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 9.11: Air Quality Operational Phase Road Traffic Emissions Assessment - Human Receptor 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/eastmidlands/hinckley-national-rail-freight-interchange/

APPENDIX 6.2.9.11: AIR QUALITY OPERATIONAL PHASE ROAD TRAFFIC EMISSIONS ASSESSMENT – HUMAN RECEPTOR FULL RESULTS

The results of the assessment for the existing receptor locations are provided for each local authority.

Blaby District Council

2019 Base and Model Verification Year

Table 11.1: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)							
	NO ₂	PM ₁₀	PM _{2.5}					
R1	12.3	14.3	9.0					
R2	12.8	13.9	8.9					
R3	13.8	14.9	9.2					
R4	17.1	16.5	10.0					
R5	14.3	16.3	11.1					
R6	15.2	16.5	11.2					
R7	15.3	16.5	11.2					
R8	14.3	16.3	11.1					
R9	15.2	16.5	11.2					

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Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)							
	NO ₂	PM ₁₀	PM _{2.5}					
R10	13.2	14.2	9.2					
R11	12.3	14.0	9.1					
R12	12.6	13.8	9.0					
R13	11.9	13.6	8.9					
R14	12.1	13.7	9.0					
R15	12.7	13.8	9.0					
R16	11.6	13.9	8.9					
R17	11.8	14.0	8.9					
R18	11.3	13.9	8.9					
R19	12.1	14.0	9.1					
R20	12.5	13.8	8.8					
R21	12.3	13.8	8.8					
R22	12.1	13.7	8.8					
R23	11.9	13.7	8.8					
R24	12.2	14.4	9.0					

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)							
	NO ₂	PM ₁₀	PM _{2.5}					
R25	12.1	14.3	9.0					
R26	11.1	14.2	8.8					
R27	13.9	14.8	9.2					
R28	13.2	15.1	9.3					
R29	13.4	14.5	9.1					
R30	13.0	14.4	9.1					
R31	14.1	15.0	9.2					
R32	13.0	14.4	9.1					
R33	16.1	14.3	9.4					
R34	15.6	14.3	9.3					
R35	15.3	14.2	9.3					
R36	26.3	17.2	10.9					
R37	20.8	17.0	10.5					
R38	22.8	16.8	10.6					

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Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)							
	NO ₂	PM ₁₀	PM _{2.5}					
R39	32.7	17.9	11.2					
R40	36.5	18.3	11.5					
R41	24.3	16.0	10.1					
R42	24.0	16.7	10.5					
R43	15.7	15.9	9.7					
R44	15.8	15.9	9.7					
R45	15.2	15.9	9.7					
R46	12.9	14.2	9.0					
R47	12.3	14.3	9.0					
R48	12.4	14.4	9.0					
R49	13.6	13.9	8.9					
R50	19.0	16.1	10.2					
R51	17.9	16.5	10.3					
R52	26.3	17.2	10.8					
STR1	12.5	13.8	8.8					

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)						
	NO ₂	PM ₁₀	PM _{2.5}				
STR2	11.6	14.1	8.9				
STR3	17.2	16.4	10.0				

Italics indicates receptor relevant to short term air quality objectives only.

2026 Opening Year

Table 11.2: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)								
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	 Scenario 5: Out 2026 With m⁻ HNRFI (μg.m⁻³) Concentration Change* (μg.m⁻³) Concentration Concentration Relative to Air Quality Assessment Level (%) 		Impact					
R1	9.1	9.1	0.0	0	Negligible				
R2	9.5	9.5	0.0	0	Negligible				
R3	10.0	9.9	-0.1	0	Negligible				
R4	11.9	11.9	-0.1	0	Negligible				
R5	11.0	10.9	-0.1	0	Negligible				

Receptor	Predicted NO₂ Concentration (µg.m ⁻³)								
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact				
R6	11.4	11.3	-0.1	0	Negligible				
R7	11.5	11.3	-0.1	0	Negligible				
R8	11.0	11.0	0.0	0	Negligible				
R9	10.8	10.8	+0.1	0	Negligible				
R10	9.7	9.7	+0.1	0	Negligible				
R11	9.1	9.1	-0.1	0	Negligible				
R12	9.3	9.9	+0.5	+1	Negligible				
R13	8.9	9.2	+0.3	+1	Negligible				
R14	9.1	9.4	+0.3	+1	Negligible				
R15	9.4	9.8	+0.4	+1	Negligible				
R16	9.0	9.1	+0.1	0	Negligible				
R17	9.2	9.3	+0.1	0	Negligible				
R18	8.6	8.8	+0.2	0	Negligible				
R19	9.1	9.1	-0.1	0	Negligible				

Receptor	Predicted NO₂ Concentration (µg.m ⁻³)								
	Scenario 4: 2026 Without HNRFI (μg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact				
R20	9.0	8.7	-0.3	-1	Negligible				
R21	8.9	8.7	-0.3	-1	Negligible				
R22	8.8	8.6	-0.2	-1	Negligible				
R23	8.7	8.5	-0.2	-1	Negligible				
R24	9.0	8.7	-0.3	-1	Negligible				
R25	8.9	8.6	-0.3	-1	Negligible				
R26	8.8	8.6	-0.2	0	Negligible				
R27	9.7	9.7	-0.1	0	Negligible				
R28	9.3	9.4	+0.1	0	Negligible				
R29	10.2	10.3	+0.1	0	Negligible				
R30	9.9	9.9	+0.1	0	Negligible				
R31	10.8	10.9	+0.1	0	Negligible				
R32	9.8	9.9	+0.1	0	Negligible				

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Receptor	Predicted NO₂ Concentration (µg.m ⁻³)								
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact				
R33	11.7	11.6	0.0	0	Negligible				
R34	11.4	11.4	0.0	0	Negligible				
R35	11.3	11.3	0.0	0	Negligible				
R36	16.5	16.5	0.0	0	Negligible				
R37	13.9	14.0	0.0	0	Negligible				
R38	14.9	14.5	-0.4	-1	Negligible				
R39	21.5	23.3	+1.8	+5	Negligible				
R40	23.4	25.2	+1.8	+5	Negligible				
R41	14.7	16.0	+1.3	+3	Negligible				
R42	15.6	16.1	+0.6	+1	Negligible				
R43	10.9	11.2	+0.3	+1	Negligible				
R44	10.9	11.5	+0.6	+1	Negligible				
R45	10.7	10.9	+0.2	0	Negligible				
R46	9.5	9.7	+0.1	0	Negligible				

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)								
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact				
R47	9.1	9.1	0.0	0	Negligible				
R48	9.2	9.2	0.0	0	Negligible				
R49	9.4	10.0	+0.6	+2	Negligible				
R50	13.1	13.1	0.0	0	Negligible				
R51	12.6	12.6	0.0	0	Negligible				
R52	18.4	18.4	0.0	0	Negligible				
STR1	9.0	8.7	-0.3	-1	Negligible				
STR2	8.5	8.5	0.0	0	Negligible				
STR3	12.0	11.9	0.0	0	Negligible				

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.3:	Predicted	annual	mean	\textbf{PM}_{10}	concentrations	and	HNRFI	impact	at	existing	receptor
locations.											

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)								
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentratio n Change* (µg.m ⁻³)	Change in Concentratio n Relative to Air Quality Assessment Level (%)	Impact				
R1	13.3	13.3	0.0	0	Negligible				
R2	12.9	12.9	0.0	0	Negligible				
R3	13.9	13.9	-0.1	0	Negligible				
R4	15.4	15.4	0.0	0	Negligible				
R5	15.2	15.1	0.0	0	Negligible				
R6	15.4	15.3	0.0	0	Negligible				
R7	15.4	15.3	0.0	0	Negligible				
R8	15.2	15.2	0.0	0	Negligible				
R9	15.1	15.1	0.0	0	Negligible				
R10	13.2	13.2	0.0	0	Negligible				
R11	12.9	12.9	0.0	0	Negligible				
R12	12.8	13.0	+0.2	0	Negligible				

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentratio n Change* (µg.m ⁻³)	Change in Concentratio n Relative to Air Quality Assessment Level (%)	Impact		
R13	12.6	12.7	+0.1	0	Negligible		
R14	12.7	12.8	+0.1	0	Negligible		
R15	12.8	12.9	+0.1	0	Negligible		
R16	13.1	13.1	0.0	0	Negligible		
R17	13.2	13.2	0.0	0	Negligible		
R18	12.9	12.9	+0.1	0	Negligible		
R19	13.0	12.9	0.0	0	Negligible		
R20	12.8	12.7	-0.1	0	Negligible		
R21	12.8	12.7	-0.1	0	Negligible		
R22	12.7	12.6	-0.1	0	Negligible		
R23	12.7	12.6	-0.1	0	Negligible		
R24	13.4	13.3	-0.1	0	Negligible		
R25	13.4	13.3	-0.1	0	Negligible		

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentratio n Change* (µg.m ⁻³)	Change in Concentratio n Relative to Air Quality Assessment Level (%)	Impact
R26	13.3	13.3	-0.1	0	Negligible
R27	13.8	13.8	0.0	0	Negligible
R28	14.1	14.2	+0.1	0	Negligible
R29	13.5	13.5	+0.1	0	Negligible
R30	13.4	13.4	0.0	0	Negligible
R31	14.0	14.0	0.0	0	Negligible
R32	13.4	13.4	0.0	0	Negligible
R33	13.3	13.3	0.0	0	Negligible
R34	13.2	13.2	0.0	0	Negligible
R35	13.1	13.1	0.0	0	Negligible
R36	16.0	16.0	0.0	0	Negligible
R37	15.8	15.8	0.0	0	Negligible
R38	15.6	15.4	-0.2	-1	Negligible

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentratio n Change* (µg.m ⁻³)	Change in Concentratio n Relative to Air Quality Assessment Level (%)	Impact	
R39	16.7	16.9	+0.1	0	Negligible	
R40	17.1	17.5	+0.3	+1	Negligible	
R41	14.7	14.9	+0.2	0	Negligible	
R42	15.5	15.7	+0.2	0	Negligible	
R43	14.9	15.0	+0.1	0	Negligible	
R44	14.9	15.1	+0.2	+1	Negligible	
R45	14.8	14.9	+0.1	0	Negligible	
R46	13.2	13.2	0.0	0	Negligible	
R47	13.3	13.3	0.0	0	Negligible	
R48	13.3	13.3	0.0	0	Negligible	
R49	12.8	12.9	+0.1	0	Negligible	
R50	15.0	15.0	0.0	0	Negligible	
R51	15.5	15.5	0.0	0	Negligible	

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Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentratio n Change* (µg.m ⁻³)	Change in Concentratio n Relative to Air Quality Assessment Level (%)	Impact		
R52	16.1	16.1	0.0	0	Negligible		
STR1	12.8	12.7	-0.1	0	Negligible		
STR2	13.1	13.1	0.0	0	Negligible		
STR3	15.4	15.4	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.4: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R1	8.2	8.2	0.0	0	Negligible	
R2	8.1	8.1	0.0	0	Negligible	

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R3	8.4	8.3	0.0	0	Negligible		
R4	9.1	9.1	0.0	0	Negligible		
R5	10.1	10.1	0.0	0	Negligible		
R6	10.2	10.2	0.0	0	Negligible		
R7	10.3	10.2	0.0	0	Negligible		
R8	10.2	10.1	0.0	0	Negligible		
R9	10.1	10.1	0.0	0	Negligible		
R10	8.4	8.4	0.0	0	Negligible		
R11	8.3	8.2	0.0	0	Negligible		
R12	8.2	8.3	+0.1	+1	Negligible		
R13	8.1	8.2	+0.1	0	Negligible		
R14	8.1	8.2	+0.1	0	Negligible		
R15	8.2	8.3	+0.1	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R16	8.2	8.2	0.0	0	Negligible		
R17	8.3	8.3	0.0	0	Negligible		
R18	8.1	8.1	0.0	0	Negligible		
R19	8.3	8.2	0.0	0	Negligible		
R20	8.0	8.0	-0.1	0	Negligible		
R21	8.0	7.9	-0.1	0	Negligible		
R22	8.0	7.9	-0.1	0	Negligible		
R23	8.0	7.9	0.0	0	Negligible		
R24	8.2	8.1	-0.1	0	Negligible		
R25	8.2	8.1	-0.1	0	Negligible		
R26	8.1	8.1	0.0	0	Negligible		
R27	8.4	8.4	0.0	0	Negligible		
R28	8.5	8.5	0.0	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R29	8.3	8.4	0.0	0	Negligible		
R30	8.3	8.3	0.0	0	Negligible		
R31	8.4	8.4	0.0	0	Negligible		
R32	8.3	8.3	0.0	0	Negligible		
R33	8.5	8.5	0.0	0	Negligible		
R34	8.4	8.4	0.0	0	Negligible		
R35	8.4	8.4	0.0	0	Negligible		
R36	9.9	9.9	0.0	0	Negligible		
R37	9.6	9.6	0.0	0	Negligible		
R38	9.6	9.6	-0.1	0	Negligible		
R39	10.3	10.4	+0.1	+1	Negligible		
R40	10.5	10.8	+0.3	+1	Negligible		
R41	9.1	9.2	+0.1	+1	Negligible		

Receptor		Predicted PN	M _{2.5} Concentratio	on (µg.m⁻³)	
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R42	9.6	9.8	+0.2	+1	Negligible
R43	8.9	9.0	+0.1	0	Negligible
R44	8.9	9.0	+0.1	+1	Negligible
R45	8.9	8.9	0.0	0	Negligible
R46	8.2	8.2	0.0	0	Negligible
R47	8.2	8.2	0.0	0	Negligible
R48	8.2	8.2	0.0	0	Negligible
R49	8.0	8.1	+0.1	0	Negligible
R50	9.3	9.3	0.0	0	Negligible
R51	9.4	9.4	0.0	0	Negligible
R52	9.9	9.9	0.0	0	Negligible
STR1	8.0	8.0	-0.1	0	Negligible
STR2	8.0	8.0	0.0	0	Negligible

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)							
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
STR3	9.1	9.1	0.0	0	Negligible			

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

2036: Future Year

Table 11.5: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted NO ₂ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R1	8.3	8.3	0.0	0	Negligible	
R2	8.6	8.6	0.0	0	Negligible	
R3	9.0	8.9	-0.1	0	Negligible	
R4	10.4	10.4	-0.1	0	Negligible	

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Receptor		Predicted N	O ₂ Concentratio	n (μg.m⁻³)	
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R5	10.1	10.0	-0.1	0	Negligible
R6	10.4	10.3	-0.1	0	Negligible
R7	10.5	10.4	-0.1	0	Negligible
R8	10.1	10.1	0.0	0	Negligible
R9	9.9	10.0	0.0	0	Negligible
R10	8.8	8.8	+0.1	0	Negligible
R11	8.3	8.3	0.0	0	Negligible
R12	8.4	8.7	+0.4	+1	Negligible
R13	8.1	8.3	+0.2	+1	Negligible
R14	8.2	8.4	+0.2	+1	Negligible
R15	8.4	8.7	+0.3	+1	Negligible
R16	8.2	8.3	+0.1	0	Negligible
R17	8.4	8.5	+0.1	0	Negligible

Receptor		Predicted NO₂ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R18	7.9	8.0	+0.1	0	Negligible		
R19	8.4	8.3	-0.1	0	Negligible		
R20	8.1	7.9	-0.2	0	Negligible		
R21	8.0	7.9	-0.2	0	Negligible		
R22	7.9	7.8	-0.1	0	Negligible		
R23	7.9	7.7	-0.1	0	Negligible		
R24	8.1	7.9	-0.2	0	Negligible		
R25	8.0	7.9	-0.1	0	Negligible		
R26	8.0	7.9	-0.1	0	Negligible		
R27	8.5	8.5	0.0	0	Negligible		
R28	8.2	8.2	0.0	0	Negligible		
R29	9.3	9.4	+0.1	0	Negligible		
R30	9.0	9.1	+0.1	0	Negligible		

Receptor		Predicted NO₂ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R31	9.8	9.9	+0.1	0	Negligible		
R32	9.0	9.0	+0.1	0	Negligible		
R33	10.4	10.4	0.0	0	Negligible		
R34	10.2	10.2	0.0	0	Negligible		
R35	10.1	10.2	0.0	0	Negligible		
R36	13.7	13.7	0.0	0	Negligible		
R37	11.9	12.0	0.0	0	Negligible		
R38	12.6	12.6	0.0	0	Negligible		
R39	18.0	18.0	0.0	0	Negligible		
R40	19.3	19.3	0.0	0	Negligible		
R41	12.5	13.4	+0.9	+2	Negligible		
R42	13.0	13.1	0.0	0	Negligible		
R43	9.5	9.7	+0.2	+1	Negligible		

Receptor		Predicted NO ₂ Concentration (μg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R44	9.5	9.9	+0.4	+1	Negligible			
R45	9.4	9.5	+0.1	0	Negligible			
R46	8.6	8.7	+0.1	0	Negligible			
R47	8.3	8.3	0.0	0	Negligible			
R48	8.4	8.4	0.0	0	Negligible			
R49	8.4	8.8	+0.4	+1	Negligible			
R50	11.3	11.4	0.0	0	Negligible			
R51	11.0	11.0	0.0	0	Negligible			
R52	15.9	15.9	0.0	0	Negligible			
STR1	8.1	7.9	-0.2	0	Negligible			
STR2	7.7	7.7	0.0	0	Negligible			
STR3	10.4	10.4	0.0	0	Negligible			

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Receptor	Predicted PM ₁₀ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R1	13.3	13.3	0.0	0	Negligible	
R2	12.9	12.9	0.0	0	Negligible	
R3	13.9	13.9	-0.1	0	Negligible	
R4	15.4	15.4	0.0	0	Negligible	
R5	15.1	15.1	0.0	0	Negligible	
R6	15.3	15.3	-0.1	0	Negligible	
R7	15.3	15.3	-0.1	0	Negligible	
R8	15.1	15.1	0.0	0	Negligible	
R9	15.0	15.0	0.0	0	Negligible	
R10	13.2	13.2	0.0	0	Negligible	
R11	12.9	12.9	0.0	0	Negligible	

Table 11.6: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R12	12.7	12.9	+0.2	+1	Negligible			
R13	12.5	12.7	+0.1	0	Negligible			
R14	12.6	12.7	+0.1	0	Negligible			
R15	12.7	12.9	+0.2	0	Negligible			
R16	13.1	13.1	0.0	0	Negligible			
R17	13.2	13.3	0.0	0	Negligible			
R18	12.8	12.9	+0.1	0	Negligible			
R19	12.9	12.9	0.0	0	Negligible			
R20	12.8	12.7	-0.1	0	Negligible			
R21	12.8	12.7	-0.1	0	Negligible			
R22	12.7	12.6	-0.1	0	Negligible			
R23	12.6	12.6	-0.1	0	Negligible			
R24	13.4	13.3	-0.1	0	Negligible			

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R25	13.3	13.2	-0.1	0	Negligible		
R26	13.3	13.3	-0.1	0	Negligible		
R27	13.8	13.8	0.0	0	Negligible		
R28	14.2	14.2	+0.1	0	Negligible		
R29	13.5	13.6	+0.1	0	Negligible		
R30	13.3	13.4	0.0	0	Negligible		
R31	14.0	14.0	+0.1	0	Negligible		
R32	13.3	13.4	0.0	0	Negligible		
R33	13.3	13.3	0.0	0	Negligible		
R34	13.1	13.1	0.0	0	Negligible		
R35	13.1	13.1	0.0	0	Negligible		
R36	16.0	16.0	0.0	0	Negligible		
R37	15.8	15.8	0.0	0	Negligible		

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R38	15.6	15.6	0.0	0	Negligible			
R39	16.7	16.7	0.0	0	Negligible			
R40	17.1	17.1	0.0	0	Negligible			
R41	14.7	14.9	0.2	0	Negligible			
R42	15.5	15.5	0.0	0	Negligible			
R43	14.8	14.9	+0.1	0	Negligible			
R44	14.8	15.0	+0.2	+1	Negligible			
R45	14.8	14.8	+0.1	0	Negligible			
R46	13.1	13.2	0.0	0	Negligible			
R47	13.3	13.3	0.0	0	Negligible			
R48	13.3	13.3	0.0	0	Negligible			
R49	12.8	12.9	+0.1	0	Negligible			
R50	15.0	15.0	0.0	0	Negligible			

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R51	15.4	15.4	0.0	0	Negligible			
R52	16.0	16.1	0.0	0	Negligible			
STR1	12.8	12.7	-0.1	0	Negligible			
STR2	13.0	13.0	0.0	0	Negligible			
STR3	15.4	15.4	0.0	0	Negligible			

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.7: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM _{2.5} Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R1	8.2	8.2	0.0	0	Negligible			

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R2	8.1	8.1	0.0	0	Negligible			
R3	8.3	8.3	0.0	0	Negligible			
R4	9.1	9.1	0.0	0	Negligible			
R5	10.1	10.1	0.0	0	Negligible			
R6	10.2	10.2	0.0	0	Negligible			
R7	10.2	10.2	0.0	0	Negligible			
R8	10.1	10.1	0.0	0	Negligible			
R9	10.0	10.0	0.0	0	Negligible			
R10	8.4	8.4	0.0	0	Negligible			
R11	8.2	8.2	0.0	0	Negligible			
R12	8.1	8.3	+0.1	+1	Negligible			
R13	8.1	8.1	+0.1	0	Negligible			
R14	8.1	8.2	+0.1	0	Negligible			

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Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R15	8.2	8.2	+0.1	0	Negligible		
R16	8.2	8.2	0.0	0	Negligible		
R17	8.3	8.3	0.0	0	Negligible		
R18	8.1	8.1	0.0	0	Negligible		
R19	8.2	8.2	0.0	0	Negligible		
R20	8.0	7.9	-0.1	0	Negligible		
R21	8.0	7.9	-0.1	0	Negligible		
R22	7.9	7.9	0.0	0	Negligible		
R23	7.9	7.9	0.0	0	Negligible		
R24	8.1	8.1	0.0	0	Negligible		
R25	8.1	8.1	0.0	0	Negligible		
R26	8.1	8.1	0.0	0	Negligible		
R27	8.4	8.4	0.0	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R28	8.5	8.5	0.0	0	Negligible			
R29	8.3	8.4	0.0	0	Negligible			
R30	8.2	8.2	0.0	0	Negligible			
R31	8.4	8.4	0.0	0	Negligible			
R32	8.2	8.2	0.0	0	Negligible			
R33	8.5	8.5	0.0	0	Negligible			
R34	8.4	8.4	0.0	0	Negligible			
R35	8.4	8.4	0.0	0	Negligible			
R36	9.8	9.9	0.0	0	Negligible			
R37	9.6	9.6	0.0	0	Negligible			
R38	9.6	9.6	0.0	0	Negligible			
R39	10.2	10.2	0.0	0	Negligible			
R40	10.5	10.5	0.0	0	Negligible			

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)				
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R41	9.1	9.2	+0.1	+1	Negligible
R42	9.6	9.6	0.0	0	Negligible
R43	8.9	8.9	+0.1	0	Negligible
R44	8.8	9.0	+0.1	+1	Negligible
R45	8.8	8.9	0.0	0	Negligible
R46	8.2	8.2	0.0	0	Negligible
R47	8.2	8.2	0.0	0	Negligible
R48	8.2	8.2	0.0	0	Negligible
R49	8.0	8.1	+0.1	0	Negligible
R50	9.3	9.3	0.0	0	Negligible
R51	9.4	9.4	0.0	0	Negligible
R52	9.8	9.8	0.0	0	Negligible
STR1	8.0	7.9	-0.1	0	Negligible

Receptor	Predicted $PM_{2.5}$ Concentration (µg.m ⁻³)				
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
STR2	8.0	8.0	0.0	0	Negligible
STR3	9.1	9.1	0.0	0	Negligible

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

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2019 Base and Model Verification Year

Table 11.8: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
R78	13.2	14.2	9.0		
R79	18.0	16.5	9.8		
R80	13.7	14.1	8.9		

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Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)		rification Year ntrations (μg.m ⁻³)		
	NO ₂	PM ₁₀	PM _{2.5}		
R81	16.8	14.5	9.2		
R82	16.0	14.3	9.1		
R83	15.0	14.1	9.2		
R84	14.9	14.1	9.2		
R85	13.5	13.9	9.1		
R86	14.3	13.9	9.1		
R87	13.8	13.8	9.1		
R88	13.0	14.3	9.0		
R89	11.8	14.1	8.8		
R90	17.0	15.1	9.5		
R91	18.2	14.9	9.7		
R92	20.4	15.4	9.9		
R93	19.5	15.2	9.8		
R94	17.0	14.6	9.5		
R95	16.3	14.4	9.6		
Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
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	NO ₂	PM ₁₀	PM _{2.5}		
R96	21.4	15.2	10.0		
R97	19.2	15.0	10.0		
R98	21.6	15.5	10.2		
R99	21.0	15.3	10.2		
R100	21.1	15.4	10.2		
R101	23.3	15.5	10.2		
R102	21.8	15.2	10.1		
R103	22.0	15.2	10.1		
R104	20.4	16.1	10.2		
R105	19.6	14.8	9.7		
R106	22.8	15.4	10.0		
R107	20.5	15.1	9.8		
R108	20.6	16.2	10.2		
R109	22.3	16.6	10.4		

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Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (up m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
R110	17.0	15.3	9.6		
R111	18.3	15.3	9.6		
R112	19.5	15.1	9.8		
R113	18.7	14.6	9.7		
R114	23.3	15.5	10.2		
R115	17.3	14.3	9.5		
R116	17.6	14.7	9.8		
R117	18.2	14.8	9.9		
R118	20.2	14.9	10.0		
R119	27.3	16.4	10.8		
R120	22.2	15.4	10.2		
R121	21.2	15.2	10.1		
R122	22.3	15.4	10.2		
R123	21.5	15.2	10.1		
R124	18.7	14.6	9.6		

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
R125	20.0	14.8	9.7		
R126	17.5	14.3	9.4		
R127	17.8	14.4	9.4		
R128	18.6	14.5	9.5		
R129	21.5	15.1	9.8		
R130	20.8	14.9	9.8		
R131	18.9	14.6	9.5		
R132	19.4	14.6	9.6		
R133	19.6	14.7	9.6		
R134	28.5	16.8	10.5		
R135	28.2	17.0	10.6		
R136	27.0	16.6	10.5		
R137	20.4	16.0	10.1		
R138	20.5	16.0	10.1		

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Existing Receptor	Scenario 1: 20 Predicted Annual	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}				
R139	20.9	16.2	10.2				
R140	20.4	16.1	10.2				
R141	22.0	16.4	10.4				
R142	21.2	14.9	9.9				
R143	21.3	15.0	9.9				
R144	20.5	14.8	9.9				
R145	17.7	14.4	9.7				
R146	18.5	14.6	9.8				
R147	16.9	14.3	9.6				
R148	17.7	14.7	9.7				
R149	15.6	14.3	9.5				
R150	15.9	14.3	9.6				
R151	15.5	14.2	9.5				
R152	15.7	14.3	9.5				
R153	17.3	14.6	9.7				

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
R154	19.8	15.9	10.1		
R155	23.8	16.5	10.4		
R156	23.8	16.6	10.5		
R157	20.2	15.9	10.0		
R158	29.5	18.0	11.2		
R159	17.9	15.7	9.8		
R160	23.4	17.0	10.5		
R161	16.8	15.6	9.6		
R162	17.9	15.8	9.7		
R163	18.7	15.3	9.7		
R164	15.6	14.7	9.3		
R165	10.9	13.9	8.6		
R166	10.7	13.9	8.6		
R167	12.7	14.1	8.8		

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Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}			
R168	12.8	14.2	8.7			
R169	13.6	14.3	8.8			
R170	17.7	14.8	9.5			
R171	14.8	15.0	9.3			
R172	18.1	16.2	9.9			
R173	13.8	13.9	9.1			
R174	17.8	14.4	9.6			
R175	15.4	14.0	9.4			
R176	15.4	14.0	9.4			
R177	14.7	13.7	9.1			
R178	14.8	14.3	9.1			
R179	18.6	14.7	9.6			
R180	26.9	17.4	10.6			
R181	28.2	18.8	11.5			
R219	15.1	14.6	9.2			

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)			
	NO2	PM ₁₀	PM _{2.5}	
STR7	22.8	15.7	10.4	
STR8	22.2	16.2	10.3	

Italics indicates receptor relevant to short term air quality objectives only.

2026 Opening Year

Table 11.9: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor		Predicted NO ₂ Concentration (µg.m ⁻³)			
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R78	9.8	9.9	0.0	0	Negligible
R79	11.4	11.7	+0.3	+1	Negligible
R80	9.3	9.5	+0.2	+1	Negligible
R81	10.7	11.1	+0.4	+1	Negligible
R82	10.3	10.7	+0.3	+1	Negligible

Receptor		Predicted N	O ₂ Concentratio	n (μg.m⁻³)	
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R83	10.6	10.9	+0.4	+1	Negligible
R84	10.3	10.9	+0.5	+1	Negligible
R85	9.8	10.1	+0.3	+1	Negligible
R86	10.3	10.8	+0.4	+1	Negligible
R87	10.1	10.4	+0.3	+1	Negligible
R88	9.5	9.6	+0.1	0	Negligible
R89	8.6	8.6	+0.1	0	Negligible
R90	10.2	10.3	+0.1	0	Negligible
R91	13.0	13.1	+0.1	0	Negligible
R92	12.4	12.6	+0.3	+1	Negligible
R93	12.0	12.1	+0.2	0	Negligible
R94	11.6	11.7	+0.1	0	Negligible
R95	12.2	12.2	0.0	0	Negligible

Receptor	Predicted NO ₂ Concentration (µg.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R96	14.3	14.2	-0.1	0	Negligible
R97	13.6	13.5	-0.1	0	Negligible
R98	14.9	14.7	-0.2	0	Negligible
R99	14.6	14.5	-0.1	0	Negligible
R100	14.7	14.5	-0.1	0	Negligible
R101	17.2	17.0	-0.2	0	Negligible
R102	16.5	16.3	-0.2	0	Negligible
R103	16.5	16.3	-0.2	0	Negligible
R104	13.8	13.8	-0.1	0	Negligible
R105	14.4	14.2	-0.2	0	Negligible
R106	15.5	15.2	-0.3	-1	Negligible
R107	13.3	13.4	+0.1	0	Negligible
R108	13.9	14.0	+0.1	0	Negligible

Receptor		Predicted N	O ₂ Concentratio	n (μg.m⁻³)	
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R109	14.8	15.0	+0.1	0	Negligible
R110	9.7	12.0	+2.4	+6	Slight adverse
R111	12.5	11.8	-0.7	-2	Negligible
R112	13.5	12.8	-0.7	-2	Negligible
R113	13.1	12.5	-0.7	-2	Negligible
R114	15.4	14.2	-1.1	-3	Negligible
R115	12.4	12.0	-0.4	-1	Negligible
R116	13.1	12.9	-0.2	0	Negligible
R117	13.3	13.1	-0.1	0	Negligible
R118	13.9	13.4	-0.5	-1	Negligible
R119	17.4	16.3	-1.1	-3	Negligible
R120	14.8	14.3	-0.6	-1	Negligible
R121	14.4	14.0	-0.4	-1	Negligible

Receptor		Predicted N	O ₂ Concentratio	n (µg.m⁻³)	
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R122	15.0	14.4	-0.6	-1	Negligible
R123	14.6	14.2	-0.5	-1	Negligible
R124	13.0	12.5	-0.5	-1	Negligible
R125	13.2	12.5	-0.7	-2	Negligible
R126	12.0	11.6	-0.4	-1	Negligible
R127	12.3	11.8	-0.4	-1	Negligible
R128	12.6	12.2	-0.5	-1	Negligible
R129	14.1	13.2	-0.8	-2	Negligible
R130	13.8	13.4	-0.4	-1	Negligible
R131	12.7	12.5	-0.2	-1	Negligible
R132	12.9	12.7	-0.3	-1	Negligible
R133	12.9	12.8	-0.2	0	Negligible
R134	14.9	16.8	+1.9	+5	Negligible

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R135	15.4	16.1	+0.7	+2	Negligible		
R136	14.9	15.6	+0.7	+2	Negligible		
R137	14.1	13.6	-0.5	-1	Negligible		
R138	14.2	13.6	-0.6	-1	Negligible		
R139	14.2	14.1	-0.1	0	Negligible		
R140	13.9	13.8	0.0	0	Negligible		
R141	14.9	14.6	-0.3	-1	Negligible		
R142	14.8	14.8	-0.1	0	Negligible		
R143	15.0	14.9	-0.1	0	Negligible		
R144	14.8	14.7	0.0	0	Negligible		
R145	11.9	11.8	-0.1	0	Negligible		
R146	12.8	12.4	-0.4	-1	Negligible		
R147	11.8	11.7	-0.1	0	Negligible		

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R148	12.9	12.5	-0.4	-1	Negligible		
R149	11.5	11.4	-0.1	0	Negligible		
R150	11.8	11.6	-0.2	0	Negligible		
R151	11.5	11.4	-0.1	0	Negligible		
R152	11.6	11.4	-0.2	0	Negligible		
R153	12.8	12.2	-0.5	-1	Negligible		
R154	13.7	13.3	-0.5	-1	Negligible		
R155	14.6	14.9	+0.3	+1	Negligible		
R156	15.0	15.2	+0.2	0	Negligible		
R157	13.4	13.6	+0.2	+1	Negligible		
R158	18.0	18.0	0.0	0	Negligible		
R159	12.8	12.8	0.0	0	Negligible		
R160	15.3	15.2	-0.1	0	Negligible		

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Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R161	11.7	11.6	-0.1	0	Negligible		
R162	12.3	12.2	-0.1	0	Negligible		
R163	12.6	12.5	-0.1	0	Negligible		
R164	11.1	11.0	0.0	0	Negligible		
R165	8.8	8.9	+0.1	0	Negligible		
R166	8.6	8.7	+0.1	0	Negligible		
R167	9.3	9.2	-0.1	0	Negligible		
R168	9.5	9.4	-0.1	0	Negligible		
R169	10.0	9.8	-0.1	0	Negligible		
R170	10.7	10.8	+0.2	0	Negligible		
R171	9.9	10.0	+0.1	0	Negligible		
R172	12.0	11.9	-0.2	0	Negligible		
R173	10.3	10.3	0.0	0	Negligible		

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R174	13.9	13.9	0.0	0	Negligible		
R175	11.6	11.6	0.0	0	Negligible		
R176	11.6	11.6	0.0	0	Negligible		
R177	10.5	10.6	+0.1	0	Negligible		
R178	9.8	9.9	+0.1	0	Negligible		
R179	12.4	13.1	+0.7	+2	Negligible		
R180	14.3	16.4	+2.1	+5	Negligible		
R181	18.1	20.2	+2.2	+5	Negligible		
R219	9.2	11.0	+1.8	+4	Negligible		
STR7	15.6	15.4	-0.2	0	Negligible		
STR8	15.7	15.7	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.10:	Predicted	annual	mean	PM ₁₀	concentrations	and	HNRFI	impact	at	existing
receptor loca	tions.									

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R78	13.2	13.2	0.0	0	Negligible		
R79	15.4	15.6	+0.2	0	Negligible		
R80	13.0	13.1	+0.1	0	Negligible		
R81	13.3	13.5	+0.2	0	Negligible		
R82	13.2	13.3	+0.2	0	Negligible		
R83	13.0	13.1	+0.1	0	Negligible		
R84	13.0	13.2	+0.2	0	Negligible		
R85	12.8	12.9	+0.1	0	Negligible		
R86	12.9	13.0	+0.1	0	Negligible		
R87	12.8	12.9	+0.1	0	Negligible		
R88	13.2	13.3	0.0	0	Negligible		
R89	13.1	13.1	0.0	0	Negligible		

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R90	13.6	13.6	0.0	0	Negligible		
R91	14.1	14.2	+0.1	0	Negligible		
R92	13.8	14.0	+0.1	0	Negligible		
R93	13.6	13.7	+0.1	0	Negligible		
R94	13.5	13.5	+0.1	0	Negligible		
R95	13.4	13.3	0.0	0	Negligible		
R96	14.0	14.0	-0.1	0	Negligible		
R97	13.9	13.8	0.0	0	Negligible		
R98	14.3	14.3	-0.1	0	Negligible		
R99	14.2	14.2	-0.1	0	Negligible		
R100	14.2	14.2	0.0	0	Negligible		
R101	14.6	14.5	-0.1	0	Negligible		
R102	14.3	14.2	-0.1	0	Negligible		

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R103	14.3	14.2	-0.1	0	Negligible		
R104	15.1	15.1	0.0	0	Negligible		
R105	14.0	14.0	-0.1	0	Negligible		
R106	14.4	14.3	-0.1	0	Negligible		
R107	13.7	13.7	0.0	0	Negligible		
R108	15.2	15.2	0.0	0	Negligible		
R109	15.6	15.6	0.0	0	Negligible		
R110	13.5	14.4	+0.9	+2	Negligible		
R111	14.3	14.0	-0.3	-1	Negligible		
R112	14.2	13.9	-0.3	-1	Negligible		
R113	13.5	13.3	-0.3	-1	Negligible		
R114	14.3	13.9	-0.4	-1	Negligible		
R115	13.2	13.1	-0.2	0	Negligible		

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R116	13.7	13.6	-0.1	0	Negligible		
R117	13.8	13.7	-0.1	0	Negligible		
R118	13.8	13.6	-0.2	0	Negligible		
R119	15.1	14.7	-0.4	-1	Negligible		
R120	14.2	13.9	-0.2	-1	Negligible		
R121	14.0	13.8	-0.2	0	Negligible		
R122	14.2	14.0	-0.2	-1	Negligible		
R123	14.1	13.9	-0.2	0	Negligible		
R124	13.7	13.5	-0.2	0	Negligible		
R125	13.8	13.5	-0.3	-1	Negligible		
R126	13.3	13.1	-0.2	0	Negligible		
R127	13.4	13.2	-0.2	0	Negligible		
R128	13.5	13.3	-0.2	0	Negligible		

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R129	14.0	13.7	-0.3	-1	Negligible		
R130	13.9	13.7	-0.2	0	Negligible		
R131	13.5	13.4	-0.1	0	Negligible		
R132	13.6	13.4	-0.1	0	Negligible		
R133	13.6	13.5	-0.1	0	Negligible		
R134	15.3	15.9	+0.6	+2	Negligible		
R135	15.6	16.0	+0.4	+1	Negligible		
R136	15.3	15.7	+0.4	+1	Negligible		
R137	15.2	15.0	-0.2	-1	Negligible		
R138	15.2	14.9	-0.2	-1	Negligible		
R139	15.3	15.2	-0.1	0	Negligible		
R140	15.2	15.1	0.0	0	Negligible		
R141	15.6	15.4	-0.2	0	Negligible		

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R142	13.6	13.6	0.0	0	Negligible		
R143	13.6	13.6	0.0	0	Negligible		
R144	13.6	13.5	0.0	0	Negligible		
R145	13.1	13.0	0.0	0	Negligible		
R146	13.4	13.2	-0.1	0	Negligible		
R147	13.0	13.0	0.0	0	Negligible		
R148	13.8	13.6	-0.1	0	Negligible		
R149	13.3	13.2	0.0	0	Negligible		
R150	13.3	13.3	-0.1	0	Negligible		
R151	13.2	13.2	-0.1	0	Negligible		
R152	13.3	13.2	-0.1	0	Negligible		
R153	13.7	13.5	-0.2	0	Negligible		
R154	15.0	14.8	-0.2	0	Negligible		

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R155	15.2	15.3	+0.1	0	Negligible		
R156	15.6	15.7	+0.1	0	Negligible		
R157	14.8	14.9	+0.1	0	Negligible		
R158	17.0	17.0	0.0	0	Negligible		
R159	14.7	14.7	0.0	0	Negligible		
R160	15.9	15.9	0.0	0	Negligible		
R161	14.6	14.6	0.0	0	Negligible		
R162	14.8	14.8	0.0	0	Negligible		
R163	14.3	14.3	0.0	0	Negligible		
R164	13.7	13.7	0.0	0	Negligible		
R165	13.2	13.3	0.0	0	Negligible		
R166	13.1	13.2	0.0	0	Negligible		
R167	13.3	13.2	0.0	0	Negligible		

Receptor		Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R168	13.3	13.3	0.0	0	Negligible			
R169	13.4	13.4	0.0	0	Negligible			
R170	13.3	13.4	+0.1	0	Negligible			
R171	13.8	13.8	0.0	0	Negligible			
R172	15.3	15.3	0.0	0	Negligible			
R173	12.9	12.9	0.0	0	Negligible			
R174	13.3	13.3	0.0	0	Negligible			
R175	13.0	12.9	0.0	0	Negligible			
R176	13.0	12.9	0.0	0	Negligible			
R177	12.7	12.7	0.0	0	Negligible			
R178	13.2	13.3	+0.1	0	Negligible			
R179	13.5	13.8	+0.2	+1	Negligible			
R180	16.0	16.3	+0.3	+1	Negligible			

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R181	16.9	17.6	+0.6	+2	Negligible			
R219	13.0	13.6	+0.7	+2	Negligible			
STR7	14.6	14.5	-0.1	0	Negligible			
STR8	15.2	15.2	0.0	0	Negligible			

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.11: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R78	8.2	8.2	0.0	0	Negligible		
R79	8.9	9.0	+0.1	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R80	8.1	8.1	+0.1	0	Negligible			
R81	8.3	8.4	+0.1	0	Negligible			
R82	8.2	8.3	+0.1	0	Negligible			
R83	8.3	8.4	+0.1	0	Negligible			
R84	8.3	8.4	+0.1	+1	Negligible			
R85	8.2	8.3	+0.1	0	Negligible			
R86	8.3	8.3	+0.1	0	Negligible			
R87	8.2	8.3	+0.1	0	Negligible			
R88	8.2	8.2	0.0	0	Negligible			
R89	8.0	8.0	0.0	0	Negligible			
R90	8.4	8.4	0.0	0	Negligible			
R91	9.0	9.0	0.0	0	Negligible			
R92	8.8	8.9	+0.1	0	Negligible			

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R93	8.7	8.7	0.0	0	Negligible	
R94	8.6	8.6	0.0	0	Negligible	
R95	8.8	8.8	0.0	0	Negligible	
R96	9.1	9.1	0.0	0	Negligible	
R97	9.1	9.1	0.0	0	Negligible	
R98	9.3	9.3	0.0	0	Negligible	
R99	9.3	9.3	0.0	0	Negligible	
R100	9.3	9.3	0.0	0	Negligible	
R101	9.4	9.4	0.0	0	Negligible	
R102	9.3	9.2	0.0	0	Negligible	
R103	9.3	9.2	0.0	0	Negligible	
R104	9.4	9.3	0.0	0	Negligible	
R105	8.9	8.9	0.0	0	Negligible	

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R106	9.2	9.1	-0.1	0	Negligible			
R107	8.7	8.8	0.0	0	Negligible			
R108	9.4	9.4	0.0	0	Negligible			
R109	9.6	9.6	0.0	0	Negligible			
R110	8.3	8.8	+0.5	+2	Negligible			
R111	8.8	8.6	-0.2	-1	Negligible			
R112	9.0	8.8	-0.2	-1	Negligible			
R113	8.8	8.7	-0.1	-1	Negligible			
R114	9.3	9.0	-0.2	-1	Negligible			
R115	8.7	8.6	-0.1	0	Negligible			
R116	9.0	8.9	0.0	0	Negligible			
R117	9.0	9.0	0.0	0	Negligible			
R118	9.1	9.0	-0.1	-1	Negligible			

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R119	9.8	9.5	-0.2	-1	Negligible		
R120	9.3	9.1	-0.1	-1	Negligible		
R121	9.2	9.1	-0.1	0	Negligible		
R122	9.3	9.2	-0.1	-1	Negligible		
R123	9.2	9.1	-0.1	0	Negligible		
R124	8.8	8.7	-0.1	-1	Negligible		
R125	8.8	8.7	-0.2	-1	Negligible		
R126	8.6	8.5	-0.1	0	Negligible		
R127	8.6	8.5	-0.1	0	Negligible		
R128	8.7	8.6	-0.1	0	Negligible		
R129	9.0	8.8	-0.2	-1	Negligible		
R130	8.9	8.8	-0.1	0	Negligible		
R131	8.7	8.6	-0.1	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R132	8.7	8.7	-0.1	0	Negligible			
R133	8.7	8.7	-0.1	0	Negligible			
R134	9.4	9.8	+0.4	+2	Negligible			
R135	9.5	9.8	+0.2	+1	Negligible			
R136	9.3	9.6	+0.3	+1	Negligible			
R137	9.4	9.3	-0.1	-1	Negligible			
R138	9.4	9.3	-0.1	-1	Negligible			
R139	9.4	9.4	0.0	0	Negligible			
R140	9.4	9.4	0.0	0	Negligible			
R141	9.6	9.5	-0.1	0	Negligible			
R142	8.9	8.9	0.0	0	Negligible			
R143	8.9	8.9	0.0	0	Negligible			
R144	8.9	8.9	0.0	0	Negligible			

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R145	8.7	8.6	0.0	0	Negligible	
R146	8.8	8.7	-0.1	0	Negligible	
R147	8.6	8.6	0.0	0	Negligible	
R148	9.0	8.9	-0.1	0	Negligible	
R149	8.7	8.7	0.0	0	Negligible	
R150	8.8	8.7	0.0	0	Negligible	
R151	8.7	8.7	0.0	0	Negligible	
R152	8.7	8.7	0.0	0	Negligible	
R153	8.9	8.8	-0.1	-1	Negligible	
R154	9.3	9.2	-0.1	-1	Negligible	
R155	9.4	9.5	+0.1	0	Negligible	
R156	9.6	9.6	0.0	0	Negligible	
R157	9.2	9.2	0.0	0	Negligible	

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R158	10.3	10.3	0.0	0	Negligible			
R159	9.0	9.0	0.0	0	Negligible			
R160	9.7	9.7	0.0	0	Negligible			
R161	8.8	8.8	0.0	0	Negligible			
R162	8.9	8.9	0.0	0	Negligible			
R163	8.8	8.8	0.0	0	Negligible			
R164	8.5	8.5	0.0	0	Negligible			
R165	8.0	8.0	0.0	0	Negligible			
R166	7.9	7.9	0.0	0	Negligible			
R167	8.0	8.0	0.0	0	Negligible			
R168	7.9	7.9	0.0	0	Negligible			
R169	8.0	8.0	0.0	0	Negligible			
R170	8.4	8.4	0.0	0	Negligible			

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R171	8.4	8.4	0.0	0	Negligible		
R172	9.1	9.1	0.0	0	Negligible		
R173	8.3	8.3	0.0	0	Negligible		
R174	8.7	8.7	0.0	0	Negligible		
R175	8.6	8.6	0.0	0	Negligible		
R176	8.6	8.6	0.0	0	Negligible		
R177	8.3	8.3	0.0	0	Negligible		
R178	8.2	8.3	0.0	0	Negligible		
R179	8.6	8.8	+0.1	+1	Negligible		
R180	9.4	9.6	+0.2	+1	Negligible		
R181	10.0	10.4	+0.4	+2	Negligible		
R219	8.1	8.4	+0.4	+2	Negligible		
STR7	9.5	9.4	0.0	0	Negligible		

Receptor	Predicted PM _{2.5} Concentration (μg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
STR8	9.4	9.4	0.0	0	Negligible	

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

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Table 11.12: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted NO ₂ Concentration (µg.m ⁻³)				
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R78	8.9	8.9	0.0	0	Negligible
R79	9.9	10.1	+0.2	0	Negligible
R80	8.3	8.4	+0.2	0	Negligible
R81	9.4	9.7	+0.3	+1	Negligible

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Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R82	9.1	9.4	+0.3	+1	Negligible	
R83	9.7	9.9	+0.2	+1	Negligible	
R84	9.6	9.9	+0.4	+1	Negligible	
R85	9.0	9.2	+0.2	+1	Negligible	
R86	9.4	9.7	+0.3	+1	Negligible	
R87	9.3	9.5	+0.2	+1	Negligible	
R88	8.6	8.7	+0.1	0	Negligible	
R89	7.8	7.9	0.0	0	Negligible	
R90	9.1	9.1	0.0	0	Negligible	
R91	11.1	11.2	+0.1	0	Negligible	
R92	10.7	10.9	+0.2	0	Negligible	
R93	10.4	10.5	+0.1	0	Negligible	
R94	10.2	10.2	+0.1	0	Negligible	

Receptor	Predicted NO₂ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R95	11.1	11.1	0.0	0	Negligible	
R96	12.5	12.4	-0.2	0	Negligible	
R97	12.1	12.0	-0.1	0	Negligible	
R98	13.0	12.8	-0.2	0	Negligible	
R99	12.7	12.6	-0.1	0	Negligible	
R100	12.7	12.6	-0.1	0	Negligible	
R101	15.1	15.0	-0.1	0	Negligible	
R102	14.7	14.6	-0.1	0	Negligible	
R103	14.7	14.5	-0.1	0	Negligible	
R104	11.6	11.6	0.0	0	Negligible	
R105	12.5	12.3	-0.2	0	Negligible	
R106	13.2	13.0	-0.3	-1	Negligible	
R107	11.7	11.8	+0.1	0	Negligible	

Receptor	Predicted NO ₂ Concentration (μg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R108	11.7	11.8	+0.1	0	Negligible		
R109	12.3	12.5	+0.2	0	Negligible		
R110	8.7	10.2	+1.6	+4	Negligible		
R111	10.8	10.2	-0.6	-1	Negligible		
R112	11.7	11.1	-0.6	-2	Negligible		
R113	11.5	11.1	-0.4	-1	Negligible		
R114	13.1	12.5	-0.6	-2	Negligible		
R115	11.0	10.7	-0.3	-1	Negligible		
R116	11.6	11.5	-0.1	0	Negligible		
R117	11.8	11.7	-0.1	0	Negligible		
R118	12.2	11.9	-0.3	-1	Negligible		
R119	14.7	14.0	-0.7	-2	Negligible		
R120	12.8	12.4	-0.3	-1	Negligible		
Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
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	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R121	12.5	12.2	-0.3	-1	Negligible		
R122	12.9	12.6	-0.3	-1	Negligible		
R123	12.7	12.4	-0.3	-1	Negligible		
R124	11.1	10.8	-0.3	-1	Negligible		
R125	11.4	10.9	-0.6	-1	Negligible		
R126	10.5	10.2	-0.3	-1	Negligible		
R127	10.6	10.3	-0.3	-1	Negligible		
R128	10.9	10.6	-0.3	-1	Negligible		
R129	12.0	11.4	-0.6	-2	Negligible		
R130	11.9	11.6	-0.4	-1	Negligible		
R131	11.1	10.8	-0.2	-1	Negligible		
R132	11.5	11.1	-0.4	-1	Negligible		
R133	11.6	11.2	-0.4	-1	Negligible		

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Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R134	12.4	14.0	+1.6	+4	Negligible		
R135	13.1	14.3	+1.2	+3	Negligible		
R136	12.4	13.8	+1.3	+3	Negligible		
R137	11.9	11.5	-0.4	-1	Negligible		
R138	12.0	11.6	-0.4	-1	Negligible		
R139	11.9	11.8	0.0	0	Negligible		
R140	11.7	11.7	0.0	0	Negligible		
R141	12.4	12.2	-0.2	0	Negligible		
R142	13.5	13.5	-0.1	0	Negligible		
R143	13.7	13.6	-0.1	0	Negligible		
R144	13.5	13.5	0.0	0	Negligible		
R145	10.8	10.7	-0.1	0	Negligible		
R146	11.4	11.1	-0.3	-1	Negligible		

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R147	10.7	10.7	-0.1	0	Negligible		
R148	11.2	11.0	-0.3	-1	Negligible		
R149	10.3	10.2	-0.1	0	Negligible		
R150	10.4	10.3	-0.1	0	Negligible		
R151	10.3	10.2	-0.1	0	Negligible		
R152	10.3	10.2	-0.1	0	Negligible		
R153	11.1	10.8	-0.4	-1	Negligible		
R154	11.6	11.3	-0.3	-1	Negligible		
R155	12.2	12.5	0.3	1	Negligible		
R156	12.5	12.7	0.2	0	Negligible		
R157	11.4	11.5	0.2	0	Negligible		
R158	14.9	14.9	0.0	0	Negligible		
R159	11.4	11.4	0.0	0	Negligible		

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R160	13.1	13.1	0.0	0	Negligible		
R161	10.3	10.2	-0.1	0	Negligible		
R162	10.8	10.7	-0.1	0	Negligible		
R163	10.9	10.8	-0.1	0	Negligible		
R164	9.8	9.8	0.0	0	Negligible		
R165	8.0	8.0	0.0	0	Negligible		
R166	7.8	7.8	0.0	0	Negligible		
R167	8.3	8.2	0.0	0	Negligible		
R168	8.5	8.5	0.0	0	Negligible		
R169	8.9	8.9	-0.1	0	Negligible		
R170	9.4	9.5	+0.1	0	Negligible		
R171	8.7	8.8	+0.1	0	Negligible		
R172	10.2	10.1	-0.1	0	Negligible		

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R173	9.4	9.4	0.0	0	Negligible		
R174	12.9	12.9	0.0	0	Negligible		
R175	10.6	10.6	0.0	0	Negligible		
R176	10.6	10.6	0.0	0	Negligible		
R177	9.4	9.4	0.0	0	Negligible		
R178	8.7	8.8	+0.1	0	Negligible		
R179	11.5	11.8	+0.3	+1	Negligible		
R180	11.8	13.3	+1.4	+4	Negligible		
R181	14.4	15.9	+1.5	+4	Negligible		
R219	8.4	9.6	+1.2	+3	Negligible		
STR7	13.3	13.2	-0.1	0	Negligible		
STR8	13.6	13.6	0.0	0	Negligible		

Receptor	Predicted PM ₁₀ Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R78	13.1	13.1	0.0	0	Negligible		
R79	15.6	15.8	+0.2	0	Negligible		
R80	13.0	13.1	+0.1	0	Negligible		
R81	13.4	13.6	+0.2	0	Negligible		
R82	13.3	13.4	+0.2	0	Negligible		
R83	13.1	13.2	+0.1	0	Negligible		
R84	13.2	13.4	+0.2	0	Negligible		
R85	12.9	13.0	+0.1	0	Negligible		
R86	12.9	13.1	+0.1	0	Negligible		
R87	12.8	12.9	+0.1	0	Negligible		
R88	13.2	13.3	0.0	0	Negligible		

Table 11.13:	Predicted	annual	mean	PM ₁₀	concentrations	and	HNRFI	impact	at existing	receptor
locations.										

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R89	13.0	13.1	0.0	0	Negligible		
R90	13.5	13.5	0.0	0	Negligible		
R91	14.1	14.2	+0.1	0	Negligible		
R92	13.8	14.0	+0.1	0	Negligible		
R93	13.6	13.7	+0.1	0	Negligible		
R94	13.4	13.5	+0.1	0	Negligible		
R95	13.3	13.3	0.0	0	Negligible		
R96	14.2	14.1	-0.1	0	Negligible		
R97	13.9	13.8	-0.1	0	Negligible		
R98	14.4	14.3	-0.1	0	Negligible		
R99	14.2	14.2	-0.1	0	Negligible		
R100	14.2	14.1	-0.1	0	Negligible		
R101	14.6	14.5	-0.1	0	Negligible		

Receptor	Predicted PM ₁₀ Concentration ($\mu g.m^{-3}$)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R102	14.3	14.2	-0.1	0	Negligible		
R103	14.3	14.2	-0.1	0	Negligible		
R104	15.1	15.1	0.0	0	Negligible		
R105	14.1	14.0	-0.1	0	Negligible		
R106	14.5	14.3	-0.1	0	Negligible		
R107	13.7	13.7	0.0	0	Negligible		
R108	15.2	15.3	+0.1	0	Negligible		
R109	15.6	15.7	+0.1	0	Negligible		
R110	13.4	14.3	+0.9	+2	Negligible		
R111	14.4	14.0	-0.4	-1	Negligible		
R112	14.3	13.9	-0.4	-1	Negligible		
R113	13.6	13.3	-0.2	-1	Negligible		
R114	14.4	14.1	-0.4	-1	Negligible		

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R115	13.2	13.1	-0.2	0	Negligible		
R116	13.7	13.6	-0.1	0	Negligible		
R117	13.7	13.7	-0.1	0	Negligible		
R118	13.8	13.7	-0.2	0	Negligible		
R119	15.2	14.8	-0.4	-1	Negligible		
R120	14.2	14.0	-0.2	-1	Negligible		
R121	14.0	13.9	-0.2	0	Negligible		
R122	14.2	14.0	-0.2	0	Negligible		
R123	14.1	14.0	-0.2	0	Negligible		
R124	13.7	13.6	-0.2	0	Negligible		
R125	13.9	13.5	-0.3	-1	Negligible		
R126	13.3	13.2	-0.2	0	Negligible		
R127	13.4	13.2	-0.2	0	Negligible		

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R128	13.5	13.3	-0.2	0	Negligible		
R129	14.2	13.8	-0.3	-1	Negligible		
R130	14.1	13.9	-0.2	-1	Negligible		
R131	13.6	13.5	-0.1	0	Negligible		
R132	13.8	13.6	-0.2	-1	Negligible		
R133	13.9	13.6	-0.3	-1	Negligible		
R134	15.5	16.0	+0.5	+1	Negligible		
R135	16.1	16.5	+0.4	+1	Negligible		
R136	15.4	15.8	+0.4	+1	Negligible		
R137	15.2	15.0	-0.2	-1	Negligible		
R138	15.2	15.0	-0.2	-1	Negligible		
R139	15.3	15.2	0.0	0	Negligible		
R140	15.2	15.1	0.0	0	Negligible		

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R141	15.6	15.4	-0.1	0	Negligible		
R142	13.6	13.5	0.0	0	Negligible		
R143	13.6	13.6	-0.1	0	Negligible		
R144	13.5	13.5	0.0	0	Negligible		
R145	13.1	13.0	-0.1	0	Negligible		
R146	13.4	13.2	-0.2	0	Negligible		
R147	13.0	13.0	0.0	0	Negligible		
R148	13.7	13.6	-0.2	0	Negligible		
R149	13.2	13.2	0.0	0	Negligible		
R150	13.3	13.2	-0.1	0	Negligible		
R151	13.2	13.2	-0.1	0	Negligible		
R152	13.3	13.2	-0.1	0	Negligible		
R153	13.7	13.5	-0.2	0	Negligible		

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Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R154	15.0	14.8	-0.2	0	Negligible		
R155	15.3	15.4	0.1	0	Negligible		
R156	15.7	15.7	+0.1	0	Negligible		
R157	14.8	14.9	+0.1	0	Negligible		
R158	17.1	17.2	0.0	0	Negligible		
R159	14.7	14.7	0.0	0	Negligible		
R160	16.0	16.0	0.0	0	Negligible		
R161	14.6	14.6	0.0	0	Negligible		
R162	14.9	14.8	0.0	0	Negligible		
R163	14.4	14.4	0.0	0	Negligible		
R164	13.7	13.7	0.0	0	Negligible		
R165	13.3	13.3	0.0	0	Negligible		
R166	13.2	13.2	0.0	0	Negligible		

Receptor		Predicted PM_{10} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R167	13.3	13.3	0.0	0	Negligible		
R168	13.3	13.3	0.0	0	Negligible		
R169	13.5	13.5	0.0	0	Negligible		
R170	13.3	13.4	0.0	0	Negligible		
R171	13.8	13.8	0.0	0	Negligible		
R172	15.4	15.4	0.0	0	Negligible		
R173	12.9	12.9	0.0	0	Negligible		
R174	13.3	13.3	0.0	0	Negligible		
R175	12.9	12.9	0.0	0	Negligible		
R176	12.9	12.9	0.0	0	Negligible		
R177	12.7	12.7	0.0	0	Negligible		
R178	13.2	13.3	+0.1	0	Negligible		
R179	14.0	14.1	+0.1	0	Negligible		

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R180	15.9	16.8	+0.8	+2	Negligible			
R181	16.9	17.7	+0.8	+2	Negligible			
R219	13.0	13.6	+0.7	+2	Negligible			
STR7	14.6	14.5	-0.1	0	Negligible			
STR8	15.1	15.1	0.0	0	Negligible			

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.14: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R78	8.2	8.2	0.0	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R79	9.0	9.1	+0.1	0	Negligible		
R80	8.1	8.1	+0.1	0	Negligible		
R81	8.3	8.4	+0.1	+1	Negligible		
R82	8.3	8.3	+0.1	0	Negligible		
R83	8.4	8.4	+0.1	0	Negligible		
R84	8.4	8.5	+0.1	+1	Negligible		
R85	8.3	8.3	+0.1	0	Negligible		
R86	8.3	8.4	+0.1	0	Negligible		
R87	8.2	8.3	+0.1	0	Negligible		
R88	8.2	8.2	0.0	0	Negligible		
R89	8.0	8.0	0.0	0	Negligible		
R90	8.3	8.4	0.0	0	Negligible		
R91	8.9	9.0	0.0	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R92	8.8	8.9	+0.1	0	Negligible		
R93	8.7	8.7	0.0	0	Negligible		
R94	8.6	8.6	0.0	0	Negligible		
R95	8.8	8.8	0.0	0	Negligible		
R96	9.2	9.1	-0.1	0	Negligible		
R97	9.1	9.0	0.0	0	Negligible		
R98	9.4	9.3	-0.1	0	Negligible		
R99	9.3	9.2	0.0	0	Negligible		
R100	9.3	9.2	0.0	0	Negligible		
R101	9.4	9.4	0.0	0	Negligible		
R102	9.3	9.2	0.0	0	Negligible		
R103	9.3	9.2	0.0	0	Negligible		
R104	9.3	9.3	0.0	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R105	8.9	8.9	-0.1	0	Negligible			
R106	9.2	9.1	-0.1	0	Negligible			
R107	8.7	8.7	0.0	0	Negligible			
R108	9.4	9.4	0.0	0	Negligible			
R109	9.6	9.6	0.0	0	Negligible			
R110	8.3	8.8	+0.5	+2	Negligible			
R111	8.8	8.6	-0.2	-1	Negligible			
R112	9.1	8.8	-0.2	-1	Negligible			
R113	8.8	8.7	-0.1	-1	Negligible			
R114	9.3	9.1	-0.2	-1	Negligible			
R115	8.7	8.6	-0.1	0	Negligible			
R116	9.0	8.9	0.0	0	Negligible			
R117	9.0	9.0	0.0	0	Negligible			

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R118	9.1	9.0	-0.1	0	Negligible		
R119	9.8	9.6	-0.2	-1	Negligible		
R120	9.2	9.1	-0.1	-1	Negligible		
R121	9.2	9.1	-0.1	0	Negligible		
R122	9.3	9.2	-0.1	-1	Negligible		
R123	9.2	9.1	-0.1	0	Negligible		
R124	8.8	8.7	-0.1	0	Negligible		
R125	8.8	8.7	-0.2	-1	Negligible		
R126	8.6	8.5	-0.1	0	Negligible		
R127	8.6	8.5	-0.1	-1	Negligible		
R128	8.7	8.6	-0.1	-1	Negligible		
R129	9.0	8.8	-0.2	-1	Negligible		
R130	9.0	8.9	-0.1	-1	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R131	8.7	8.7	-0.1	0	Negligible		
R132	8.9	8.7	-0.1	-1	Negligible		
R133	8.9	8.8	-0.1	-1	Negligible		
R134	9.5	9.6	+0.2	+1	Negligible		
R135	9.7	10.0	+0.2	+1	Negligible		
R136	9.4	9.6	+0.2	+1	Negligible		
R137	9.4	9.3	-0.1	-1	Negligible		
R138	9.4	9.3	-0.1	-1	Negligible		
R139	9.4	9.4	0.0	0	Negligible		
R140	9.4	9.3	0.0	0	Negligible		
R141	9.6	9.5	-0.1	0	Negligible		
R142	8.9	8.8	0.0	0	Negligible		
R143	8.9	8.9	0.0	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R144	8.8	8.8	0.0	0	Negligible		
R145	8.6	8.6	0.0	0	Negligible		
R146	8.8	8.7	-0.1	0	Negligible		
R147	8.6	8.6	0.0	0	Negligible		
R148	9.0	8.9	-0.1	0	Negligible		
R149	8.7	8.7	0.0	0	Negligible		
R150	8.7	8.7	0.0	0	Negligible		
R151	8.7	8.7	0.0	0	Negligible		
R152	8.7	8.7	0.0	0	Negligible		
R153	8.9	8.8	-0.1	-1	Negligible		
R154	9.3	9.2	-0.1	-1	Negligible		
R155	9.4	9.5	+0.1	0	Negligible		
R156	9.6	9.7	+0.1	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R157	9.2	9.2	0.0	0	Negligible		
R158	10.4	10.4	0.0	0	Negligible		
R159	9.0	9.0	0.0	0	Negligible		
R160	9.7	9.7	0.0	0	Negligible		
R161	8.8	8.8	0.0	0	Negligible		
R162	8.9	8.9	0.0	0	Negligible		
R163	8.9	8.9	0.0	0	Negligible		
R164	8.5	8.5	0.0	0	Negligible		
R165	8.0	8.0	0.0	0	Negligible		
R166	7.9	7.9	0.0	0	Negligible		
R167	8.0	8.0	0.0	0	Negligible		
R168	7.9	7.9	0.0	0	Negligible		
R169	8.0	8.0	0.0	0	Negligible		

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R170	8.4	8.4	0.0	0	Negligible		
R171	8.4	8.4	0.0	0	Negligible		
R172	9.1	9.2	0.0	0	Negligible		
R173	8.2	8.2	0.0	0	Negligible		
R174	8.7	8.7	0.0	0	Negligible		
R175	8.6	8.6	0.0	0	Negligible		
R176	8.6	8.5	0.0	0	Negligible		
R177	8.2	8.2	0.0	0	Negligible		
R178	8.2	8.3	+0.1	0	Negligible		
R179	8.9	8.9	+0.1	0	Negligible		
R180	9.4	9.7	+0.3	+1	Negligible		
R181	10.0	10.4	+0.4	+2	Negligible		
R219	8.0	8.3	+0.3	+1	Negligible		

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)				
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
STR7	9.5	9.4	0.0	0	Negligible
STR8	9.4	9.4	0.0	0	Negligible

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Charnwood Borough Council

2019 Base and Model Verification Year

Table 11.15: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
R54	29.8	18.2	10.9		
R55	20.1	16.8	10.4		
R188	24.2	17.7	10.5		

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Recepto r	Predicted NO ₂ Concentration (µg.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (μg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentratio n Change* (μg.m ⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact
R54	18.2	18.5	+0.3	+1	Negligible
R55	13.6	13.8	+0.3	+1	Negligible
R188	14.6	15.6	+1.0	+3	Negligible

Table 11.16: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor and monitoring locations.

* Discrepancies in changes due to rounding effects.

Table 11.17: Predicted annual mean PM₁₀ concentrations and HNRFI impact at existing receptor and monitoring locations.

Recepto r	Predicted PM ₁₀ Concentration (μg.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (μg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentratio n Change* (µg.m⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact
R54	17.1	17.2	+0.1	0	Negligible

Recepto r	Predicted PM_{10} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentratio n Change* (μg.m ⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact	
R55	15.7	15.8	+0.1	0	Negligible	
R188	16.6	16.8	+0.1	0	Negligible	

* Discrepancies in changes due to rounding effects.

Table 11.18: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor and monitoring locations.

Recepto r	Predicted PM _{2.5} Concentration (μg.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (μg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentratio n Change* (µg.m⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact
R54	10.0	10.0	0.0	0	Negligible
R55	9.5	9.6	0.0	0	Negligible
R188	9.6	9.7	+0.1	0	Negligible

* Discrepancies in changes due to rounding effects.

2036 Future Year

Table 11.19: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor and monitoring locations.

Recepto r	Predicted NO ₂ Concentration (μ g.m ⁻³)				
	Scenario 6: 2036 Without HNRFI (μg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentratio n Change* (μg.m ⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact
R54	14.6	14.7	+0.1	0	Negligible
R55	11.6	11.7	0.0	0	Negligible
R188	12.2	12.9	+0.7	+2	Negligible

* Discrepancies in changes due to rounding effects.

Table 11.20: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor and monitoring locations.

Recepto r	Predicted PM ₁₀ Concentration (µg.m ⁻³)				
	Scenario 6: 2036 Without HNRFI (μg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentratio n Change* (µg.m⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact
R54	17.1	17.1	0.0	0	Negligible
R55	15.7	15.7	0.0	0	Negligible
R188	16.6	16.7	0.2	0	Negligible

* Discrepancies in changes due to rounding effects.

Table 11.21: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor and monitoring locations.

Recepto r	Predicted PM _{2.5} Concentration (μg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentratio n Change* (µg.m⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact	
R54	9.9	10.0	0.0	0	Negligible	

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

Recepto r	Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (μg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentratio n Change* (μg.m ⁻³)	Change in Concentrati on Relative to Air Quality Assessment Level (%)	Impact	
R55	9.5	9.5	0.0	0	Negligible	
R188	9.6	9.7	+0.1	0	Negligible	

* Discrepancies in changes due to rounding effects.

Coventry City Council

2019 Base and Model Verification Year

Table 11.22: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
R56	34.9	18.4	12.1		
R57	24.1	16.9	11.0		
R58	29.3	17.5	11.3		
STR4	36.0	19.3	12.0		

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
STR5	31.5	18.6	11.5		

Italics indicates receptor relevant to short term air quality objectives only.

2026 Opening Year

Table 11.23: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)							
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R56	26.1	26.3	+0.2	+1	Negligible			
R57	16.2	16.3	+0.1	0	Negligible			
R58	20.3	20.4	+0.1	0	Negligible			
STR4	22.5	22.8	+0.3	+1	Negligible			
STR5	20.2	20.4	+0.2	0	Negligible			

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term

air quality objectives only.

Table 11.24: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM10 Concentration (µg.m-3)						
	Scenario 4: 2026 Without HNRFI (μg.m-3)	Scenario 5: 2026 With HNRFI (µg.m-3)	Concentration Change* (μg.m-3)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R56	18.3	18.3	+0.1	0	Negligible		
R57	15.8	15.8	0.0	0	Negligible		
R58	16.4	16.4	0.0	0	Negligible		
STR4	18.1	18.2	+0.1	0	Negligible		
STR5	17.4	17.5	0.0	0	Negligible		

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R56	11.7	11.7	0.0	0	Negligible		
R57	10.1	10.2	0.0	0	Negligible		
R58	10.4	10.4	0.0	0	Negligible		
STR4	11.0	11.0	+0.1	0	Negligible		
STR5	10.6	10.6	0.0	0	Negligible		

Table 11.25: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

2036 Future Year

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R56	21.0	21.2	+0.2	0	Negligible		
R57	13.9	14.0	+0.1	0	Negligible		
R58	17.7	17.7	0.0	0	Negligible		
STR4	18.5	18.7	+0.2	+1	Negligible		
STR5	16.7	16.8	+0.1	0	Negligible		

Table 11.26: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM ₁₀ Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R56	18.5	18.6	+0.1	0	Negligible		
R57	15.8	15.8	0.0	0	Negligible		
R58	16.4	16.4	0.0	0	Negligible		
STR4	18.3	18.4	+0.1	0	Negligible		
STR5	17.5	17.5	0.0	0	Negligible		

Table 11.27: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R56	11.8	11.8	0.0	0	Negligible		
R57	10.1	10.2	0.0	0	Negligible		
R58	10.4	10.4	0.0	0	Negligible		
STR4	11.0	11.1	+0.1	0	Negligible		
STR5	10.6	10.6	0.0	0	Negligible		

Table 11.28: Predicted annual mean PM_{2.5} concentrations and HNRFI impact at existing receptor locations.

West Northamptonshire Council

2019 Base and Model Verification Year

 Table 11.29: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and Model

 Verification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³) NO ₂ PM ₁₀ PM _{2.5}					
R59	24.0	16.6	10.4			
R60	26.8	16.8	10.6			
STR6	21.0	16.5	10.3			

Italics indicates receptor relevant to short term air quality objectives only.

2026 Opening Year

Receptor	Predicted NO₂ Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R59	14.4	14.4	0.0	0	Negligible		
R60	15.9	15.9	0.0	0	Negligible		
STR6	13.0	13.0	0.0	0	Negligible		

Table 11.30: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.31: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R59	15.4	15.4	0.0	0	Negligible		
Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)						
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	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R60	15.6	15.6	0.0	0	Negligible		
STR6	15.4	15.4	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.32: Predicted annual mean PM_{2.5} concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R59	9.4	9.4	0.0	0	Negligible	
R60	9.5	9.5	0.0	0	Negligible	
STR6	9.3	9.4	0.0	0	Negligible	

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

2036 Future Year

Table 11.33: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted NO ₂ Concentration (μg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R59	11.6	11.6	0.0	0	Negligible		
R60	12.7	12.7	0.0	0	Negligible		
STR6	10.7	10.7	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Receptor		Predicted PM ₁₀ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R59	15.4	15.4	0.0	0	Negligible		
R60	15.6	15.6	0.0	0	Negligible		
STR6	15.3	15.4	0.0	0	Negligible		

Table 11.34: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.35: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R59	9.4	9.4	0.0	0	Negligible	
R60	9.5	9.5	0.0	0	Negligible	

Receptor		Predicted PM _{2.5} Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
STR6	9.3	9.3	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Erewash Borough Council

2019 Base and Model Verification Year

Table 11.36: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}			
R61	26.6	16.1	10.3			
R62	27.3	16.2	10.4			
R63	23.3	15.7	10.0			

2026 Opening Year

Receptor		Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R61	17.5	17.5	0.0	0	Negligible		
R62	17.8	17.8	0.0	0	Negligible		
R63	15.9	15.9	0.0	0	Negligible		

Table 11.37: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

* Discrepancies in changes due to rounding effects.

Table 11.38: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R61	15.0	15.0	0.0	0	Negligible		

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R62	15.1	15.1	0.0	0	Negligible	
R63	14.7	14.7	0.0	0	Negligible	

* Discrepancies in changes due to rounding effects.

Table 11.39: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R61	9.4	9.4	0.0	0	Negligible		
R62	9.5	9.5	0.0	0	Negligible		
R63	9.2	9.2	0.0	0	Negligible		

2036 Future Year

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R61	14.8	14.8	0.0	0	Negligible	
R62	15.0	15.0	0.0	0	Negligible	
R63	13.7	13.7	0.0	0	Negligible	

Table 11.40 Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Table 11.41:	Predicted	annual	mean	\textbf{PM}_{10}	concentrations	and	HNRFI	impact	at existing	receptor
locations.										

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R61	15.0	15.0	0.0	0	Negligible		
R62	15.1	15.1	0.0	0	Negligible		
R63	14.6	14.6	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects.

Table 11.42: Predicted annual mean PM_{2.5} concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R61	9.4	9.4	0.0	0	Negligible		
R62	9.5	9.5	0.0	0	Negligible		

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)							
	Scenario 6: 2036 Without HNRFI (µg.m ⁻³)	Scenario 7: 2036 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R63	9.2	9.2	0.0	0	Negligible			

* Discrepancies in changes due to rounding effects.

Harborough District Council

2019 Base and Model Verification Year

Table 11.43: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}			
R53	11.8	13.9	8.8			
R64	19.1	16.4	10.0			
R65	23.8	17.9	10.7			
R66	14.7	15.2	9.3			
R67	28.9	18.4	11.1			

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}			
R68	25.6	16.8	10.4			
R69	13.3	14.6	9.0			
R70	14.0	14.8	9.1			
R71	14.0	14.8	9.1			
R72	14.5	14.4	9.2			
R73	14.2	14.4	9.1			
R74	14.0	14.7	9.4			
R75	13.4	14.2	9.0			
R76	13.8	14.3	9.0			
R77	17.6	15.5	9.8			

2026 Opening Year

Fable 11.44: Predicted annual mean NO $_2$ concentrations and HNRFI impact at existing receptor an	d
monitoring locations.	

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R53	8.7	8.7	+0.1	0	Negligible		
R64	11.3	11.4	+0.1	0	Negligible		
R65	14.5	15.0	+0.5	+1	Negligible		
R66	10.0	10.2	+0.2	+1	Negligible		
R67	17.2	17.3	+0.1	0	Negligible		
R68	14.3	15.4	+1.1	+3	Negligible		
R69	9.4	9.6	+0.2	0	Negligible		
R70	9.7	9.7	+0.1	0	Negligible		
R71	9.8	10.1	+0.3	+1	Negligible		
R72	10.6	10.7	+0.1	0	Negligible		
R73	10.5	10.6	+0.1	0	Negligible		

Receptor	Predicted NO₂ Concentration (µg.m ⁻³)							
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R74	9.8	10.0	+0.2	0	Negligible			
R75	9.6	9.5	0.0	0	Negligible			
R76	9.7	9.6	-0.1	0	Negligible			
R77	12.0	12.3	+0.3	+1	Negligible			

* Discrepancies in changes due to rounding effects.

Table 11.45: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted PM ₁₀ Concentration (μg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R53	12.9	12.9	0.0	0	Negligible		
R64	15.2	15.4	+0.2	+1	Negligible		
R65	17.1	17.7	+0.5	+1	Negligible		

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)							
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R66	14.3	14.5	+0.2	0	Negligible			
R67	17.1	17.2	0.0	0	Negligible			
R68	15.5	15.7	+0.2	0	Negligible			
R69	13.7	13.7	0.0	0	Negligible			
R70	13.8	13.8	0.0	0	Negligible			
R71	13.8	13.9	+0.1	0	Negligible			
R72	13.6	13.6	0.0	0	Negligible			
R73	13.6	13.6	0.0	0	Negligible			
R74	13.7	13.8	0.0	0	Negligible			
R75	13.3	13.2	0.0	0	Negligible			
R76	13.3	13.3	0.0	0	Negligible			
R77	14.6	14.7	+0.1	0	Negligible			

Table 11.46: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)							
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R53	8.0	8.0	0.0	0	Negligible			
R64	9.0	9.1	+0.1	+1	Negligible			
R65	10.0	10.3	+0.3	+1	Negligible			
R66	8.6	8.6	+0.1	0	Negligible			
R67	10.1	10.1	0.0	0	Negligible			
R68	9.4	9.5	+0.1	0	Negligible			
R69	8.2	8.3	0.0	0	Negligible			
R70	8.3	8.3	0.0	0	Negligible			
R71	8.3	8.4	+0.1	0	Negligible			
R72	8.4	8.5	0.0	0	Negligible			
R73	8.4	8.4	0.0	0	Negligible			
R74	8.5	8.6	0.0	0	Negligible			

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R75	8.2	8.2	0.0	0	Negligible		
R76	8.2	8.2	0.0	0	Negligible		
R77	9.0	9.1	+0.1	0	Negligible		

* Discrepancies in changes due to rounding effects.

2036 Opening Year

Table 11.47: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted NO ₂ Concentration (μg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R53	7.8	7.9	0.0	0	Negligible	
R64	9.3	9.4	+0.1	0	Negligible	

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R65	12.0	12.2	+0.3	+1	Negligible	
R66	8.7	8.8	+0.1	0	Negligible	
R67	13.7	13.8	0.0	0	Negligible	
R68	9.8	11.7	+2.0	+5	Negligible	
R69	8.5	8.6	+0.2	0	Negligible	
R70	8.6	8.7	+0.1	0	Negligible	
R71	8.9	9.2	+0.3	+1	Negligible	
R72	9.3	9.4	0.0	0	Negligible	
R73	9.2	9.3	0.0	0	Negligible	
R74	8.6	8.7	+0.1	0	Negligible	
R75	8.4	8.4	0.0	0	Negligible	
R76	8.5	8.5	0.0	0	Negligible	
R77	10.3	10.4	+0.1	0	Negligible	

Table 11.48: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor ar	۱d
monitoring locations.	

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R53	12.8	12.9	0.0	0	Negligible	
R64	15.2	15.4	+0.2	0	Negligible	
R65	17.5	17.9	+0.5	+1	Negligible	
R66	14.4	14.5	+0.2	0	Negligible	
R67	17.2	17.2	0.0	0	Negligible	
R68	15.1	15.5	+0.4	+1	Negligible	
R69	13.8	13.8	+0.1	0	Negligible	
R70	13.9	13.9	0.0	0	Negligible	
R71	14.0	14.1	+0.1	0	Negligible	
R72	13.7	13.7	0.0	0	Negligible	
R73	13.7	13.7	0.0	0	Negligible	

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R74	13.7	13.8	0.0	0	Negligible	
R75	13.3	13.3	0.0	0	Negligible	
R76	13.3	13.3	0.0	0	Negligible	
R77	14.8	14.9	+0.1	0	Negligible	

* Discrepancies in changes due to rounding effects.

Table 11.49: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted $PM_{2.5}$ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R53	8.0	8.0	0.0	0	Negligible	
R64	9.0	9.1	+0.1	+1	Negligible	

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R65	10.1	10.4	+0.2	+1	Negligible	
R66	8.6	8.7	+0.1	0	Negligible	
R67	10.1	10.1	0.0	0	Negligible	
R68	9.1	9.3	+0.2	+1	Negligible	
R69	8.3	8.3	0.0	0	Negligible	
R70	8.3	8.3	0.0	0	Negligible	
R71	8.4	8.5	+0.1	0	Negligible	
R72	8.5	8.5	0.0	0	Negligible	
R73	8.5	8.5	0.0	0	Negligible	
R74	8.5	8.5	0.0	0	Negligible	
R75	8.2	8.2	0.0	0	Negligible	
R76	8.2	8.2	0.0	0	Negligible	
R77	9.1	9.2	0.0	0	Negligible	

* Discrepancies in changes due to rounding effects.

North Warwickshire Borough Council

2019 Base and Model Verification Year

Table 11.50: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)				
	NO ₂	PM ₁₀	PM _{2.5}		
R182	14.5	13.1	8.6		
R183	16.8	13.9	8.9		
R184	17.6	14.1	9.0		
R185	13.6	13.0	8.5		
R186	13.7	13.0	8.5		
R213	31.3	18.2	11.0		

2026 Opening Year

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R182	10.6	10.6	0.0	0	Negligible	
R183	11.3	11.3	0.0	0	Negligible	
R184	11.7	11.7	0.0	0	Negligible	
R185	10.2	10.2	0.0	0	Negligible	
R186	10.2	10.2	0.0	0	Negligible	
R213	18.9	19.0	0.0	0	Negligible	

Table 11.51: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R182	12.2	12.2	0.0	0	Negligible		
R183	12.9	13.0	0.0	0	Negligible		
R184	13.1	13.2	0.0	0	Negligible		
R185	12.0	12.0	0.0	0	Negligible		
R186	12.0	12.0	0.0	0	Negligible		
R213	17.1	17.1	0.0	0	Negligible		

Table 11.52: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

	1							
Receptor		Predicted PM _{2.5} Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R182	7.8	7.8	0.0	0	Negligible			
R183	8.1	8.1	0.0	0	Negligible			
R184	8.2	8.2	0.0	0	Negligible			
R185	7.7	7.7	0.0	0	Negligible			
R186	7.7	7.7	0.0	0	Negligible			
R213	10.1	10.1	0.0	0	Negligible			

Table 11.53: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

2036 Future Year

Receptor	Predicted NO ₂ Concentration ($\mu g.m^{-3}$)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R182	9.5	9.5	0.0	0	Negligible	
R183	9.6	9.6	0.0	0	Negligible	
R184	9.9	9.9	0.0	0	Negligible	
R185	9.3	9.3	0.0	0	Negligible	
R186	9.3	9.3	0.0	0	Negligible	
R213	15.2	15.2	0.0	0	Negligible	

Table 11.54: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor locations.

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Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R182	12.1	12.1	0.0	0	Negligible		
R183	12.8	12.9	0.0	0	Negligible		
R184	13.1	13.1	0.0	0	Negligible		
R185	12.0	12.0	0.0	0	Negligible		
R186	12.0	12.0	0.0	0	Negligible		
R213	17.1	17.1	0.0	0	Negligible		

Table 11.55: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R182	7.8	7.8	0.0	0	Negligible		
R183	8.0	8.0	0.0	0	Negligible		
R184	8.1	8.2	0.0	0	Negligible		
R185	7.7	7.7	0.0	0	Negligible		
R186	7.7	7.7	0.0	0	Negligible		
R213	10.1	10.1	0.0	0	Negligible		

Table 11.56: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

North West Leicestershire District Council

2019 Base and Model Verification Year

Table 11.57 Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}			
R187	17.1	14.6	9.2			
R193	34.6	17.8	10.8			
R194	22.2	17.2	10.1			
R195	16.2	17.1	9.8			
R196	15.3	15.3	9.2			
R197	19.7	16.2	9.7			
R198	19.2	15.0	9.4			
R199	29.9	17.7	10.5			
R200	25.5	17.2	10.2			
STR11	36.1	19.0	11.1			
STR12	21.9	16.6	10.1			
STR13	21.9	16.3	9.7			

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

Italics indicates receptor relevant to short term air quality objectives only.

2026 Opening Year

Table 11.58: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted NO ₂ Concentration (μ g.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R187	11.4	11.4	0.0	0	Negligible	
R193	22.0	22.0	0.0	0	Negligible	
R194	14.5	14.5	0.0	0	Negligible	
R195	11.0	11.0	0.0	0	Negligible	
R196	10.5	10.5	0.0	0	Negligible	
R197	12.4	12.4	0.0	0	Negligible	
R198	12.3	12.4	0.0	0	Negligible	
R199	18.3	18.3	0.0	0	Negligible	
R200	16.2	16.2	0.0	0	Negligible	
STR11	22.4	22.4	0.0	0	Negligible	

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
STR12	13.8	13.8	0.0	0	Negligible		
STR13	13.4	13.4	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.59: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM ₁₀ Concentration (µg.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R187	13.6	13.6	0.0	0	Negligible			
R193	16.8	16.8	0.0	0	Negligible			
R194	16.3	16.3	0.0	0	Negligible			
R195	16.2	16.2	0.0	0	Negligible			

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R196	14.4	14.4	0.0	0	Negligible	
R197	15.3	15.3	0.0	0	Negligible	
R198	14.0	14.0	0.0	0	Negligible	
R199	16.7	16.7	0.0	0	Negligible	
R200	16.2	16.3	0.0	0	Negligible	
STR11	17.8	17.8	0.0	0	Negligible	
STR12	15.6	15.6	0.0	0	Negligible	
STR13	15.3	15.3	0.0	0	Negligible	

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.60: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R187	8.4	8.4	0.0	0	Negligible	
R193	9.9	9.9	0.0	0	Negligible	
R194	9.3	9.3	0.0	0	Negligible	
R195	9.0	9.0	0.0	0	Negligible	
R196	8.4	8.4	0.0	0	Negligible	
R197	8.9	9.0	0.0	0	Negligible	
R198	8.6	8.6	0.0	0	Negligible	
R199	9.6	9.6	0.0	0	Negligible	
R200	9.3	9.3	0.0	0	Negligible	
STR11	10.1	10.1	0.0	0	Negligible	
STR12	9.3	9.3	0.0	0	Negligible	
STR13	8.9	8.9	0.0	0	Negligible	

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

2036 Future Year

Table 11.61: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R187	9.7	9.8	0.0	0	Negligible	
R193	17.9	17.9	0.0	0	Negligible	
R194	12.1	12.1	0.0	0	Negligible	
R195	9.5	9.5	0.0	0	Negligible	
R196	9.1	9.1	0.0	0	Negligible	
R197	10.3	10.3	0.0	0	Negligible	
R198	10.4	10.4	0.0	0	Negligible	
R199	14.7	14.7	0.0	0	Negligible	
R200	13.2	13.2	0.0	0	Negligible	
STR11	18.2	18.2	0.0	0	Negligible	

Receptor	Predicted NO ₂ Concentration ($\mu g.m^{-3}$)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
STR12	11.5	11.5	0.0	0	Negligible		
STR13	10.9	10.9	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.62: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R187	13.6	13.6	0.0	0	Negligible			
R193	16.8	16.8	0.0	0	Negligible			
R194	16.3	16.3	0.0	0	Negligible			
R195	16.1	16.1	0.0	0	Negligible			

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R196	14.4	14.4	0.0	0	Negligible	
R197	15.3	15.3	0.0	0	Negligible	
R198	14.0	14.1	0.0	0	Negligible	
R199	16.7	16.7	0.0	0	Negligible	
R200	16.2	16.2	0.0	0	Negligible	
STR11	17.8	17.8	0.0	0	Negligible	
STR12	15.6	15.6	0.0	0	Negligible	
STR13	15.3	15.3	0.0	0	Negligible	

* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Table 11.63:	Predicted	annual	mean	PM _{2.5}	concentrat	ions and	HNRFI	impact	at existing	receptor
locations.										

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R187	8.3	8.3	0.0	0	Negligible	
R193	9.8	9.8	0.0	0	Negligible	
R194	9.3	9.3	0.0	0	Negligible	
R195	9.0	9.0	0.0	0	Negligible	
R196	8.4	8.4	0.0	0	Negligible	
R197	8.9	8.9	0.0	0	Negligible	
R198	8.6	8.6	0.0	0	Negligible	
R199	9.6	9.6	0.0	0	Negligible	
R200	9.3	9.3	0.0	0	Negligible	
STR11	10.1	10.1	0.0	0	Negligible	
STR12	9.3	9.3	0.0	0	Negligible	
STR13	8.8	8.9	0.0	0	Negligible	

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* Discrepancies in changes due to rounding effects. Italics indicates receptor relevant to short term air quality objectives only.

Nuneaton and Bedworth Borough Council

2019 Base and Model Verification Year

Table 11.64 Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM 10	PM _{2.5}			
R189	34.8	18.4	11.9			
R190	26.3	17.5	11.3			
R191	21.8	15.9	10.1			
R192	23.3	16.3	10.3			
STR10	22.4	16.1	10.2			

Italics indicates receptor relevant to short term air quality objectives only.
2026 Opening Year

Receptor		Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (μg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R189	23.3	23.3	+0.1	0	Negligible		
R190	17.8	17.8	0.0	0	Negligible		
R191	14.7	14.8	0.0	0	Negligible		
R192	15.4	15.5	+0.1	0	Negligible		
STR10	15.0	15.0	+0.1	0	Negligible		

Table 11.65: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R189	17.3	17.3	0.0	0	Negligible	
R190	16.4	16.5	0.0	0	Negligible	
R191	14.8	14.8	0.0	0	Negligible	
R192	15.1	15.2	+0.1	0	Negligible	
STR10	14.8	14.9	+0.1	0	Negligible	

Table 11.66: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R189	10.9	11.0	0.0	0	Negligible		
R190	10.4	10.4	0.0	0	Negligible		
R191	9.2	9.2	0.0	0	Negligible		
R192	9.4	9.4	0.0	0	Negligible		
STR10	9.2	9.3	0.0	0	Negligible		

Table 11.67: Predicted annual mean PM_{2.5} concentrations and HNRFI impact at existing receptor locations.

2036 Future Year

Receptor		Predicted NO₂ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R189	19.8	19.8	+0.1	0	Negligible		
R190	15.3	15.3	0.0	0	Negligible		
R191	12.9	13.0	0.0	0	Negligible		
R192	13.4	13.4	0.0	0	Negligible		
STR10	13.1	13.1	0.0	0	Negligible		

Table 11.68: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM ₁₀ Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R189	17.4	17.4	0.0	0	Negligible		
R190	16.5	16.5	0.0	0	Negligible		
R191	14.8	14.8	0.0	0	Negligible		
R192	15.1	15.2	0.0	0	Negligible		
STR10	14.8	14.8	0.0	0	Negligible		

Table 11.69: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R189	11.0	11.0	0.0	0	Negligible		
R190	10.4	10.4	0.0	0	Negligible		
R191	9.2	9.2	0.0	0	Negligible		
R192	9.4	9.4	0.0	0	Negligible		
STR10	9.2	9.2	0.0	0	Negligible		

Table 11.70: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

Rugby Borough Council

2019 Base and Model Verification Year

Table 11.71: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}			
R201	40.5	18.2	11.5			
R202	40.7	18.5	11.6			
R203	37.4	18.6	11.6			
R204	30.5	18.3	11.2			
R205	25.8	19.6	11.5			
R206	28.5	20.0	11.8			
R207	21.3	16.4	10.1			
R208	21.5	15.6	9.8			
R209	18.4	14.9	9.4			
R210	19.5	15.1	9.6			
R211	16.2	15.5	9.7			
R212	17.6	15.8	9.8			

2026 Opening Year

Table 11.72: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor		Predicted NO ₂ Concentration (μ g.m ⁻³)				
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R201	24.9	25.8	+0.9	+2	Negligible	
R202	25.0	25.9	+0.9	+2	Negligible	
R203	21.9	21.9	+0.1	0	Negligible	
R204	18.6	18.7	+0.1	0	Negligible	
R205	14.5	16.9	+2.4	+6	slight adverse	
R206	16.0	16.5	+0.5	+1	Negligible	
R207	13.9	14.4	+0.5	+1	Negligible	
R208	14.2	14.8	+0.6	+2	Negligible	
R209	12.7	13.1	+0.4	+1	Negligible	
R210	13.5	13.6	0.0	0	Negligible	

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R211	10.5	10.6	+0.1	0	Negligible	
R212	11.2	11.3	+0.1	0	Negligible	

* Discrepancies in changes due to rounding effects.

Table 11.73: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor		Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R201	17.0	17.3	+0.3	+1	Negligible		
R202	17.4	17.7	+0.3	+1	Negligible		
R203	17.4	17.4	0.0	0	Negligible		
R204	17.1	17.1	0.0	0	Negligible		

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Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R205	18.2	18.8	+0.6	+2	Negligible	
R206	18.6	18.8	+0.1	0	Negligible	
R207	15.4	15.5	+0.2	0	Negligible	
R208	14.6	14.9	+0.3	+1	Negligible	
R209	13.9	14.0	+0.2	0	Negligible	
R210	14.1	14.1	0.0	0	Negligible	
R211	14.5	14.6	+0.1	0	Negligible	
R212	14.8	14.9	+0.1	0	Negligible	

* Discrepancies in changes due to rounding effects.

Table 11.74: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R201	10.5	10.7	+0.2	+1	Negligible		
R202	10.5	10.8	+0.3	+1	Negligible		
R203	10.5	10.5	0.0	0	Negligible		
R204	10.2	10.2	0.0	0	Negligible		
R205	10.4	10.8	+0.4	+2	Negligible		
R206	10.6	10.7	+0.1	0	Negligible		
R207	9.2	9.3	+0.1	0	Negligible		
R208	9.0	9.1	+0.2	+1	Negligible		
R209	8.6	8.6	+0.1	0	Negligible		
R210	8.7	8.7	0.0	0	Negligible		
R211	8.8	8.9	+0.1	0	Negligible		
R212	9.0	9.1	+0.1	0	Negligible		

* Discrepancies in changes due to rounding effects

2036 Future Year

Table 11.75: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)				
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact
R201	19.4	20.2	+0.7	+2	Negligible
R202	19.6	20.2	+0.6	+1	Negligible
R203	17.1	17.1	0.0	0	Negligible
R204	15.0	15.1	+0.1	0	Negligible
R205	11.8	13.6	+1.8	+5	Negligible
R206	13.2	13.6	+0.4	+1	Negligible
R207	11.7	12.1	+0.4	+1	Negligible
R208	12.2	12.8	+0.6	+2	Negligible
R209	11.2	11.5	+0.4	+1	Negligible
R210	11.9	12.0	0.0	0	Negligible

Receptor	Predicted NO ₂ Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R211	9.0	9.0	0.0	0	Negligible		
R212	9.4	9.5	0.0	0	Negligible		

* Discrepancies in changes due to rounding effects.

Table 11.76: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R201	17.2	17.5	+0.3	+1	Negligible	
R202	17.6	17.8	+0.3	+1	Negligible	
R203	17.4	17.4	0.0	0	Negligible	
R204	17.1	17.1	0.0	0	Negligible	

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Receptor	Predicted PM ₁₀ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R205	18.2	18.9	+0.7	+2	Negligible	
R206	18.9	19.0	+0.2	0	Negligible	
R207	15.4	15.6	+0.2	0	Negligible	
R208	14.7	15.0	+0.4	+1	Negligible	
R209	13.9	14.1	+0.2	+1	Negligible	
R210	14.3	14.2	0.0	0	Negligible	
R211	14.5	14.5	+0.1	0	Negligible	
R212	14.8	14.9	+0.1	0	Negligible	

* Discrepancies in changes due to rounding effects.

Table 11.77: Predicted annual mean PM_{2.5} concentrations and HNRFI impact at existing receptor and monitoring locations.

Receptor	Predicted PM _{2.5} Concentration (μ g.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (μg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R201	10.6	10.7	+0.2	+1	Negligible		
R202	10.6	10.8	+0.2	+1	Negligible		
R203	10.5	10.5	0.0	0	Negligible		
R204	10.2	10.2	0.0	0	Negligible		
R205	10.4	10.7	+0.4	+2	Negligible		
R206	10.7	10.8	+0.1	0	Negligible		
R207	9.2	9.3	+0.1	0	Negligible		
R208	9.0	9.2	+0.2	+1	Negligible		
R209	8.5	8.7	+0.1	+1	Negligible		
R210	8.8	8.8	0.0	0	Negligible		
R211	8.8	8.8	0.0	0	Negligible		
R212	9.0	9.0	+0.1	0	Negligible		

* Discrepancies in changes due to rounding effects.

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2019 Base and Model Verification Year

Table 11.78: Predicted annual mean pollutant concentrations for Scenario 1: 2019 Base and ModelVerification Year at existing receptor locations.

Existing Receptor	Scenario 1: 2019 Base and Model Verification Year Predicted Annual Mean Pollutant Concentrations (µg.m ⁻³)					
	NO ₂	PM ₁₀	PM _{2.5}			
R214	30.2	17.9	11.4			
R215	25.3	16.6	10.7			
R216	17.7	15.2	9.9			
R217	34.9	18.1	11.7			
R218	27.7	17.3	11.1			
STR9	18.7	15.8	10.1			

Italics indicates receptor relevant to short term air quality objectives only.

2026 Opening Year

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)						
	Scenario 4: 2026 Without HNRFI (µg.m ⁻³)	Scenario 5: 2026 With HNRFI (µg.m ⁻³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R214	18.7	18.6	0.0	0	Negligible		
R215	16.4	16.4	0.0	0	Negligible		
R216	12.7	12.7	0.0	0	Negligible		
R217	22.1	22.1	0.0	0	Negligible		
R218	17.7	17.7	0.0	0	Negligible		
STR9	12.9	12.9	0.0	0	Negligible		

Table 11.79: Predicted annual mean NO_2 concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM_{10} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R214	16.8	16.9	0.0	0	Negligible	
R215	15.6	15.6	0.0	0	Negligible	
R216	14.2	14.3	0.0	0	Negligible	
R217	17.0	17.1	0.0	0	Negligible	
R218	16.3	16.3	0.0	0	Negligible	
STR9	14.8	14.8	0.0	0	Negligible	

Table 11.80: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM _{2.5} Concentration (µg.m ⁻³)					
	Scenario 4: 2026 Without HNRFI (µg.m ⁻ ³)	Scenario 5: 2026 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R214	10.4	10.5	0.0	0	Negligible		
R215	9.8	9.9	0.0	0	Negligible		
R216	9.1	9.1	0.0	0	Negligible		
R217	10.7	10.8	0.0	0	Negligible		
R218	10.2	10.2	0.0	0	Negligible		
STR9	9.3	9.3	0.0	0	Negligible		

Table 11.81: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.

2036 Future Year

Receptor	Predicted NO ₂ Concentration (μ g.m ⁻³)					
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact	
R214	14.8	14.8	0.0	0	Negligible	
R215	13.6	13.6	0.0	0	Negligible	
R216	11.3	11.2	0.0	0	Negligible	
R217	17.9	17.9	-0.1	0	Negligible	
R218	14.6	14.6	-0.1	0	Negligible	
STR9	11.1	11.1	0.0	0	Negligible	

Table 11.82: Predicted annual mean NO₂ concentrations and HNRFI impact at existing receptor locations.

Receptor		Predicted PM ₁₀ Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (μg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact			
R214	16.8	16.8	0.0	0	Negligible			
R215	15.5	15.6	0.0	0	Negligible			
R216	14.2	14.2	0.0	0	Negligible			
R217	17.1	17.1	0.0	0	Negligible			
R218	16.3	16.3	0.0	0	Negligible			
STR9	14.7	14.8	0.0	0	Negligible			

Table 11.83: Predicted annual mean PM_{10} concentrations and HNRFI impact at existing receptor locations.

Receptor	Predicted PM _{2.5} Concentration (µg.m ⁻³)						
	Scenario 6: 2036 Without HNRFI (µg.m ⁻ ³)	Scenario 7: 2036 With HNRFI (µg.m ⁻ ³)	Concentration Change* (µg.m ⁻³)	Change in Concentration Relative to Air Quality Assessment Level (%)	Impact		
R214	10.4	10.4	0.0	0	Negligible		
R215	9.8	9.8	0.0	0	Negligible		
R216	9.1	9.1	0.0	0	Negligible		
R217	10.7	10.7	0.0	0	Negligible		
R218	10.2	10.2	0.0	0	Negligible		
STR9	9.3	9.3	0.0	0	Negligible		

Table 11.84: Predicted annual mean $PM_{2.5}$ concentrations and HNRFI impact at existing receptor locations.