE-IA-ES-RP-AQ-615033

1. Air Quality Responses to Scoping Opinion

1.1.1 A Scoping Opinion was adopted by the Secretary of State, administered by the Planning Inspectorate on 08 March 2022. A summary of the relevant responses received in the Scoping Opinion in relation to air quality and confirmation of how these have been addressed within the assessment is presented in **Table 9B**.

Table 9B.1.1 Summary of EIA Scoping Opinion responses for air quality

Consultee	Consideration	How addressed in this Draft ES
Planning Inspectorate (PINS)	**Paragraph 9.6.11** **Construction – emissions from Non-Road Mobile Machinery (NRMM)** The Scoping Report proposes to scope out this matter on the basis that emissions are controlled by the NRMM (Emission of Gaseous and Particulate Pollutants) Regulations 1999 (as amended) and the scale, duration and distance of construction activity to relevant receptors is not considered to be of a magnitude that would require detailed assessment. 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 to occur.	Finalised detail relating to the number of NRMM expected during the construction of the Project is not available at this stage, but indicative numbers provided by the Transport consultant have been used for the purpose of this Draft ES chapter. **Chapter 10: Noise and Vibration** includes the number of plant equipment expected for open cut trenching construction activities, trenchless crossings, compound construction, HAGI construction and access route construction. The number of plant equipment reported will not all be active at any one time, since it is expected that construction staff will operate in on different schedules. Emissions from NRMM have been scoped out, please refer to **Section 9.7: Scope of the assessment** and **Table 9.13: Summary of effects scoped out of the air quality assessment** of **Chapter 9: Air Quality**.
Planning Inspectorate (PINS)	**Paragraph 9.6.11** **Operational road traffic emissions** The Scoping Report proposes to scope out this matter on the basis that it is not considered that operational traffic flows associated with the maintenance of the Proposed	Since effects from operational road traffic emissions have been scoped out at Scoping phase, operational road traffic emissions have not been considered in this assessment of air quality effects.

Consultee	Consideration	How addressed in this Draft ES
	Development would exceed the Environmental Protection UK (EPUK) and Institute of Air Quality Management (IAQM) criteria for a detailed air quality assessment. The Inspectorate agrees that the road traffic emissions associated with the operation of the Proposed Development are unlikely to give rise to significant effects and agree that this matter can be scoped out from further assessment. The description of development within the ES should provide details of the likely operational traffic movements by vehicle type and number.	
Planning Inspectorate (PINS)	**Paragraph 9.6.5** **Sensitive receptors** In addition to the potential receptors identified, impacts from changes in air quality on residents of waterways and recreational receptors (e.g. users of canals) should be assessed where significant effects are likely.	Residents of waterways and recreational receptors have been included as sensitive human receptors when considering the impacts from construction dust emissions. The assessment of impacts from construction dust emissions is reported in **Section 9.9: Assessment of air quality effects**.
Planning Inspectorate (PINS)	**Paragraph 9.6.8 and Table 9.9** **Non-statutory sites designated for nature conservation and protected species** Scoping Report Paragraph 9.6.8 and Table 9.9 provisionally list statutory sites designated for nature conservation and ancient woodland 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	Please refer to **Figure 9.1: Baseline Air Quality Study Area**; **Figure 9.3: Construction Dust Assessment Study Area** and **Figure 9.4: Construction Road Traffic Assessment Study Area**.

Consultee	Consideration	How addressed in this Draft ES
	effects are likely to occur and cross-reference the ecology chapter (and vice-versa) where relevant.	
Planning Inspectorate (PINS)	**Table 9.5 Scope of Assessment – Warrington Air Quality Management Area (AQMA)** The Scoping Report does not mention the Warrington AQMA which covers the town centre ring road and major arterial roads. The Warrington AQMA has potential to be affected by any construction works and traffic rerouting and should therefore be considered within further assessment work. The Applicant's attention is drawn to the consultation response from Warrington Borough Council in this regard.	Warrington AQMA 4 which covers the link roads and the town centre ring road is included in **Section 9.5: Overall Baseline**. The construction traffic will be diverted to not go into Warrington AQMA, however, detailed dispersion modelling and the impacts on the AQMA will be included in this modelling assessment with results presented in **Section 9.9: Assessment of air quality effects** for completeness.
Canal and River Trust	The Trust agree that air quality should be scoped into the Environmental Statement. The canals should be identified as sensitive receptors particularly with regards to dust emissions during construction and the significant excavations that would be required. Mitigation measures should be set out to ensure that regular checks of the waterways are undertaken during construction and for a period following completion of the works.	The potential for dust emissions from construction sites has been considered in **Section 9.9: Assessment of Air Quality effects** and **Appendix 9D: Construction Dust Assessment**. The conclusions from this assessment will inform measures to be included in the Outline Construction Environmental Management Plan (CEMP). These measures will ensure that dust emissions are minimised such that adverse effects do not occur.
Canal and River Trust	The waterway users should be identified as sensitive receptors that may be affected. It should be clarified that	Residents of waterways and recreational receptors have been included as sensitive

Consultee	Consideration	How addressed in this Draft ES
	users of the waterway for recreation, boaters, both leisure users and residential, along with pedestrians and cyclists on the towpaths as well as wildlife are all sensitive receptors, especially during construction.	human receptors when considering the impacts from construction dust emissions. The assessment of impacts from construction dust emissions is reported in **Section 9.9: Assessment of Air Quality Effects.**
Cheshire East Council	The proposed scope is considered acceptable.	Noted.
Cheshire West and Chester Council	The Councils Environmental Protection Unit (EPU) agree with the content and in particular the embedded measures set out in Table 9.6 [of the Scoping Report]. EPU do not believe the scale of the project and the associated traffic flows are likely to present an issue with regard to exceedances of the air quality objectives but it is advised that it would be prudent to agree the assessment criteria to demonstrate this and to that end we agree the details proposed.	The methodology adopted for the assessment of construction traffic effects is reported within **Section 9.8: Assessment Methodology** and **Appendix 9E: Model Inputs and Verification**.
Cheshire West and Chester Council	Construction dust is likely to have local impacts but will be subject to measures to limit and control. The Councils EPU agree the content of para 9.6.11 in terms of scoping out the effects of NRMM and operational road traffic. With regard to NRMM irrespective of the EIA requirements, the applicant should note the content of DM31 and explanation para. 13.28 of the Local Plan, many aspects will be covered through the CEMPs.	Embedded measures suggested to be implemented to limit and control construction dust are reported in **Table 9.8: Summary of embedded environmental measures** and **Table 9.9: Embedded measures for the construction phase**.
Cheshire West and	Construction dust is likely to have local impacts but will be subject to measures to limit and control. The Councils EPU	Measures for inclusion within the CEMP are detailed within **Section 9.6: Embedded**

Consultee	Consideration	How addressed in this Draft ES
Chester Council	agree the content of para 9.6.11 in terms of scoping out the effects of NRMM and operational road traffic. With regard to NRMM irrespective of the EIA requirements, the applicant should note the content of DM31 and explanation para. 13.28 of the Local Plan, many aspects will be covered through the CEMPs.	**Measures** and **Section 9.12 Additional Measures**.
Natural England	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 ES should take account of the risks of air pollution and how these can be managed or reduced. This should include taking account of any strategic solutions or SNAPs, which may be being developed or implemented to mitigate the impacts on air quality. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk).	Embedded environmental measures are reported in **Table 9.7: Summary of embedded environmental measures**. Further mitigation measures are provided in **Table 9.8: Embedded measures for the construction phase**.
Natural England	Information on air pollution modelling, screening and assessment can be found on the following websites: • SCAIL Combustion and SCAIL Agriculture - http://www.scail.ceh.ac.uk/ • Ammonia assessment for agricultural development https://www.gov.uk/guidance/intensivefarming-risk-assessment-for-your-environmental-permit	These resources were duly noted and considered when ecological impacts were addressed as part of the assessment of effects of air quality.

Consultee	Consideration	How addressed in this Draft ES
	• Environment Agency Screening Tool for industrial emissions https://www.gov.uk/guidance/airemissions-risk-assessment-for-your-environmental-permit • Defra Local Air Quality Management Area Tool (Industrial Emission Screening Tool) – England http://www.airqualityengland.co.uk/laqm	
St Helens Borough Council	The Councils Air Quality officer has reviewed this chapter. They state that the SR contains a lot of detail as to how construction dust, construction road emissions and operational road emissions will be assessed. Highly sensitive human and eco-logical receptors will be considered in any assessments undertaken. The scoping report method statement outlines that a construction assessment will be included as part of the EIA using the EPUK & IAQM Assessment of dust from demolition and construction (2014 guidance) and traffic impacts will be assessed using the EPUK & IAQM Land-use Planning and Development Control: Planning for Air Quality (2017 guidance). On that basis they agree with the scope of the assessment in this chapter.	Noted
Trafford Council	No part of the site lies within the Greater Manchester Combined Authority Air Quality Management Area (2016).	No Project element lies within the Greater Manchester Combined Authority AQMA, however access routes used by construction traffic associated with the Project have been identified within the Greater Manchester Combined Authority AQMA as shown in **Table 9.6: AQMAs**

Consultee	Consideration	How addressed in this Draft ES
		declared within 2km of the Red Line Boundary and affected road network.
Trafford Council	There will be a requirement for air quality impacts from construction and operational phases to be considered and modelled. The Scoping Report confirms that air quality impacts will be assessed as part of the proposals and confirms the information and modelling methodology that will be utilised.	Air quality impacts from the operational phase of the Project have been scoped out. Please refer to **Section 9.7: Scope of the Assessment** and **Table 9.15: Summary of effects scoped out of the air quality assessment.** Construction phase impacts have been considered and assessed. Both the construction dust assessment and construction road traffic assessment are reported and discussed further in **Section 9.9: Assessment of Air Quality Effects.**
Trafford Council	The Council's Pollution and Housing Section has reviewed the Scoping Report and are satisfied that the criteria identified for use/reference within the EIA process for assessing construction and operational impact are satisfactory for measuring impacts on air quality.	Noted
UK Health Security Agency	Recommendation - Our position is that pollutants associated with road traffic or combustion, particularly particulate matter and oxides of nitrogen are non-threshold; i.e., an exposed population is likely to be subject to potential harm at any level and that reducing public exposure to non-threshold pollutants (such as particulate matter and nitrogen dioxide) below air	The assessment of emissions from construction traffic in the peak construction year of 2027 and 2028 is detailed in **Section 9.9: Assessment of Air Quality Effects** and **Appendix 9H: Full Modelling Results**.

Consultee	Consideration	How addressed in this Draft ES
	quality standards will have potential public health benefits. We support approaches which minimise or mitigate public exposure to non-threshold air pollutants, address inequalities (in exposure) and maximise co-benefits (such as physical exercise). We encourage their consideration during development design, environmental and health impact assessment, and development consent.	
Warrington Borough Council	Comments from the WBC Environmental Protection Team have been received and the full response will be attached to this response but they are also summarised below: Scoping Report acknowledges the Motorway Air Quality Management Area (AQMA). It does not though mention the Warrington AQMA which covers the town centre ring road and major arterial roads. The Warrington AQMA is most likely to be affected by any construction works and traffic rerouting and should therefore be considered within further assessments.	Noted, Warrington AQMA covering the town centre ring road has been considered within this Draft ES chapter and reported in **Table 9.5: AQMAs declared within 2km of the Draft Order Limits and affected road network**. Sensitive receptors have identified within the AQMA and included in the modelling.
Warrington Borough Council	It is concluded that air quality has been adequately considered as part of the EIA scoping but that further detailed assessment is required when full information is available on the construction methods and route. It is recommended that further detailed assessments are required for air quality impacts to include: • Air quality impacts from for any traffic rerouting due to construction works.	The assessment of construction dust impacts and impacts from construction traffic is provided in **Section 9.9: Assessment of Air Quality Effects**. Measures for inclusion in the CEMP are detailed in **Section 9.6: Embedded Environmental Measures.** The methodology adopted for the assessment of air quality effects is reported in **Section 9.8: Assessment methodology** with further

Consultee	Consideration	How addressed in this Draft ES
	• Construction dust and mitigation measures during construction. • Use of low emission vehicles, plant and machinery during construction. • Financial contribution to the Council's Environment Protection Team for air quality monitoring and Air Quality Action Plan measures. • Any other appropriate mitigation. • The Council's Environmental Protection team should be contacted to agree the methodology for an air quality assessment.	information given in **Appendix 9D: Construction Dust Assessment** and **Appendix 9G: Model Inputs and Verification.** Technical engagement with the Council was made prior to the completion of the Draft ES Chapter.
Warrington Borough Council	The traffic associated with the development will be limited with no significant impacts expected long term as no vehicular activity of any note associated with the running and maintenance of this proposal.	Air quality impacts from the operation phase of the Project have been scoped out. Please refer to **Section 9.7: Scope of the Assessment** and **Table 9.15: Summary of effects scoped out of the air quality assessment.**
Warrington Borough Council	**Appendix 9A** [of the Scoping Report] details Air Quality monitoring sites and info. It should be noted though that for any detailed assessment, care need to be taken from using data collected during the Covid pandemic due to the reductions in travel leading to potential temporary improvements in air quality.	The dispersion model verification process detailed in **Appendix 9G: Model Inputs and Verification**, which informs the assessment of construction traffic impacts in **Section 9.9: Assessment of Air Quality Effects** has used monitoring data from 2022. Data from 2020 to 2021 is expected to have been affected by

Consultee	Consideration	How addressed in this Draft ES
		reduced emissions during the COVID-19 lockdowns.

2. Statutory Consultation

2.1.1 Statutory consultation took place between 12 September and 10 November 2022 in accordance with the Planning Act 2008. Prescribed and non-prescribed consultees and members of the public were consulted. Various methods of consultation and engagement were used in accordance with the Statement of Community Consultation (SoCC) including letters, website, public exhibitions, publicity and advertising in newspapers and webinar briefings.

2.1.2 Cadent Gas Ltd (Cadent) ("the Applicant") prepared a Preliminary Environmental Information Report (PEIR) which was publicised at this consultation stage. The Applicant sought feedback on the environmental information presented in that report. Feedback received during statutory consultation was considered by the Applicant and incorporated, where relevant into the design of the Project and its assessment and is presented in this Draft ES.

2.1.3 A summary of the relevant responses received in response to statutory consultation, together with any subsequent discussions held in relation to air quality and confirmation of how these have been considered within the assessment to date is presented in **Table 9B 2.1**.

Table 9B 2.1 Summary of Section 42 Consultation responses for air quality

Consultee	Consideration	How addressed in this Draft ES
Cheshire West and Chester Council	The Environmental Protection Unit reviewed the PEIR Chapter 9 Air Quality and finds that construction activities are limited in duration and any potential effects on residential amenity can be mitigated through standard best practice control measures, primarily by limiting construction hours and controlling dust.	Best practice air quality control measures have been reported in **Section 9.6: Embedded Environmental Measures.**
Natural England	Natural England notes that while APIS was used to provide critical loads and levels for the air quality assessment, further information is needed regarding the use of critical loads presented for the listed SSSIs.	This air quality assessment includes a detailed discussion in **Section 9.8: Assessment Methodology** around the use of critical loads for the SSSIs and the ecological sites assessed.
Natural England	Natural England expects the screening assessment to consider the most sensitive habitat type for each SSSI as part of an initial assessment, e.g. for Holcroft Moss SSSI the minimum nutrient nitrogen deposition load should be 5-10 kg N/ha/yr, however 15 kg N/ha/yr is listed within Table 9.17 of the PEIR Chapter 9 Air Quality. They advise that further detail be provided on the use of the stated critical loads in Table 9.17 and that the values for the most sensitive habitat type are used in the screening assessment.	The most sensitive habitat type has been used in this air quality assessment and reported in **Section 9.8: Assessment Methodology**. The ecology consultant for this Project has been consulted and agree with the critical loads used in this assessment. The results have been described in **Section 9.9: Assessment of Air Quality Effects**.
Natural England	Chapter 9 Air quality Appendix 9B Dispersion Modelling [of the PEIR] considers the impacts of air quality on ecological receptors, however, it is not clear from the results provided within Tables 9B.12 Predicted annual mean NOx concentrations and 9B.13 Predicted daily mean NOx	Assessment of potential impacts of air quality on ecological receptors have been carried out and results outlined in detail, including the difference (%) as a percentage of critical level and load.

Consultee	Consideration	How addressed in this Draft ES
	concentrations that the difference (%) represents a percentage of the critical level for NOx. We advise clarity is provided regarding the modelling results to clearly show any relevant critical loads/levels and percentages so that any exceedances can be highlighted.	Results can be found in **Appendix 9I: Full ecological modelled results**.
Warrington Borough Council	Warrington Borough Council finds the air quality information in Chapter 9 of the PEIR acceptable but notes that the report is preliminary. They are requesting that the updated report address how traffic diversions required for construction work may affect air quality at a detailed local level, specifically within the Warrington Air Quality Management Area and the Thelwall/Novelis link.	Detailed traffic data for the full Warrington AQMA was not provided, and therefore not included within this assessment. However, it is understood that the construction traffic will be routed away from the AQMA. However, sensitive receptors along this route going into the AQMA have been modelled for completeness (refer to **Table 9.12: Human health receptors for construction traffic assessment**, **Figure 9.4: Human health receptors for construction traffic assessment**, and **Appendix 9E: Modelled receptors and backgrounds** for further information).
Members of the public	Concern about the cumulative impact of the Project, the Tata incinerator and HS2 on local air quality in Northwich.	The contribution of existing emission sources to local air quality have been accounted for through the use of the Defra background maps in the assessment, which are based on the National Atmospheric Emissions Inventory (NAEI). Further information on the baseline of local air quality is provided in **Section 9.5: Overall Baseline**. The peak construction year modelled (2027 and 2028) includes cumulative developments in the

Consultee	Consideration	How addressed in this Draft ES
		surrounding area, and therefore impact of the Tata incinerator has been included. It is the Applicant's understanding that HS2 is no longer proceeding; it has therefore not been considered in the assessment.
Members of the public	Concern about the impact of the Warburton HAGI on local air quality.	There will be no pollutant emissions from the proposed operations at the HAGIs, with equipment at each HAGI consisting of pressure controls, monitoring and inspection facilities and instrumentation and control equipment. There are no hydrogen production processing facilities involved.
Members of the public	Concern that construction of the proposed development would emit dust.	A qualitative construction dust assessment has been undertaken and the risk of dust emissions impacting sensitive receptors is detailed in **Section 9.9: Assessment of Air Quality Effects** and **Appendix 9D: Construction Dust Assessment.** Best practice air quality mitigation measures as discussed in **Section 9.6: Embedded Environmental Measures** have been proposed and will be incorporated into a CEMP to ensure effective mitigation of dust emissions. With the recommended mitigation measures, there will be no anticipated risk of dust emissions impacting sensitive receptors.

Consultee	Consideration	How addressed in this Draft ES
Members of the public	Concern about traffic emissions generated on ecological receptors during construction of the Project.	The impact of construction traffic associated with the Project on ecological receptors has been assessed and reported in **Section 9.9: Assessment of Air Quality Effects**.
Members of the public	Concern about the impact of construction traffic on local air quality.	Detailed dispersion modelling of construction traffic impacts has been undertaken and discussed in **Section 9.9: Assessment of Air Quality Effects** and **Appendix 9H: Full Modelled Results**.

HyNet North West Hydrogen Pipeline

Delivering clean growth

Cadent

Your Gas Network