

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Environmental Statement Volume 2: Appendices

Appendix 9.13: Air Quality Operational Phase Road Traffic Emissions Assessment - DMRB Magnitudes Human Results

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Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009
Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
Regulation 14

This document forms a part of the Environmental Statement for the Hinckley National Rail Freight Interchange project.

Tritax Symmetry (Hinckley) Limited (TSH) has applied to the Secretary of State for Transport for a Development Consent Order (DCO) for the Hinckley National Rail Freight Interchange (HNRFI).

To help inform the determination of the DCO application, TSH has undertaken an environmental impact assessment (EIA) of its proposals. EIA is a process that aims to improve the environmental design of a development proposal, and to provide the decision maker with sufficient information about the environmental effects of the project to make a decision.

The findings of an EIA are described in a written report known as an Environmental Statement (ES). An ES provides environmental information about the scheme, including a description of the development, its predicted environmental effects and the measures proposed to ameliorate any adverse effects.

Further details about the proposed Hinckley National Rail Freight Interchange are available on the project website:

<http://www.hinckleynrfi.co.uk/>

The DCO application and documents relating to the examination of the proposed development can be viewed on the Planning Inspectorate's National Infrastructure Planning website:

<https://infrastructure.planninginspectorate.gov.uk/projects/east-midlands/hinckley-national-rail-freight-interchange/>

APPENDIX 6.9.2.13: AIR QUALITY OPERATIONAL PHASE ROAD TRAFFIC EMISSIONS ASSESSMENT - DMRB MAGNITUDE OF CHANGE AND SIGNIFICANCE FOR HUMAN RESULTS

The predicted magnitude of change in annual mean NO₂, PM₁₀ and PM_{2.5} concentrations across all modelled relevant receptors across the study area is summarised in **Table 13.1** and **Table 13.2** for the 2026 Opening Year and 2036 Future Year. The changes have been calculated with reference to the magnitude of change criteria provided in DMRB LA105¹.

Table 13.1: Predicted magnitude of change in annual mean concentrations in the Opening Year (2026).

Change in annual mean (µg.m ⁻³)	NO ₂	PM ₁₀	PM _{2.5}
>4 Increase	0	0	0
>2 to 4 Increase	4	0	0
>0.4 to 2 Increase	22	7	1
0 to 0.4 Increase	79	131	139
No Change	16	5	4
0 to 0.4 Decrease	69	84	86
>0.4 to 2 Decrease	21	2	0
>2 to 4 Decrease	0	0	0
>4 Decrease	0	0	0

¹ Highways England, (2019), Design Manual for Roads and Bridges LA 105 Air Quality

Table 13.2: Predicted magnitude of change in annual mean concentrations in the Future Year (2036).

Change in annual mean ($\mu\text{g.m}^{-3}$)	NO ₂	PM ₁₀	PM _{2.5}
>4 Increase	0	0	0
>2 to 4 Increase	0	0	0
>0.4 to 2 Increase	17	9	1
0 to 0.4 Increase	113	129	143
No Change	8	6	0
0 to 0.4 Decrease	83	86	86
>0.4 to 2 Decrease	7	0	0
>2 to 4 Decrease	0	0	0
>4 Decrease	0	0	0

For annual mean NO₂ for both the Opening Year and Future Year scenarios, the majority of receptors sit in the magnitude of change range 0 - +0.4 $\mu\text{g.m}^{-3}$ which is classed as an imperceptible increase in accordance with DMRB criteria. With the HNRFI in place, predicted annual mean NO₂ concentrations at all receptors are below the relevant objectives.

For both PM₁₀ and PM_{2.5}, the annual mean changes for both the Opening Year and Future Year scenarios at receptors predominately sit within the 0 - +0.4 $\mu\text{g.m}^{-3}$ imperceptible increase range.

Significance

DMRB LA105 does not apply as concentrations with the HNRFI are not predicted to be within 10% of the objective for an assessed pollutant. Given that all modelled receptors are predicted to experience annual mean concentrations below the relevant air quality

objectives, the HNRFI would be 'not significant', in the context of the significance criteria detailed in DMRB LA105.