

High Speed Rail (Crewe – Manchester) Environmental Statement

Volume 5: Appendix AQ-001-OR003

Air quality

Off-route works: Annandale depot

Air quality report

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Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

A report prepared for High Speed Two (HS2) Limited:

ARUP+ ERM | FOSTER + PARTNERS | JACOBS
RAMBOLL | TYPSPA | COSTAIN

MWJV

Mott MacDonald | WSP

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Contents

1	Introduction	2
2	Baseline air quality data	3
2.1	Existing air quality	3
3	Construction dust assessment	5
3.2	Dust soiling, human health and ecological effects	5
3.3	Summary of risks	6
4	Assessment of road traffic emissions	7
4.1	Overall assessment approach	7
4.2	Model inputs and verification	7
4.3	Assessment of construction traffic emissions	7
4.4	Assessment of operational traffic emissions	13

Tables

Table 1:	Range of background pollutant concentrations	3
Table 2:	Sensitivity of area to dust soiling, human health and ecological effects	5
Table 3:	Dust emission magnitude for dust soiling, human health and ecological effects	6
Table 4:	Risk of dust soiling and human health effects	6
Table 5:	Summary of risks for construction dust assessment	6
Table 6:	Modelled receptors and background concentrations (construction phase)	8
Table 7:	Predicted annual mean NO ₂ concentrations and impacts (construction phase)	10
Table 8:	Predicted annual mean PM ₁₀ concentrations and impacts (construction phase)	11
Table 9:	Predicted annual mean PM _{2.5} concentrations and impacts (construction phase)	12
Table 10:	Modelled human receptors and background concentrations (operational phase)	14
Table 11:	Predicted annual mean NO ₂ concentrations and impacts (operation phase)	15
Table 12:	Predicted annual mean PM ₁₀ concentrations and impacts (operation phase)	15
Table 13:	Predicted annual mean PM _{2.5} concentrations and impacts (operation phase)	15

1 Introduction

- 1.1.1 This report is an appendix to the air quality assessment for the Proposed Scheme off-route works in relation to the Annandale depot.
- 1.1.2 This appendix comprises:
- baseline air quality data;
 - construction dust assessment; and
 - assessment of road traffic emissions.
- 1.1.3 This appendix should be read in conjunction with Volume 4, Off-route effects.
- 1.1.4 Additional data used for the air quality assessment, including traffic data, are set out in Background Information and Data (BID) (BID AQ-002-OR003)¹.
- 1.1.5 The assessment scope, key assumptions and limitations, and the methodology for determining significance of effects for air quality are set out in Volume 1, Introduction and methodology, Section 3 and the Environmental Impact Assessment Scope and Methodology Report (SMR) (see Volume 5: Appendix CT-001-00001).
- 1.1.6 The air quality standards relevant to this assessment are:
- 40µg/m³ as an annual mean for nitrogen dioxide (NO₂);
 - 200µg/m³ one-hour mean for NO₂ not to be exceeded more than 18 times a year (equivalent to the 99.8th percentile of the one-hour mean);
 - 18µg/m³ as an annual mean for fine particulate matter (PM₁₀);
 - 50µg/m³ 24-hour mean for PM₁₀ not to be exceeded more than 7 times a year (equivalent to the 98.1st percentile of the 24-hour mean); and
 - 10µg/m³ as an annual mean for fine particulate matter (PM_{2.5}).

¹ High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Background Information and Data, Additional data used in the air quality assessment*, BID AQ-002-OR003. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

2 Baseline air quality data

2.1 Existing air quality

Local authority review and assessment information

- 2.1.1 The Annandale depot lies within the administrative area of Dumfries and Galloway Council (DGC). All councils review air quality throughout the area following the local air quality management (LAQM) regime from the Department for Environment, Food and Rural Affairs (Defra)².
- 2.1.2 There are no air quality management areas (AQMA) in this area.

Local air quality monitoring data

- 2.1.3 The following sections provide a summary of the recorded pollutant concentrations at monitoring sites in this area. Further details on monitoring data are presented in BID AQ-002-OR003¹. There are no continuous air quality monitoring sites in the vicinity of the Annandale depot.

Diffusion tubes

- 2.1.4 The local authorities in this area undertake air quality monitoring with the use of passive diffusion tubes as part of their LAQM process. There is one diffusion tube site in this area. Measurements of NO₂ were within the air quality standard in 2018.

Background pollutant concentrations

- 2.1.5 Estimates of background air quality were obtained from the Defra maps². Background pollutant concentrations are within the air quality standards throughout the study area. Table 1 presents the range of background pollutant concentrations in this area for the existing and future baseline.

Table 1: Range of background pollutant concentrations

Pollutant	Background concentrations (µg/m ³)		
	2018	2025	2038
Annual mean NO _x	2.4µg/m ³ to 16.5µg/m ³	1.9µg/m ³ to 12.7µg/m ³	1.8µg/m ³ to 13.1µg/m ³
Annual mean NO ₂	2.0µg/m ³ to 12.5µg/m ³	1.5µg/m ³ to 9.6µg/m ³	1.5µg/m ³ to 9.9µg/m ³

² Department for Environment, Food and Rural Affairs (Defra) (2021), *Defra Background Pollutant Concentration Maps*. Available online at: <https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2018>.

Environmental Statement
Volume 5: Appendix AQ-001-OR003
Air quality
Off-route works: Annandale depot
Air quality report

Pollutant	Background concentrations ($\mu\text{g}/\text{m}^3$)		
	2018	2025	2038
Annual mean PM_{10}	6.8 $\mu\text{g}/\text{m}^3$ to 11.7 $\mu\text{g}/\text{m}^3$	6.1 $\mu\text{g}/\text{m}^3$ to 11.0 $\mu\text{g}/\text{m}^3$	6.1 $\mu\text{g}/\text{m}^3$ to 11.0 $\mu\text{g}/\text{m}^3$
Annual mean $\text{PM}_{2.5}$	4.5 $\mu\text{g}/\text{m}^3$ to 7.2 $\mu\text{g}/\text{m}^3$	4.0 $\mu\text{g}/\text{m}^3$ to 6.5 $\mu\text{g}/\text{m}^3$	4.0 $\mu\text{g}/\text{m}^3$ to 6.3 $\mu\text{g}/\text{m}^3$

3 Construction dust assessment

3.1.1 This section provides details of the assessment of dust emissions during construction of the Proposed Scheme.

3.2 Dust soiling, human health and ecological effects

Assessed receptors and sensitivity of the area

3.2.1 The assessment of dust soiling, human health and ecological effects has been undertaken for the area around Annandale depot:

- there are no demolition activities in the area; residential dwellings are located within 20m of earthworks, construction and trackout³ activities;
- Bensmoor Ancient Woodland (AW): there are no demolition activities in this area. This receptor is located within 20m of earthworks, construction and trackout activities;
- Blacksike AW: there are no demolition activities in this area. This receptor is located within 20m of earthworks, construction and trackout activities;
- Plantation East of Nook Cottage AW: there are no demolition activities in this area. This receptor is located within 20m of earthworks, construction and trackout activities;
- Woodland east of Railway Cottage AW: there are no demolition or trackout activities in this area. This receptor is located within 20m of earthworks and construction activities;
- Woodland south of Railway Cottage AW: there are no demolition activities in this area. This receptor is located within 20m of earthworks, construction and trackout activities;
- Mossknowe Lodge North AW: there are no demolition activities in this area. This receptor is located within 20m of earthworks, construction and trackout activities;
- Billy's Wood AW: there are no demolition activities in this area. This receptor is located within 20m of earthworks, construction and trackout activities; and
- Manse Wood AW: there are no demolition or trackout activities in this area. This receptor is located within 20m of earthworks and construction activities.

3.2.2 Table 2 presents the sensitivity to dust soiling, human health and ecological effects.

Table 2: Sensitivity of area to dust soiling, human health and ecological effects

Effect	Demolition	Earthworks	Construction	Trackout
Annandale depot area				
Dust soiling	Not applicable	High	High	Medium

³ Trackout refers to the transport of dust and dirt from the construction site(s) onto the public road network, where it may be deposited and then re-suspended by vehicles using the network.

Environmental Statement
 Volume 5: Appendix AQ-001-OR003
 Air quality
 Off-route works: Annandale depot
 Air quality report

Effect	Demolition	Earthworks	Construction	Trackout
Human health	Not applicable	Low	Low	Low
Ecological effects	Not applicable	Low	Low	Low

Dust emission magnitude

3.2.3 Each dust generating activity has been assigned a dust emission magnitude as shown in Table 3.

Table 3: Dust emission magnitude for dust soiling, human health and ecological effects

Area	Demolition	Earthworks	Construction	Trackout
Dust soiling and human health	Not applicable	Large	Large	Large
Ecological effects	Not applicable	Large	Large	Large

Risk of impacts

3.2.4 Taking into consideration the dust emission magnitude of each activity and the sensitivity of the area, the risk of dust effects has been defined as shown in Table 4.

Table 4: Risk of dust soiling and human health effects

Effect	Demolition	Earthworks	Construction	Trackout
Dust soiling	Not applicable	High risk	High risk	Medium risk
Human health	Not applicable	Low risk	Low risk	Low risk
Ecological effects	Not applicable	Low risk	Low risk	Low risk

3.3 Summary of risks

3.3.1 The summary of risks identified within the Annandale depot area are shown in Table 5.

Table 5: Summary of risks for construction dust assessment

Activity	Dust soiling	Human health	Ecological effects
Demolition	Not applicable	Not applicable	Not applicable
Earthworks	High	Low	Low
Construction	High	Low	Low
Trackout	Medium	Low	Low

4 Assessment of road traffic emissions

4.1 Overall assessment approach

- 4.1.1 The air quality assessment for road traffic emissions has used the approach described in the SMR. Pollutant concentrations have been predicted at sensitive human receptors where these are located within 200m of the affected road network. Where ecological sites have been assessed, the change in nitrogen (N) deposition has been predicted for comparison against the lower critical load for the site.

4.2 Model inputs and verification

Model parameters

- 4.2.1 The ADMS-Roads model was used to predict pollutant concentrations from changes in road traffic emissions. A surface roughness of 0.3m was used for this area and a surface roughness of 0.2m was used for the meteorological site. A minimum Monin-Obukhov length of 10m and latitude of 55 degrees were used in the assessment. Meteorological data from the Carlisle monitoring site was used for the year 2018.

Model verification

- 4.2.2 Model verification has not been undertaken in this area. There is one diffusion tube site in the Annandale depot area, managed by the local authority. This location is considered unsuitable for verification purposes as it is adjacent to a cul-de-sac, for which traffic data is unavailable.

4.3 Assessment of construction traffic emissions

- 4.3.1 Construction traffic data used in this assessment are detailed in BID AQ-002-OR003. The assessment of construction traffic emissions has used traffic data based on an estimate of the average daily flows in the peak year during the construction period (2027–2031). However, vehicle emissions and background concentrations have been taken from 2025, the first year of construction for the full Proposed Scheme as set out in Volume 1.

Screening of traffic data

- 4.3.2 The screening process identified a total of two roads in this area exceeding the Design Manual for Roads and Bridges (DMRB) thresholds for changes in annual average daily traffic (AADT), changes in daily heavy duty vehicles (HDV) flows and/or changes in road alignment by 5m or more. These roads are the Annandale depot main compound access road and the A74 (M).

Environmental Statement
 Volume 5: Appendix AQ-001-OR003
 Air quality
 Off-route works: Annandale depot
 Air quality report

4.3.3 Traffic data for construction vehicles using the site haul routes and moving between compounds have also been included in the assessment. Additional roads have been included in the assessment where relevant to account for their emissions at nearby receptors.

Receptors assessed and background concentrations

4.3.4 Sensitive receptors have been selected from the OS AddressBase Premium database. The receptors consist of residential properties, schools and care homes within 200m of the screened in roads and represent worst-case exposure locations.

4.3.5 No designated ecological receptors were identified within 200m of the screened in roads within the Annandale depot area during construction of the Proposed Scheme.

4.3.6 Details of the assessed receptors and the background concentrations used in the assessment are shown in Table 6 for human receptors.

Table 6: Modelled receptors and background concentrations (construction phase)

Receptor	Description/Location	Ordnance Survey coordinates	Background concentrations in 2025 ($\mu\text{g}/\text{m}^3$)			
			NO _x	NO ₂	PM ₁₀	PM _{2.5}
A-C-H001	The Hill, B7076	331317 568687	6.3	5.0	9.9	5.9
A-C-H002	The Haven	330733 568953	4.6	3.7	8.5	5.3
A-C-H003	The Haven	330733 568953	4.6	3.7	8.5	5.3
A-C-H004	The Douglas Steading	330756 568988	4.6	3.7	8.5	5.3
A-C-H005	The Bracken	330636 569055	4.8	3.9	8.4	5.2
A-C-H006	Nouthill Farm	329827 569401	4.3	3.5	9.4	5.7
A-C-H007	Nouthill Cottage	329869 569465	4.3	3.5	9.4	5.7
A-C-H008	Cranberry Cottage	330538 569554	4.8	3.9	8.4	5.2
A-C-H009	Redhouse Cottage, B7076	329478 569591	4.3	3.5	9.4	5.7
A-C-H010	Redhouse Cottage, B7076	329497 569598	4.3	3.5	9.4	5.7
A-C-H011	Redhouse Farm, B7076	329294 569663	4.3	3.5	9.4	5.7
A-C-H012	Redhouse Farm, B7076	329284 569718	4.3	3.5	9.4	5.7
A-C-H013	Cranberry Farm	329270 569747	4.8	3.9	8.4	5.2
A-C-H014	East Lodge. Mossknowe	330688 569836	4.2	3.4	8.6	5.3
A-C-H015	Grahamshill Cottage	328724 569903	4.2	3.4	8.6	5.3

Environmental Statement
 Volume 5: Appendix AQ-001-OR003
 Air quality
 Off-route works: Annandale depot
 Air quality report

Receptor	Description/Location	Ordnance Survey coordinates	Background concentrations in 2025 ($\mu\text{g}/\text{m}^3$)			
			NO _x	NO ₂	PM ₁₀	PM _{2.5}
A-C-H016	Mill Forge Hotel (south)	328739 569966	5.6	4.5	9.2	5.5
A-C-H017	Mill Forge Hotel (north)	328556 570010	5.6	4.5	9.2	5.5
A-C-H018	Grahamshill Railway Cottages	328590 570041	5.6	4.5	9.2	5.5

Assessment results

4.3.7 Table 7, Table 8 and Table 9 provide the summary of the modelled pollutant concentrations for the assessed receptors. The magnitude of change and impact descriptor are also derived following the Institute of Air Quality Management (IAQM)/Environmental Protection UK (EPUK) methodology⁴.

⁴ Institute of Air Quality Management (2017), *Land-Use Planning & Development Control: Planning For Air Quality*. Available online at: <http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf>.

Environmental Statement
 Volume 5: Appendix AQ-001-OR003
 Air quality
 Off-route works: Annandale depot
 Air quality report

Table 7: Predicted annual mean NO₂ concentrations and impacts (construction phase)

Receptor	Description/Location	NO ₂ concentrations (µg/m ³)		Change in NO ₂ concentrations (µg/m ³)	Impact descriptor	Significance
		2025 without the Proposed Scheme	2025 with the Proposed Scheme			
A-C-H001	The Hill, B7076	8.7	8.7	< 0.1	Negligible	Not significant
A-C-H002	The Haven	5.1	5.2	0.1	Negligible	Not significant
A-C-H003	The Haven	5.1	5.2	0.1	Negligible	Not significant
A-C-H004	The Douglas Steading	5.1	5.1	< 0.1	Negligible	Not significant
A-C-H005	The Bracken	5.0	5.0	< 0.1	Negligible	Not significant
A-C-H006	Nouthill Farm	4.7	4.7	< 0.1	Negligible	Not significant
A-C-H007	Nouthill Cottage	4.3	4.3	< 0.1	Negligible	Not significant
A-C-H008	Cranberry Cottage	4.2	4.2	< 0.1	Negligible	Not significant
A-C-H009	Redhouse Cottage, B7076	4.6	4.6	< 0.1	Negligible	Not significant
A-C-H010	Redhouse Cottage, B7076	4.4	4.5	0.1	Negligible	Not significant
A-C-H011	Redhouse Farm, B7076	4.8	4.8	< 0.1	Negligible	Not significant
A-C-H012	Redhouse Farm, B7076	4.3	4.4	0.1	Negligible	Not significant
A-C-H013	Cranberry Farm	4.0	4.0	< 0.1	Negligible	Not significant
A-C-H014	East Lodge. Mossknowe	5.0	5.1	0.1	Negligible	Not significant
A-C-H015	Grahamshill Cottage	4.4	4.5	0.1	Negligible	Not significant
A-C-H016	Mill Forge Hotel (south)	6.4	6.5	0.1	Negligible	Not significant
A-C-H017	Mill Forge Hotel (north)	5.6	5.7	0.1	Negligible	Not significant
A-C-H018	Grahamshill Railway Cottages	4.8	4.8	< 0.1	Negligible	Not significant

Environmental Statement
 Volume 5: Appendix AQ-001-OR003
 Air quality
 Off-route works: Annandale depot
 Air quality report

Table 8: Predicted annual mean PM₁₀ concentrations and impacts (construction phase)

Receptor	Description/Location	PM ₁₀ concentrations (µg/m ³)		Change in PM ₁₀ concentrations (µg/m ³)	Impact descriptor	Significance
		2025 without the Proposed Scheme	2025 with the Proposed Scheme			
A-C-H001	The Hill, B7076	10.7	10.8	0.1	Negligible	Not significant
A-C-H002	The Haven	8.8	8.8	< 0.1	Negligible	Not significant
A-C-H003	The Haven	8.8	8.8	< 0.1	Negligible	Not significant
A-C-H004	The Douglas Steading	8.8	8.9	0.1	Negligible	Not significant
A-C-H005	The Bracken	8.7	8.7	< 0.1	Negligible	Not significant
A-C-H006	Nouthill Farm	9.6	9.7	0.1	Negligible	Not significant
A-C-H007	Nouthill Cottage	9.5	9.5	< 0.1	Negligible	Not significant
A-C-H008	Cranberry Cottage	8.5	8.5	< 0.1	Negligible	Not significant
A-C-H009	Redhouse Cottage, B7076	9.6	9.6	< 0.1	Negligible	Not significant
A-C-H010	Redhouse Cottage, B7076	9.6	9.6	< 0.1	Negligible	Not significant
A-C-H011	Redhouse Farm, B7076	9.7	9.7	< 0.1	Negligible	Not significant
A-C-H012	Redhouse Farm, B7076	9.6	9.6	< 0.1	Negligible	Not significant
A-C-H013	Cranberry Farm	8.5	8.5	< 0.1	Negligible	Not significant
A-C-H014	East Lodge. Mossknowe	8.9	9	0.1	Negligible	Not significant
A-C-H015	Grahamshill Cottage	8.8	8.8	< 0.1	Negligible	Not significant
A-C-H016	Mill Forge Hotel (south)	9.6	9.7	0.1	Negligible	Not significant
A-C-H017	Mill Forge Hotel (north)	9.4	9.4	< 0.1	Negligible	Not significant
A-C-H018	Grahamshill Railway Cottages	9.2	9.2	< 0.1	Negligible	Not significant

Environmental Statement
Volume 5: Appendix AQ-001-OR003
Air quality
Off-route works: Annandale depot
Air quality report

Table 9: Predicted annual mean PM_{2.5} concentrations and impacts (construction phase)

Receptor	Description/Location	PM _{2.5} concentrations (µg/m ³)		Change in PM _{2.5} concentrations (µg/m ³)	Impact descriptor	Significance
		2025 without the Proposed Scheme	2025 with the Proposed Scheme			
A-C-H001	The Hill, B7076	6.4	6.4	< 0.1	Negligible	Not significant
A-C-H002	The Haven	5.5	5.5	< 0.1	Negligible	Not significant
A-C-H003	The Haven	5.5	5.5	< 0.1	Negligible	Not significant
A-C-H004	The Douglas Steading	5.5	5.5	< 0.1	Negligible	Not significant
A-C-H005	The Bracken	5.3	5.4	0.1	Negligible	Not significant
A-C-H006	Nouthill Farm	5.9	5.9	< 0.1	Negligible	Not significant
A-C-H007	Nouthill Cottage	5.8	5.8	< 0.1	Negligible	Not significant
A-C-H008	Cranberry Cottage	5.2	5.2	< 0.1	Negligible	Not significant
A-C-H009	Redhouse Cottage, B7076	5.8	5.8	< 0.1	Negligible	Not significant
A-C-H010	Redhouse Cottage, B7076	5.8	5.8	< 0.1	Negligible	Not significant
A-C-H011	Redhouse Farm, B7076	5.9	5.9	< 0.1	Negligible	Not significant
A-C-H012	Redhouse Farm, B7076	5.8	5.8	< 0.1	Negligible	Not significant
A-C-H013	Cranberry Farm	5.2	5.2	< 0.1	Negligible	Not significant
A-C-H014	East Lodge. Mossknowe	5.5	5.6	0.1	Negligible	Not significant
A-C-H015	Grahamshill Cottage	5.5	5.5	< 0.1	Negligible	Not significant
A-C-H016	Mill Forge Hotel (south)	5.8	5.8	< 0.1	Negligible	Not significant
A-C-H017	Mill Forge Hotel (north)	5.7	5.7	< 0.1	Negligible	Not significant
A-C-H018	Grahamshill Railway Cottages	5.6	5.6	< 0.1	Negligible	Not significant

- 4.3.8 The annual mean concentrations of NO₂, PM₁₀ and PM_{2.5} are predicted to be within the air quality standards with and without construction of the Proposed Scheme. Since the annual mean NO₂ concentrations are predicted to be below 60µg/m³, the hourly mean standard is also expected to be met. Similarly, since the annual mean PM₁₀ concentrations are predicted to be below 35µg/m³, the daily mean standard is also expected to be met.
- 4.3.9 Negligible impacts are predicted at all human receptors in the area for annual mean NO₂, PM₁₀ and PM_{2.5} concentrations.

Assessment of significance

- 4.3.10 No significant effects are anticipated at any receptor in relation to annual mean NO₂, PM₁₀ and PM_{2.5} concentrations.

4.4 Assessment of operational traffic emissions

Operational traffic model

- 4.4.1 Operational traffic data used in this assessment are detailed in BID AQ-002-OR003. For the assessment of traffic on the highway network, data for the year 2038 was used as the operational year of the Proposed Scheme.

Screening of traffic data

- 4.4.2 The screening process identified one road in this area exceeding the DMRB thresholds for changes in AADT or daily HDV flows and/or changes in road alignment by 5m or more. This road is the Annandale depot main compound access road.
- 4.4.3 Additional roads have been included in the assessment where relevant to account for their emissions at nearby receptors.

Receptors assessed and background concentrations

- 4.4.4 Sensitive receptors have been selected from the OS AddressBase Premium database. The receptors consist of residential properties, schools and care homes within 200m of the screened in roads and represent worst-case exposure locations (Table 10).
- 4.4.5 No designated ecological receptors were identified within 200m of the screened in roads within the Annandale depot area during operation of the Proposed Scheme.
- 4.4.6 Details of the assessed receptors and the background concentrations used in the assessment are shown in Table 10 for human receptors.

Environmental Statement
 Volume 5: Appendix AQ-001-OR003
 Air quality
 Off-route works: Annandale depot
 Air quality report

Table 10: Modelled human receptors and background concentrations (operational phase)

Receptor	Description/Location	Ordnance Survey coordinates	Background concentrations in 2038 ($\mu\text{g}/\text{m}^3$)			
			NO _x	NO ₂	PM ₁₀	PM _{2.5}
A-O-H001	Redhouse Cottage, B7076	331317 568687	4.0	3.2	9.3	5.6
A-O-H002	Redhouse Cottage, B7076	330733 568953	4.0	3.2	9.3	5.6
A-O-H003	Redhouse Farm, B7076	330733 568953	4.0	3.2	9.3	5.6
A-O-H004	Redhouse Farm, B7076	330756 568988	4.0	3.2	9.3	5.6

Assessment results

4.4.7 Table 11, Table 12 and Table 13 provide the summary of the modelled pollutant concentrations for the assessed human receptors. The magnitude of change and impact descriptor are also derived following the IAQM/EPUK methodology⁴.

Environmental Statement
Volume 5: Appendix AQ-001-OR003
Air quality
Off-route works: Annandale depot
Air quality report

Table 11: Predicted annual mean NO₂ concentrations and impacts (operation phase)

Receptor	Description/Location	NO ₂ concentrations (µg/m ³)		Change in NO ₂ concentrations (µg/m ³)	Impact descriptor	Significance
		2038 without the Proposed Scheme	2038 with the Proposed Scheme			
A-O-H001	Redhouse Cottage, B7076	3.5	3.6	0.1	Negligible	Not significant
A-O-H002	Redhouse Cottage, B7076	3.5	3.5	< 0.1	Negligible	Not significant
A-O-H003	Redhouse Farm, B7076	3.6	3.6	< 0.1	Negligible	Not significant
A-O-H004	Redhouse Farm, B7076	3.4	3.4	< 0.1	Negligible	Not significant

Table 12: Predicted annual mean PM₁₀ concentrations and impacts (operation phase)

Receptor	Description/Location	PM ₁₀ concentrations (µg/m ³)		Change in PM ₁₀ concentrations (µg/m ³)	Impact descriptor	Significance
		2038 without the Proposed Scheme	2038 with the Proposed Scheme			
A-O-H001	Redhouse Cottage, B7076	9.5	9.5	< 0.1	Negligible	Not significant
A-O-H002	Redhouse Cottage, B7076	9.5	9.5	< 0.1	Negligible	Not significant
A-O-H003	Redhouse Farm, B7076	9.5	9.5	< 0.1	Negligible	Not significant
A-O-H004	Redhouse Farm, B7076	9.4	9.4	< 0.1	Negligible	Not significant

Table 13: Predicted annual mean PM_{2.5} concentrations and impacts (operation phase)

Receptor	Description/Location	PM _{2.5} concentrations (µg/m ³)		Change in PM _{2.5} concentrations (µg/m ³)	Impact descriptor	Significance
		2038 without the Proposed Scheme	2038 with the Proposed Scheme			
A-O-H001	Redhouse Cottage, B7076	5.8	5.8	< 0.1	Negligible	Not significant
A-O-H002	Redhouse Cottage, B7076	5.7	5.7	< 0.1	Negligible	Not significant
A-O-H003	Redhouse Farm, B7076	5.8	5.8	< 0.1	Negligible	Not significant
A-O-H004	Redhouse Farm, B7076	5.7	5.7	< 0.1	Negligible	Not significant

Environmental Statement
Volume 5: Appendix AQ-001-OR003
Air quality
Off-route works: Annandale depot
Air quality report

- 4.4.8 The annual mean NO₂, PM₁₀ and PM_{2.5} concentrations are predicted to be within the air quality standards with and without operation of the Proposed Scheme. Since the annual mean NO₂ concentrations are predicted to be below 60µg/m³, the hourly mean standard is also expected to be met. Similarly, since the annual mean PM₁₀ concentrations are predicted to be below 35µg/m³, the daily mean standard is also expected to be met.
- 4.4.9 Negligible impacts are predicted at all human receptors for annual mean NO₂, PM₁₀, PM_{2.5} concentrations.

Assessment of significance

- 4.4.10 No significant effects are anticipated at any receptors in relation to annual mean NO₂, PM₁₀ and PM_{2.5} concentrations.

High Speed Two (HS2) Limited

Two Snowhill

Snow Hill Queensway

Birmingham B4 6GA

Freephone: 08081 434 434

Minicom: 08081 456 472

Email: HS2enquiries@hs2.org.uk
