

**East Midlands Gateway  
Phase 2 (EMG2)**

**Document DCO 6.8G/MCO 6.8G**

ENVIRONMENTAL STATEMENT

**Technical Appendices**

Appendix 8G

# Human Receptor Concentrations and Impacts

April 2026

08

The East Midlands Gateway Phase 2  
and Highway Order 202X and The East Midlands Gateway  
Rail Freight and Highway (Amendment) Order 202X

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**The East Midlands Gateway Phase 2 and  
Highway Order 202X and the East Midlands Gateway  
Rail Freight and Highway (Amendment) Order 202X**

**APPENDIX 8G – HUMAN RECEPTOR  
CONCENTRATIONS AND IMPACTS  
(DOCUMENT DCO 6.8G/MCO 6.8G)**

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## Appendix 8g – Human Receptor Concentrations and Impacts

### EMG2 Project Impacts

The following tables present results from the assessment of **EMG2 Project** impacts with regards to air quality on identified human receptors.

The impacts of the operational phase of the **EMG2 Project** are demonstrated in **Table 8g.1** to **Table 8g.36**.

The impacts of the construction phase are presented **Table 8g.37** to **Table 8g.54**.

The results are presented first for the 2028 'A' scenarios for each human receptor (**Table 8g.1** to **Table 8g.18**), followed by the 2028 'B' scenarios (**Table 8g.19** to **Table 8g.36**).

Under each scenario, the tables are presented first for NO<sub>2</sub> impacts, then PM<sub>10</sub> and PM<sub>2.5</sub>. Each human receptor is illustrated in **Appendix 8C (Document DCO 6.8D/MCO 6.8C)** alongside the co-ordinates for the receptor location. For each scenario and pollutant, the results are first presented for sensitive residential receptors, then for school receptors, care home receptors, medical receptors and finally Equality receptors.

Within the operational impacts tables, an assessment of future receptors on the EMG2 Project Site has also been undertaken to understand potential future exposure at the Site; these tables are presented in **Table 8g.16** to **Table 8g.18** (for the 2028 'A' scenario) and **Table 8g.34** to **Table 8g.36** (for the 2028 'B' scenario).

To note, no care home receptors were deemed necessary to assess for the construction phase.

Summary tables for the 'worst-case scenario' for each site are presented in **Table 8h.55** to **Table 8h.57**.

## 2028 1a Vs 2a EMG 2 Project Impacts

Table 8g.1: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Residential Receptors)

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
AB.R1	12.2	12.8	1%	Negligible
AB.R2	12.2	12.3	0%	Negligible
AB.R3	13.3	13.4	0%	Negligible
AB.R4	11.8	11.9	0%	Negligible
AB.R5	18.4	18.6	0%	Negligible
AB.R6	15.7	15.8	0%	Negligible
AB.R7	11.2	11.3	0%	Negligible
AB.R8	13.9	14.1	1%	Negligible
AB.R9	14.7	15.1	1%	Negligible
AB.R10	16.1	16.3	0%	Negligible
AB.R11	9.4	9.4	0%	Negligible
AB.R12	13.0	13.6	2-5%	Negligible
AB.R13	9.8	10.0	1%	Negligible
AB.R14	10.8	11.4	2-5%	Negligible
AB.R15	11.2	12.1	2-5%	Negligible
AB.R16	9.8	10.0	0%	Negligible
AB.R17	10.0	10.2	1%	Negligible
AB.R18	10.9	11.1	0%	Negligible
AB.R19	10.7	10.8	0%	Negligible
CD.R1	11.8	11.9	0%	Negligible
CD.R2	11.4	11.5	0%	Negligible
CD.R3	11.2	11.3	0%	Negligible
CD.R4	10.8	10.8	0%	Negligible
CD.R5	11.2	11.2	0%	Negligible
CD.R6	12.2	12.2	0%	Negligible
CD.R7a	14.5	14.7	1%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
CD.R7b	14.6	14.8	1%	Negligible
CD.R8	11.5	11.6	0%	Negligible
CD.R9	14.2	14.4	0%	Negligible
CD.R10	16.8	17.0	1%	Negligible
CD.R11	14.7	15.0	1%	Negligible
CD.R12	12.7	12.8	0%	Negligible
CD.R13	17.9	18.2	1%	Negligible
CD.R14	20.9	21.3	1%	Negligible
CD.R15	22.2	22.7	1%	Negligible
CD.R16	21.7	22.2	1%	Negligible
CD.R17	24.6	25.7	2-5%	Negligible
CD.R18	12.9	13.2	1%	Negligible
CD.R19	20.5	21.3	2-5%	Negligible
CD.R20	18.1	18.7	2-5%	Negligible
CD.R21	22.3	23.2	2-5%	Negligible
CD.R22	11.7	12.0	1%	Negligible
CD.R23	12.1	12.4	1%	Negligible
CD.R24	13.5	13.2	1%	Negligible
CD.R25	10.5	10.4	0%	Negligible
CD.R26	10.3	10.2	0%	Negligible
CD.R27	10.1	10.2	0%	Negligible
CD.R28	10.1	10.2	0%	Negligible
CD.R29	14.5	14.8	1%	Negligible
CD.R30	13.7	14.0	1%	Negligible
CD.R31	13.1	13.3	1%	Negligible
CD.R32	10.5	10.6	0%	Negligible
CD.R33	10.6	10.7	0%	Negligible
CD.R35	11.2	11.3	0%	Negligible
CD.R36	16.0	16.0	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
CD.R37	23.4	23.7	1%	Negligible
EF.R1	13.7	13.9	0%	Negligible
EF.R2	15.2	15.4	1%	Negligible
EF.R3	13.6	13.7	0%	Negligible
EF.R4	13.5	13.7	0%	Negligible
EF.R5	14.3	14.4	0%	Negligible
EF.R6	11.9	12.0	0%	Negligible
EF.R7	12.5	12.6	0%	Negligible
EF.R8	11.2	11.3	0%	Negligible
EF.R9	12.6	12.7	0%	Negligible
EF.R10	13.4	13.5	0%	Negligible
EF.R11	13.4	13.4	0%	Negligible
EF.R12	14.0	14.0	0%	Negligible
EF.R13	13.5	13.5	0%	Negligible
EF.R14	13.6	13.7	0%	Negligible
EF.R15	14.5	14.6	0%	Negligible
EF.R16	12.7	12.8	0%	Negligible
EF.R17	13.6	13.7	0%	Negligible
EF.R18	13.0	13.1	0%	Negligible
EF.R19	12.2	12.4	0%	Negligible
EF.R20	11.2	11.3	0%	Negligible
GLN.R1	17.8	17.8	0%	Negligible
GLN.R2	14.2	14.2	0%	Negligible
GLN.R3	14.6	14.7	0%	Negligible
GLN.R4	16.4	16.4	0%	Negligible
GLN.R5	16.8	16.9	0%	Negligible
GLN.R6	17.0	17.1	0%	Negligible
GLN.R7	14.4	14.4	0%	Negligible
GLN.R8	12.2	12.2	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
GLN.R9	14.4	14.4	0%	Negligible
GLN.R10	13.7	13.7	0%	Negligible
GLN.R11	15.1	15.1	0%	Negligible
GLN.R12	14.7	14.8	0%	Negligible
GLN.R13	14.4	14.4	0%	Negligible
GLN.R14	13.7	13.8	0%	Negligible
GLN.R15	9.6	9.6	0%	Negligible
GLN.R16	12.6	12.6	0%	Negligible
GLN.R17	12.2	12.2	0%	Negligible
GLN.R18	11.7	11.7	0%	Negligible
GLN.R19	12.2	12.2	0%	Negligible
GLN.R20	12.2	12.2	0%	Negligible
GLN.R21	13.7	13.7	0%	Negligible
GLN.R22	15.1	15.1	0%	Negligible
GLN.R23	15.8	15.8	0%	Negligible
GLN.R24	11.0	11.1	0%	Negligible
GLN.R25	11.8	11.8	0%	Negligible
GLN.R26	11.6	11.6	0%	Negligible
GLN.R27	9.6	9.7	0%	Negligible
GLN.R28	8.9	9.0	0%	Negligible
GLN.R29	11.6	11.7	0%	Negligible
GLN.R30	10.7	10.8	0%	Negligible
GLN.R31	10.3	10.3	0%	Negligible
GLN.R32	10.8	10.9	0%	Negligible
GLN.R33	11.6	11.7	0%	Negligible
GLN.R34	11.6	11.6	0%	Negligible
GLN.R35	14.1	14.2	0%	Negligible
GLN.R36	11.7	11.8	0%	Negligible
GLN.R37	11.0	11.0	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
GLN.R38	14.0	14.0	0%	Negligible
H.R1	12.8	12.9	0%	Negligible
H.R2	12.3	12.4	0%	Negligible
MN.R1	26.9	27.3	1%	Negligible
MN.R2	16.6	16.9	1%	Negligible
MN.R3	16.2	16.5	1%	Negligible
MN.R4	21.6	22.7	2-5%	Negligible
MN.R5	24.0	24.5	1%	Negligible
MN.R6	21.6	22.0	1%	Negligible
MN.R7	18.7	19.0	1%	Negligible
MN.R8	17.8	18.0	1%	Negligible
MN.R9	13.7	13.8	0%	Negligible
MN.R10	17.2	17.4	1%	Negligible
MN.R11	15.8	15.9	0%	Negligible
MN.R12	18.1	18.1	0%	Negligible
MN.R13	16.9	16.9	0%	Negligible
MN.R14	22.9	23.2	1%	Negligible
MN.R15	14.5	14.7	1%	Negligible
OP.R1	29.1	29.2	0%	Negligible
OP.R3	30.2	30.4	0%	Negligible
OP.R2	32.6	32.8	1%	Negligible
OP.R4	30.5	30.7	0%	Negligible
OP.R5	27.5	27.7	0%	Negligible
OP.R6	19.2	19.3	0%	Negligible
OP.R7	19.4	19.6	0%	Negligible
OP.R8	16.8	16.9	0%	Negligible
OP.R9	15.1	15.1	0%	Negligible
OP.R10	16.6	16.6	0%	Negligible
OP.R11	13.4	13.5	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.R12	13.3	13.4	0%	Negligible
OP.R13	16.3	16.4	0%	Negligible
OP.R15	19.5	19.5	0%	Negligible
OP.R16	18.8	18.8	0%	Negligible
OP.R17	18.4	18.4	0%	Negligible
OP.R18	18.1	18.1	0%	Negligible
OP.R19	17.6	17.6	0%	Negligible
OP.R20	18.1	18.1	0%	Negligible
OP.R21	17.4	17.5	0%	Negligible
OP.R22	19.8	19.8	0%	Negligible
OP.R23	20.1	20.2	0%	Negligible
OP.R24	21.0	21.0	0%	Negligible
OP.R25	15.9	16.0	0%	Negligible
OP.R26	16.3	16.3	0%	Negligible
OP.R28	14.2	14.2	0%	Negligible
OP.R27	15.8	15.8	0%	Negligible
QR.R1	9.7	9.7	0%	Negligible
QR.R2	12.9	13.0	0%	Negligible
QR.R3	13.6	13.8	0%	Negligible
QR.R4	12.3	12.4	0%	Negligible
QR.R5	10.5	10.5	0%	Negligible
QR.R6	11.1	11.1	0%	Negligible
QR.R7	27.2	28.9	2-5%	Negligible
QR.R8	30.6	32.5	2-5%	Slight
QR.R9	16.7	17.4	2-5%	Negligible
QR.R10	31.2	33.2	2-5%	Slight
QR.R11	21.9	23.2	2-5%	Negligible
QR.R12	14.8	15.3	1%	Negligible
QR.R13	28.1	29.9	2-5%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
QR.R14	27.3	29.1	2-5%	Negligible
QR.R15	30.0	32.0	2-5%	Slight
QR.R16	20.2	21.3	2-5%	Negligible
QR.R17	21.9	23.2	2-5%	Negligible
QR.R18	21.4	22.6	2-5%	Negligible
QR.R19	27.9	29.8	2-5%	Negligible
QR.R20	30.7	32.8	2-5%	Slight
QR.R21	32.8	35.0	6-10%	Moderate
QR.R22	34.0	36.3	6-10%	Moderate
QR.R23	32.0	34.1	2-5%	Slight
QR.R24	31.9	34.0	2-5%	Slight
QR.R25	12.1	12.1	0%	Negligible
QR.R26	10.9	11.0	0%	Negligible
QR.R27	11.5	11.5	0%	Negligible
QR.R28	11.0	11.0	0%	Negligible
QR.R29	13.5	13.5	0%	Negligible
QR.R30	13.3	13.4	0%	Negligible
QR.R31	12.8	12.9	0%	Negligible
QR.R32	13.3	13.4	0%	Negligible
QR.R33	14.5	14.7	0%	Negligible
QR.R34	15.6	15.8	0%	Negligible
QR.R35	16.0	16.2	0%	Negligible
QR.R36	17.3	17.6	1%	Negligible
QR.R37	13.3	13.4	0%	Negligible
QR.R38	10.5	10.5	0%	Negligible
QR.R39	10.2	10.2	0%	Negligible
QR.R40	10.3	10.4	0%	Negligible
QR.R41	10.3	10.3	0%	Negligible
QR.R42	10.6	10.6	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
QR.R43	10.8	10.8	0%	Negligible
QR.R44	10.8	10.8	0%	Negligible
QR.R45	13.2	13.2	0%	Negligible
QR.R46	11.1	11.1	0%	Negligible
QR.R47	12.4	12.4	0%	Negligible
QR.R48	11.7	11.7	0%	Negligible
QR.R49	12.3	12.4	0%	Negligible
QR.R50	12.2	12.2	0%	Negligible
TK.R1	14.4	14.4	0%	Negligible
TK.R2	10.1	10.1	0%	Negligible
TK.R3	10.7	10.8	0%	Negligible
TK.R4	9.8	9.8	0%	Negligible
TK.R5	12.1	12.2	0%	Negligible
TK.R6	13.3	13.3	0%	Negligible
TK.R7	10.6	10.6	0%	Negligible
TK.R8	8.4	8.4	0%	Negligible
U.R1	10.6	10.6	0%	Negligible
U.R2	9.5	9.5	0%	Negligible
U.R3	9.6	9.7	0%	Negligible
U.R4	10.0	10.0	0%	Negligible
U.R5	10.4	10.5	0%	Negligible
U.R6	9.7	9.8	0%	Negligible
VW.R1a	10.8	10.8	0%	Negligible
VW.R1b	10.2	10.2	0%	Negligible
VW.R2	9.2	9.2	0%	Negligible
VW.R3	9.7	9.7	0%	Negligible
VW.R4	10.3	10.4	0%	Negligible
VW.R5	10.3	10.4	0%	Negligible
VW.R6	9.2	9.2	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
VW.R7	14.3	14.5	0%	Negligible
VW.R8	10.5	10.5	0%	Negligible
VW.R9	10.8	10.9	0%	Negligible
VW.R10	10.9	11.0	0%	Negligible
VW.R11	11.0	11.1	0%	Negligible
VW.R12	11.1	11.3	1%	Negligible
VW.R13	12.4	12.6	0%	Negligible
VW.R14	18.1	18.7	2-5%	Negligible
VW.R15	15.7	16.2	1%	Negligible
VW.R16	15.1	15.5	1%	Negligible
VW.R17	16.3	16.8	1%	Negligible
VW.R18	19.6	20.4	2-5%	Negligible
VW.R19	19.8	20.7	2-5%	Negligible
VW.R20	16.6	17.2	1%	Negligible
VW.R21	16.6	17.2	1%	Negligible
VW.R22	17.0	17.6	2-5%	Negligible
VW.R23	18.5	19.3	2-5%	Negligible
VW.R24	22.9	24.0	2-5%	Negligible
VW.R25	10.9	11.0	0%	Negligible
VW.R26	18.5	19.2	2-5%	Negligible
VW.R27	14.4	14.8	1%	Negligible
VW.R28	11.6	11.9	1%	Negligible
VW.R29	11.6	11.9	1%	Negligible
VW.R30	11.1	11.3	1%	Negligible
VW.R31	13.5	13.6	0%	Negligible
VW.R32	14.2	14.3	0%	Negligible
VW.R33	14.4	14.4	0%	Negligible
VW.R34	13.7	13.7	0%	Negligible
VW.R35	16.4	16.5	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
X.R1a	19.8	19.9	0%	Negligible
X.R1b	16.2	16.3	0%	Negligible
X.R2	16.2	16.2	0%	Negligible
X.R3	17.2	17.3	0%	Negligible
X.R4	13.2	13.2	0%	Negligible
X.R5	12.2	12.3	0%	Negligible
X.R6	10.2	10.2	0%	Negligible
YZ.R1	8.3	8.4	0%	Negligible
YZ.R2	8.9	9.1	0%	Negligible
YZ.R3	15.6	16.5	2-5%	Negligible
YZ.R4	9.1	9.3	1%	Negligible
YZ.R5	11.9	12.7	2-5%	Negligible
YZ.R6	11.1	11.7	1%	Negligible
YZ.R7	11.9	12.3	1%	Negligible
YZ.R8	12.5	12.6	0%	Negligible
YZ.R9	10.1	10.3	0%	Negligible
YZ.R10	9.5	9.9	1%	Negligible
YZ.R11	14.4	14.7	1%	Negligible
YZ.R12	10.8	11.0	0%	Negligible
YZ.R13	9.3	9.5	0%	Negligible
YZ.R14	9.1	9.3	0%	Negligible
YZ.R15	10.7	10.7	0%	Negligible
YZ.R16	11.0	11.3	1%	Negligible
YZ.R17	13.2	13.6	1%	Negligible
YZ.R18	9.4	9.6	0%	Negligible
YZ.R19	11.6	12.0	1%	Negligible
YZ.R20	10.5	10.8	1%	Negligible
YZ.R21	10.2	10.4	0%	Negligible
YZ.R22	12.1	12.3	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
YZ.R23	15.0	15.1	0%	Negligible
YZ.R24	11.8	12.0	1%	Negligible
YZ.R25	11.7	11.9	1%	Negligible
YZ.R26	16.4	16.5	0%	Negligible
YZ.R27	15.6	15.7	0%	Negligible
YZ.R28	14.3	14.4	0%	Negligible
YZ.R29	10.7	10.7	0%	Negligible
YZ.R30	13.6	13.7	0%	Negligible
YZ.R31	12.8	13.1	1%	Negligible
YZ.R32	15.0	15.2	1%	Negligible
YZ.R33	11.1	11.1	0%	Negligible
YZ.R34	11.9	12.0	0%	Negligible
YZ.R35	11.8	12.0	0%	Negligible

Since the results in **Table 8g.1** are Negligible for all receptors aside from those in the Castle Donington AQMA (prefixed QR), a detailed **Figure 8g.1** is provided below, illustrating the impacts within the most impacted area of Castle Donington.

Figure 8g.1: 1a vs 2a NO<sub>2</sub> Impacts – Castle Donington (Human Receptors)



Table 8g.2: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (School Receptors)

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
AB.S1	12.4	13.8	2-5%	Negligible
CD.S1	10.3	10.3	0%	Negligible
QR.S1	13.7	13.8	0%	Negligible
QR.S2	10.1	10.2	0%	Negligible
VW.S1	10.3	10.4	0%	Negligible
YZ.S1	9.6	9.8	1%	Negligible

**Table 8g.3: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Care Home Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.CH1	15.4	15.4	0%	Negligible
OP.CH2	12.9	12.9	0%	Negligible
QR.CH1	10.4	10.4	0%	Negligible

**Table 8g.4: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Medical Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.MC1	16.3	16.3	0%	Negligible
VW.MC1	14.9	15.3	1%	Negligible
YZ.MC.1	8.3	8.4	0%	Negligible

**Table 8g.5: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Equality Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OS1	10.0	10.2	1%	Negligible
OS10	9.7	9.8	0%	Negligible
OS13	9.6	9.8	0%	Negligible
OS2	10.4	10.4	0%	Negligible
OS3	10.1	10.1	0%	Negligible
OS4	10.2	10.2	0%	Negligible
OS6	10.5	10.5	0%	Negligible
OS7	10.1	10.1	0%	Negligible
OS11	10.5	10.5	0%	Negligible
OS12	10.5	10.5	0%	Negligible
OS14	10.2	10.2	0%	Negligible

**Table 8g.6: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Residential Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
AB.R1	15.8	16.0	1%	Negligible
AB.R2	14.1	14.2	0%	Negligible
AB.R3	14.9	14.9	0%	Negligible
AB.R4	13.5	13.5	0%	Negligible
AB.R5	16.5	16.6	0%	Negligible
AB.R6	15.2	15.3	0%	Negligible
AB.R7	13.0	13.1	0%	Negligible
AB.R8	13.7	13.7	0%	Negligible
AB.R9	13.1	13.2	0%	Negligible
AB.R10	16.3	16.4	0%	Negligible
AB.R11	12.9	12.9	0%	Negligible
AB.R12	14.6	14.9	1%	Negligible
AB.R13	12.6	12.7	0%	Negligible
AB.R14	13.0	13.3	1%	Negligible
AB.R15	13.3	13.7	1%	Negligible
AB.R16	12.6	12.6	0%	Negligible
AB.R17	12.6	12.8	0%	Negligible
AB.R18	13.0	13.1	0%	Negligible
AB.R19	12.9	12.9	0%	Negligible
CD.R1	14.3	14.3	0%	Negligible
CD.R2	14.1	14.1	0%	Negligible
CD.R3	13.9	13.9	0%	Negligible
CD.R4	13.7	13.8	0%	Negligible
CD.R5	13.9	13.9	0%	Negligible
CD.R6	14.3	14.3	0%	Negligible
CD.R7a	15.2	15.3	0%	Negligible
CD.R7b	15.3	15.4	0%	Negligible
CD.R8	14.1	14.1	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
CD.R9	15.3	15.4	0%	Negligible
CD.R10	16.7	16.9	0%	Negligible
CD.R11	14.7	14.8	0%	Negligible
CD.R12	14.7	14.8	0%	Negligible
CD.R13	17.5	17.7	0%	Negligible
CD.R14	19.1	19.4	1%	Negligible
CD.R15	19.8	20.1	1%	Negligible
CD.R16	18.6	18.9	1%	Negligible
CD.R17	21.4	22.1	2-5%	Negligible
CD.R18	14.8	14.9	0%	Negligible
CD.R19	19.0	19.4	1%	Negligible
CD.R20	17.6	17.9	1%	Negligible
CD.R21	20.0	20.5	1%	Negligible
CD.R22	14.2	14.3	0%	Negligible
CD.R23	14.4	14.5	0%	Negligible
CD.R24	14.1	14.0	0%	Negligible
CD.R25	13.1	13.0	0%	Negligible
CD.R26	13.0	12.9	0%	Negligible
CD.R27	12.7	12.7	0%	Negligible
CD.R28	13.4	13.4	0%	Negligible
CD.R29	14.8	14.9	0%	Negligible
CD.R30	14.4	14.6	0%	Negligible
CD.R31	14.2	14.3	0%	Negligible
CD.R32	13.1	13.2	0%	Negligible
CD.R33	14.2	14.2	0%	Negligible
CD.R35	14.1	14.1	0%	Negligible
CD.R36	16.5	16.6	0%	Negligible
CD.R37	17.4	17.5	0%	Negligible
EF.R1	15.6	15.7	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
EF.R2	16.2	16.3	0%	Negligible
EF.R3	14.7	14.8	0%	Negligible
EF.R4	15.1	15.1	0%	Negligible
EF.R5	16.8	16.9	0%	Negligible
EF.R6	14.3	14.4	0%	Negligible
EF.R7	15.3	15.3	0%	Negligible
EF.R8	15.2	15.2	0%	Negligible
EF.R9	13.8	13.9	0%	Negligible
EF.R10	14.1	14.1	0%	Negligible
EF.R11	14.0	14.1	0%	Negligible
EF.R12	14.4	14.4	0%	Negligible
EF.R13	14.1	14.1	0%	Negligible
EF.R14	14.2	14.2	0%	Negligible
EF.R15	14.7	14.8	0%	Negligible
EF.R16	14.7	14.7	0%	Negligible
EF.R17	15.1	15.2	0%	Negligible
EF.R18	14.8	14.8	0%	Negligible
EF.R19	15.5	15.5	0%	Negligible
EF.R20	14.1	14.2	0%	Negligible
GLN.R1	15.2	15.2	0%	Negligible
GLN.R2	15.6	15.6	0%	Negligible
GLN.R3	15.7	15.8	0%	Negligible
GLN.R4	16.3	16.3	0%	Negligible
GLN.R5	16.4	16.5	0%	Negligible
GLN.R6	16.8	16.8	0%	Negligible
GLN.R7	16.1	16.1	0%	Negligible
GLN.R8	12.9	12.8	0%	Negligible
GLN.R9	14.2	14.2	0%	Negligible
GLN.R10	13.9	13.9	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
GLN.R11	16.2	16.2	0%	Negligible
GLN.R12	16.4	16.5	0%	Negligible
GLN.R13	16.2	16.3	0%	Negligible
GLN.R14	15.9	15.9	0%	Negligible
GLN.R15	13.5	13.5	0%	Negligible
GLN.R16	15.4	15.4	0%	Negligible
GLN.R17	15.5	15.5	0%	Negligible
GLN.R18	15.2	15.2	0%	Negligible
GLN.R19	15.5	15.5	0%	Negligible
GLN.R20	15.4	15.4	0%	Negligible
GLN.R21	15.9	15.9	0%	Negligible
GLN.R22	16.4	16.4	0%	Negligible
GLN.R23	16.6	16.6	0%	Negligible
GLN.R24	13.6	13.6	0%	Negligible
GLN.R25	15.6	15.6	0%	Negligible
GLN.R26	13.5	13.5	0%	Negligible
GLN.R27	13.2	13.3	0%	Negligible
GLN.R28	13.4	13.4	0%	Negligible
GLN.R29	13.9	13.9	0%	Negligible
GLN.R30	14.0	14.0	0%	Negligible
GLN.R31	12.6	12.6	0%	Negligible
GLN.R32	12.8	12.8	0%	Negligible
GLN.R33	13.3	13.3	0%	Negligible
GLN.R34	13.2	13.2	0%	Negligible
GLN.R35	14.2	14.2	0%	Negligible
GLN.R36	15.8	15.8	0%	Negligible
GLN.R37	15.5	15.5	0%	Negligible
GLN.R38	14.2	14.2	0%	Negligible
H.R1	15.0	15.0	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
H.R2	14.9	14.9	0%	Negligible
MN.R1	20.1	20.2	0%	Negligible
MN.R2	17.9	18.1	0%	Negligible
MN.R3	17.7	17.9	0%	Negligible
MN.R4	20.0	20.6	1%	Negligible
MN.R5	22.2	22.5	1%	Negligible
MN.R6	20.8	21.0	1%	Negligible
MN.R7	19.4	19.5	0%	Negligible
MN.R8	18.9	19.0	0%	Negligible
MN.R9	16.7	16.8	0%	Negligible
MN.R10	18.5	18.6	0%	Negligible
MN.R11	17.8	17.8	0%	Negligible
MN.R12	19.0	19.1	0%	Negligible
MN.R13	18.4	18.4	0%	Negligible
MN.R14	19.3	19.5	0%	Negligible
MN.R15	17.1	17.2	0%	Negligible
OP.R1	17.5	17.6	0%	Negligible
OP.R3	18.8	18.9	0%	Negligible
OP.R2	19.8	19.9	0%	Negligible
OP.R4	18.7	18.7	0%	Negligible
OP.R5	16.9	16.9	0%	Negligible
OP.R6	16.0	16.0	0%	Negligible
OP.R7	16.1	16.1	0%	Negligible
OP.R8	14.3	14.3	0%	Negligible
OP.R9	13.6	13.6	0%	Negligible
OP.R10	14.5	14.5	0%	Negligible
OP.R11	13.5	13.5	0%	Negligible
OP.R12	13.3	13.4	0%	Negligible
OP.R13	14.0	14.0	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.R15	13.6	13.6	0%	Negligible
OP.R16	13.4	13.4	0%	Negligible
OP.R17	13.2	13.2	0%	Negligible
OP.R18	13.6	13.6	0%	Negligible
OP.R19	13.4	13.4	0%	Negligible
OP.R20	13.5	13.5	0%	Negligible
OP.R21	13.2	13.2	0%	Negligible
OP.R22	13.7	13.7	0%	Negligible
OP.R23	13.7	13.7	0%	Negligible
OP.R24	14.0	14.0	0%	Negligible
OP.R25	13.9	13.9	0%	Negligible
OP.R26	14.0	14.0	0%	Negligible
OP.R28	13.1	13.1	0%	Negligible
OP.R27	13.5	13.5	0%	Negligible
QR.R1	13.3	13.3	0%	Negligible
QR.R2	13.8	13.8	0%	Negligible
QR.R3	14.1	14.2	0%	Negligible
QR.R4	13.8	13.8	0%	Negligible
QR.R5	12.9	12.9	0%	Negligible
QR.R6	12.8	12.8	0%	Negligible
QR.R7	21.6	22.7	2-5%	Negligible
QR.R8	23.7	25.1	2-5%	Negligible
QR.R9	15.7	16.0	1%	Negligible
QR.R10	24.2	25.6	2-5%	Negligible
QR.R11	18.5	19.3	2-5%	Negligible
QR.R12	14.7	14.9	1%	Negligible
QR.R13	22.2	23.4	2-5%	Negligible
QR.R14	21.7	22.8	2-5%	Negligible
QR.R15	23.4	24.8	2-5%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
QR.R16	17.6	18.2	2-5%	Negligible
QR.R17	18.5	19.3	2-5%	Negligible
QR.R18	18.2	18.9	2-5%	Negligible
QR.R19	22.1	23.3	2-5%	Negligible
QR.R20	23.9	25.3	2-5%	Negligible
QR.R21	25.4	26.9	2-5%	Negligible
QR.R22	26.2	27.9	2-5%	Negligible
QR.R23	24.8	26.3	2-5%	Negligible
QR.R24	24.7	26.2	2-5%	Negligible
QR.R25	14.4	14.4	0%	Negligible
QR.R26	12.8	12.8	0%	Negligible
QR.R27	13.1	13.1	0%	Negligible
QR.R28	12.8	12.9	0%	Negligible
QR.R29	13.8	13.9	0%	Negligible
QR.R30	13.7	13.8	0%	Negligible
QR.R31	13.7	13.8	0%	Negligible
QR.R32	14.0	14.0	0%	Negligible
QR.R33	14.6	14.7	0%	Negligible
QR.R34	14.4	14.5	0%	Negligible
QR.R35	14.6	14.7	0%	Negligible
QR.R36	15.3	15.5	0%	Negligible
QR.R37	13.3	13.3	0%	Negligible
QR.R38	12.9	12.9	0%	Negligible
QR.R39	12.7	12.8	0%	Negligible
QR.R40	12.8	12.8	0%	Negligible
QR.R41	12.8	12.8	0%	Negligible
QR.R42	13.4	13.4	0%	Negligible
QR.R43	14.9	14.9	0%	Negligible
QR.R44	14.9	14.9	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
QR.R45	13.9	13.9	0%	Negligible
QR.R46	12.9	12.9	0%	Negligible
QR.R47	13.5	13.5	0%	Negligible
QR.R48	13.2	13.2	0%	Negligible
QR.R49	13.5	13.5	0%	Negligible
QR.R50	13.4	13.4	0%	Negligible
TK.R1	15.0	15.0	0%	Negligible
TK.R2	13.8	13.8	0%	Negligible
TK.R3	14.2	14.3	0%	Negligible
TK.R4	12.8	12.8	0%	Negligible
TK.R5	14.3	14.3	0%	Negligible
TK.R6	15.4	15.4	0%	Negligible
TK.R7	14.5	14.5	0%	Negligible
TK.R8	13.4	13.4	0%	Negligible
U.R1	12.6	12.6	0%	Negligible
U.R2	12.1	12.1	0%	Negligible
U.R3	12.2	12.2	0%	Negligible
U.R4	12.3	12.3	0%	Negligible
U.R5	12.5	12.6	0%	Negligible
U.R6	12.2	12.2	0%	Negligible
VW.R1a	13.4	13.5	0%	Negligible
VW.R1b	13.2	13.3	0%	Negligible
VW.R2	12.9	12.9	0%	Negligible
VW.R3	13.0	13.1	0%	Negligible
VW.R4	13.6	13.6	0%	Negligible
VW.R5	13.6	13.6	0%	Negligible
VW.R6	13.1	13.1	0%	Negligible
VW.R7	17.3	17.4	0%	Negligible
VW.R8	14.1	14.1	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
VW.R9	14.3	14.3	0%	Negligible
VW.R10	14.3	14.3	0%	Negligible
VW.R11	14.3	14.4	0%	Negligible
VW.R12	14.4	14.5	0%	Negligible
VW.R13	15.0	15.0	0%	Negligible
VW.R14	17.6	17.9	1%	Negligible
VW.R15	16.5	16.7	1%	Negligible
VW.R16	16.5	16.8	1%	Negligible
VW.R17	17.2	17.5	1%	Negligible
VW.R18	19.0	19.5	1%	Negligible
VW.R19	19.2	19.7	1%	Negligible
VW.R20	17.6	18.0	1%	Negligible
VW.R21	17.4	17.7	1%	Negligible
VW.R22	17.6	17.9	1%	Negligible
VW.R23	17.8	18.2	1%	Negligible
VW.R24	20.0	20.6	1%	Negligible
VW.R25	14.3	14.4	0%	Negligible
VW.R26	17.8	18.2	1%	Negligible
VW.R27	16.2	16.4	1%	Negligible
VW.R28	14.7	14.9	0%	Negligible
VW.R29	14.8	14.9	0%	Negligible
VW.R30	14.5	14.6	0%	Negligible
VW.R31	16.7	16.7	0%	Negligible
VW.R32	17.0	17.0	0%	Negligible
VW.R33	17.2	17.2	0%	Negligible
VW.R34	15.4	15.4	0%	Negligible
VW.R35	16.8	16.9	0%	Negligible
X.R1a	15.2	15.3	0%	Negligible
X.R1b	14.3	14.3	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
X.R2	14.6	14.6	0%	Negligible
X.R3	16.0	16.1	0%	Negligible
X.R4	16.1	16.1	0%	Negligible
X.R5	13.3	13.3	0%	Negligible
X.R6	13.0	13.0	0%	Negligible
YZ.R1	12.4	12.5	0%	Negligible
YZ.R2	12.7	12.8	0%	Negligible
YZ.R3	16.7	17.4	2-5%	Negligible
YZ.R4	12.8	12.9	0%	Negligible
YZ.R5	14.5	15.0	1%	Negligible
YZ.R6	14.0	14.3	1%	Negligible
YZ.R7	14.1	14.3	1%	Negligible
YZ.R8	14.5	14.5	0%	Negligible
YZ.R9	13.3	13.4	0%	Negligible
YZ.R10	12.9	13.1	0%	Negligible
YZ.R11	15.3	15.5	0%	Negligible
YZ.R12	13.7	13.7	0%	Negligible
YZ.R13	13.0	13.0	0%	Negligible
YZ.R14	12.2	12.2	0%	Negligible
YZ.R15	12.8	12.8	0%	Negligible
YZ.R16	13.7	13.8	0%	Negligible
YZ.R17	15.2	15.4	0%	Negligible
YZ.R18	13.1	13.2	0%	Negligible
YZ.R19	14.4	14.6	1%	Negligible
YZ.R20	13.7	13.9	0%	Negligible
YZ.R21	13.3	13.4	0%	Negligible
YZ.R22	14.1	14.1	0%	Negligible
YZ.R23	15.9	15.9	0%	Negligible
YZ.R24	14.8	14.9	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
YZ.R25	14.7	14.8	0%	Negligible
YZ.R26	17.3	17.3	0%	Negligible
YZ.R27	16.8	16.8	0%	Negligible
YZ.R28	15.9	15.9	0%	Negligible
YZ.R29	13.6	13.7	0%	Negligible
YZ.R30	14.9	14.9	0%	Negligible
YZ.R31	14.8	14.9	0%	Negligible
YZ.R32	15.9	16.0	0%	Negligible
YZ.R33	14.0	14.0	0%	Negligible
YZ.R34	14.0	14.1	0%	Negligible
YZ.R35	14.3	14.3	0%	Negligible

Table 8g.7: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (School Receptors)

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
AB.S1	13.8	14.5	2-5%	Negligible
CD.S1	13.6	13.6	0%	Negligible
QR.S1	17.8	17.9	0%	Negligible
QR.S2	13.9	14.0	0%	Negligible
VW.S1	14.4	14.5	0%	Negligible
YZ.S1	12.5	12.5	0%	Negligible

Table 8g.8: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Care Home Receptors)

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.CH1	15.5	15.5	0%	Negligible
OP.CH2	14.9	15.0	0%	Negligible
QR.CH1	13.3	13.3	0%	Negligible

**Table 8g.9: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Medical Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.MC1	17.8	17.8	0%	Negligible
VW.MC1	19.8	20.4	1%	Negligible
YZ.MC.1	12.1	12.1	0%	Negligible

**Table 8g.10: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Equality Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OS1	12.6	12.8	0%	Negligible
OS10	12.5	12.5	0%	Negligible
OS13	12.5	12.6	0%	Negligible
OS2	13.2	13.2	0%	Negligible
OS3	12.7	12.7	0%	Negligible
OS4	12.9	12.9	0%	Negligible
OS6	13.4	13.4	0%	Negligible
OS7	12.7	12.7	0%	Negligible
OS11	13.4	13.4	0%	Negligible
OS12	13.2	13.3	0%	Negligible
OS14	12.9	12.9	0%	Negligible

**Table 8g.11: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Residential Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
AB.R1	7.3	7.4	1%	Negligible
AB.R2	7.2	7.2	0%	Negligible
AB.R3	7.6	7.6	0%	Negligible
AB.R4	7.1	7.1	0%	Negligible
AB.R5	8.7	8.8	0%	Negligible
AB.R6	8.0	8.1	0%	Negligible
AB.R7	6.9	6.9	0%	Negligible
AB.R8	7.0	7.1	0%	Negligible
AB.R9	6.9	7.0	0%	Negligible
AB.R10	7.7	7.7	0%	Negligible
AB.R11	6.7	6.7	0%	Negligible
AB.R12	7.4	7.6	1%	Negligible
AB.R13	6.7	6.7	0%	Negligible
AB.R14	6.9	7.1	1%	Negligible
AB.R15	7.1	7.3	1%	Negligible
AB.R16	6.7	6.7	0%	Negligible
AB.R17	6.7	6.8	0%	Negligible
AB.R18	6.9	7.0	0%	Negligible
AB.R19	6.9	6.9	0%	Negligible
CD.R1	7.5	7.6	0%	Negligible
CD.R2	7.4	7.5	0%	Negligible
CD.R3	7.4	7.4	0%	Negligible
CD.R4	7.3	7.3	0%	Negligible
CD.R5	7.3	7.3	0%	Negligible
CD.R6	7.5	7.6	0%	Negligible
CD.R7a	7.7	7.7	0%	Negligible
CD.R7b	7.7	7.8	0%	Negligible
CD.R8	7.1	7.1	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
CD.R9	7.7	7.8	0%	Negligible
CD.R10	8.5	8.5	0%	Negligible
CD.R11	7.8	7.9	0%	Negligible
CD.R12	7.8	7.8	0%	Negligible
CD.R13	9.2	9.3	0%	Negligible
CD.R14	10.1	10.2	1%	Negligible
CD.R15	10.4	10.6	1%	Negligible
CD.R16	9.8	10.0	1%	Negligible
CD.R17	11.3	11.6	2-5%	Negligible
CD.R18	7.8	7.9	0%	Negligible
CD.R19	10.0	10.2	1%	Negligible
CD.R20	9.3	9.5	1%	Negligible
CD.R21	10.5	10.8	1%	Negligible
CD.R22	7.1	7.2	0%	Negligible
CD.R23	7.2	7.3	0%	Negligible
CD.R24	7.5	7.4	0%	Negligible
CD.R25	6.8	6.8	0%	Negligible
CD.R26	6.8	6.8	0%	Negligible
CD.R27	6.6	6.6	0%	Negligible
CD.R28	6.7	6.7	0%	Negligible
CD.R29	7.6	7.7	0%	Negligible
CD.R30	7.4	7.5	0%	Negligible
CD.R31	7.2	7.3	0%	Negligible
CD.R32	6.7	6.7	0%	Negligible
CD.R33	6.9	7.0	0%	Negligible
CD.R35	7.1	7.1	0%	Negligible
CD.R36	7.7	7.8	0%	Negligible
CD.R37	8.9	8.9	0%	Negligible
EF.R1	7.7	7.7	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
EF.R2	8.0	8.1	0%	Negligible
EF.R3	7.8	7.9	0%	Negligible
EF.R4	8.0	8.1	0%	Negligible
EF.R5	8.3	8.4	0%	Negligible
EF.R6	7.6	7.7	0%	Negligible
EF.R7	7.5	7.5	0%	Negligible
EF.R8	7.4	7.5	0%	Negligible
EF.R9	7.6	7.7	0%	Negligible
EF.R10	8.6	8.6	0%	Negligible
EF.R11	8.6	8.6	0%	Negligible
EF.R12	8.7	8.7	0%	Negligible
EF.R13	8.6	8.6	0%	Negligible
EF.R14	8.7	8.7	0%	Negligible
EF.R15	8.9	9.0	0%	Negligible
EF.R16	7.5	7.5	0%	Negligible
EF.R17	7.7	7.8	0%	Negligible
EF.R18	7.6	7.6	0%	Negligible
EF.R19	8.1	8.1	0%	Negligible
EF.R20	7.0	7.1	0%	Negligible
GLN.R1	8.0	8.0	0%	Negligible
GLN.R2	8.3	8.3	0%	Negligible
GLN.R3	8.4	8.4	0%	Negligible
GLN.R4	8.7	8.8	0%	Negligible
GLN.R5	8.8	8.8	0%	Negligible
GLN.R6	9.0	9.0	0%	Negligible
GLN.R7	8.6	8.6	0%	Negligible
GLN.R8	7.2	7.2	0%	Negligible
GLN.R9	7.7	7.7	0%	Negligible
GLN.R10	7.5	7.5	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
GLN.R11	8.7	8.7	0%	Negligible
GLN.R12	8.8	8.8	0%	Negligible
GLN.R13	8.7	8.7	0%	Negligible
GLN.R14	8.5	8.5	0%	Negligible
GLN.R15	6.9	6.9	0%	Negligible
GLN.R16	8.2	8.2	0%	Negligible
GLN.R17	8.3	8.3	0%	Negligible
GLN.R18	8.1	8.1	0%	Negligible
GLN.R19	8.2	8.3	0%	Negligible
GLN.R20	8.2	8.2	0%	Negligible
GLN.R21	8.5	8.5	0%	Negligible
GLN.R22	8.8	8.8	0%	Negligible
GLN.R23	8.9	8.9	0%	Negligible
GLN.R24	7.4	7.4	0%	Negligible
GLN.R25	8.3	8.3	0%	Negligible
GLN.R26	7.2	7.2	0%	Negligible
GLN.R27	7.0	7.0	0%	Negligible
GLN.R28	6.8	6.8	0%	Negligible
GLN.R29	7.1	7.1	0%	Negligible
GLN.R30	7.1	7.1	0%	Negligible
GLN.R31	7.4	7.4	0%	Negligible
GLN.R32	7.5	7.5	0%	Negligible
GLN.R33	7.8	7.8	0%	Negligible
GLN.R34	7.7	7.7	0%	Negligible
GLN.R35	7.5	7.5	0%	Negligible
GLN.R36	8.4	8.4	0%	Negligible
GLN.R37	8.2	8.3	0%	Negligible
GLN.R38	8.0	8.0	0%	Negligible
H.R1	7.3	7.3	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
H.R2	7.2	7.2	0%	Negligible
MN.R1	9.9	10.0	1%	Negligible
MN.R2	8.5	8.6	0%	Negligible
MN.R3	8.4	8.5	0%	Negligible
MN.R4	9.6	9.9	2-5%	Negligible
MN.R5	10.8	11.0	1%	Negligible
MN.R6	10.0	10.2	1%	Negligible
MN.R7	9.3	9.4	0%	Negligible
MN.R8	9.0	9.1	0%	Negligible
MN.R9	7.9	7.9	0%	Negligible
MN.R10	8.8	8.9	0%	Negligible
MN.R11	8.5	8.5	0%	Negligible
MN.R12	9.1	9.1	0%	Negligible
MN.R13	8.8	8.8	0%	Negligible
MN.R14	9.1	9.2	0%	Negligible
MN.R15	7.8	7.8	0%	Negligible
OP.R1	10.0	10.0	0%	Negligible
OP.R3	10.7	10.7	0%	Negligible
OP.R2	11.2	11.3	0%	Negligible
OP.R4	10.6	10.7	0%	Negligible
OP.R5	9.7	9.7	0%	Negligible
OP.R6	9.2	9.2	0%	Negligible
OP.R7	9.3	9.3	0%	Negligible
OP.R8	8.3	8.3	0%	Negligible
OP.R9	7.9	7.9	0%	Negligible
OP.R10	8.4	8.4	0%	Negligible
OP.R11	7.9	7.9	0%	Negligible
OP.R12	7.9	7.9	0%	Negligible
OP.R13	8.2	8.2	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.R15	7.8	7.8	0%	Negligible
OP.R16	7.7	7.7	0%	Negligible
OP.R17	7.6	7.6	0%	Negligible
OP.R18	7.8	7.8	0%	Negligible
OP.R19	7.7	7.7	0%	Negligible
OP.R20	7.8	7.8	0%	Negligible
OP.R21	7.6	7.6	0%	Negligible
OP.R22	7.9	7.9	0%	Negligible
OP.R23	8.0	8.0	0%	Negligible
OP.R24	8.1	8.1	0%	Negligible
OP.R25	8.0	8.0	0%	Negligible
OP.R26	8.1	8.1	0%	Negligible
OP.R28	7.6	7.6	0%	Negligible
OP.R27	7.8	7.8	0%	Negligible
QR.R1	7.0	7.1	0%	Negligible
QR.R2	8.1	8.1	0%	Negligible
QR.R3	8.3	8.3	0%	Negligible
QR.R4	7.4	7.4	0%	Negligible
QR.R5	6.9	6.9	0%	Negligible
QR.R6	7.6	7.6	0%	Negligible
QR.R7	12.2	12.8	2-5%	Negligible
QR.R8	13.3	14.0	2-5%	Negligible
QR.R9	9.1	9.3	1%	Negligible
QR.R10	13.6	14.3	2-5%	Negligible
QR.R11	10.6	11.0	2-5%	Negligible
QR.R12	8.6	8.7	1%	Negligible
QR.R13	12.5	13.1	2-5%	Negligible
QR.R14	12.3	12.8	2-5%	Negligible
QR.R15	13.2	13.9	2-5%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
QR.R16	10.1	10.4	2-5%	Negligible
QR.R17	10.6	11.0	2-5%	Negligible
QR.R18	10.4	10.8	2-5%	Negligible
QR.R19	12.5	13.1	2-5%	Negligible
QR.R20	13.4	14.2	2-5%	Negligible
QR.R21	14.2	15.0	2-5%	Negligible
QR.R22	14.6	15.5	2-5%	Slight
QR.R23	13.9	14.7	2-5%	Negligible
QR.R24	13.8	14.6	2-5%	Negligible
QR.R25	8.4	8.4	0%	Negligible
QR.R26	7.6	7.6	0%	Negligible
QR.R27	7.7	7.7	0%	Negligible
QR.R28	7.6	7.6	0%	Negligible
QR.R29	8.1	8.1	0%	Negligible
QR.R30	8.0	8.1	0%	Negligible
QR.R31	8.0	8.1	0%	Negligible
QR.R32	8.2	8.2	0%	Negligible
QR.R33	8.5	8.5	0%	Negligible
QR.R34	7.8	7.9	0%	Negligible
QR.R35	7.9	8.0	0%	Negligible
QR.R36	8.3	8.4	0%	Negligible
QR.R37	7.2	7.3	0%	Negligible
QR.R38	6.9	6.9	0%	Negligible
QR.R39	6.8	6.8	0%	Negligible
QR.R40	6.9	6.9	0%	Negligible
QR.R41	6.8	6.9	0%	Negligible
QR.R42	7.1	7.1	0%	Negligible
QR.R43	7.0	7.0	0%	Negligible
QR.R44	7.0	7.0	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
QR.R45	8.1	8.2	0%	Negligible
QR.R46	7.6	7.6	0%	Negligible
QR.R47	7.9	7.9	0%	Negligible
QR.R48	7.8	7.8	0%	Negligible
QR.R49	7.9	7.9	0%	Negligible
QR.R50	7.9	7.9	0%	Negligible
TK.R1	7.5	7.5	0%	Negligible
TK.R2	6.9	6.9	0%	Negligible
TK.R3	7.1	7.1	0%	Negligible
TK.R4	6.7	6.7	0%	Negligible
TK.R5	7.3	7.3	0%	Negligible
TK.R6	7.8	7.8	0%	Negligible
TK.R7	7.3	7.3	0%	Negligible
TK.R8	6.8	6.8	0%	Negligible
U.R1	7.1	7.1	0%	Negligible
U.R2	6.9	6.9	0%	Negligible
U.R3	6.9	6.9	0%	Negligible
U.R4	7.0	7.0	0%	Negligible
U.R5	7.1	7.1	0%	Negligible
U.R6	6.9	6.9	0%	Negligible
VW.R1a	7.2	7.2	0%	Negligible
VW.R1b	7.1	7.1	0%	Negligible
VW.R2	6.9	6.9	0%	Negligible
VW.R3	7.0	7.0	0%	Negligible
VW.R4	7.3	7.3	0%	Negligible
VW.R5	7.3	7.3	0%	Negligible
VW.R6	7.0	7.0	0%	Negligible
VW.R7	8.5	8.5	0%	Negligible
VW.R8	8.0	8.0	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
VW.R9	8.1	8.1	0%	Negligible
VW.R10	8.1	8.2	0%	Negligible
VW.R11	8.2	8.2	0%	Negligible
VW.R12	8.2	8.2	0%	Negligible
VW.R13	8.5	8.5	0%	Negligible
VW.R14	9.9	10.0	1%	Negligible
VW.R15	9.3	9.4	1%	Negligible
VW.R16	9.3	9.4	1%	Negligible
VW.R17	9.6	9.8	1%	Negligible
VW.R18	10.6	10.9	1%	Negligible
VW.R19	10.7	10.9	1%	Negligible
VW.R20	9.9	10.1	1%	Negligible
VW.R21	9.7	9.9	1%	Negligible
VW.R22	9.8	10.0	1%	Negligible
VW.R23	10.0	10.2	1%	Negligible
VW.R24	11.1	11.5	2-5%	Negligible
VW.R25	8.1	8.2	0%	Negligible
VW.R26	10.0	10.2	1%	Negligible
VW.R27	9.2	9.3	1%	Negligible
VW.R28	8.4	8.5	0%	Negligible
VW.R29	8.4	8.5	0%	Negligible
VW.R30	8.2	8.3	0%	Negligible
VW.R31	9.7	9.7	0%	Negligible
VW.R32	9.8	9.8	0%	Negligible
VW.R33	9.9	9.9	0%	Negligible
VW.R34	8.5	8.5	0%	Negligible
VW.R35	9.3	9.3	0%	Negligible
X.R1a	8.5	8.5	0%	Negligible
X.R1b	7.9	7.9	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
X.R2	8.0	8.0	0%	Negligible
X.R3	8.3	8.3	0%	Negligible
X.R4	9.5	9.5	0%	Negligible
X.R5	7.3	7.3	0%	Negligible
X.R6	7.0	7.0	0%	Negligible
YZ.R1	6.8	6.8	0%	Negligible
YZ.R2	6.9	7.0	0%	Negligible
YZ.R3	9.1	9.4	2-5%	Negligible
YZ.R4	7.0	7.0	0%	Negligible
YZ.R5	7.9	8.1	1%	Negligible
YZ.R6	7.6	7.8	1%	Negligible
YZ.R7	7.7	7.8	1%	Negligible
YZ.R8	7.9	7.9	0%	Negligible
YZ.R9	7.2	7.3	0%	Negligible
YZ.R10	7.1	7.1	0%	Negligible
YZ.R11	8.4	8.5	0%	Negligible
YZ.R12	7.4	7.5	0%	Negligible
YZ.R13	7.3	7.3	0%	Negligible
YZ.R14	7.0	7.0	0%	Negligible
YZ.R15	7.4	7.4	0%	Negligible
YZ.R16	7.2	7.3	0%	Negligible
YZ.R17	8.0	8.1	0%	Negligible
YZ.R18	7.1	7.2	0%	Negligible
YZ.R19	7.8	7.9	1%	Negligible
YZ.R20	7.5	7.6	0%	Negligible
YZ.R21	7.3	7.4	0%	Negligible
YZ.R22	7.7	7.8	0%	Negligible
YZ.R23	8.8	8.8	0%	Negligible
YZ.R24	7.9	7.9	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
YZ.R25	7.8	7.9	0%	Negligible
YZ.R26	10.1	10.2	0%	Negligible
YZ.R27	9.9	9.9	0%	Negligible
YZ.R28	9.4	9.4	0%	Negligible
YZ.R29	8.2	8.3	0%	Negligible
YZ.R30	8.9	8.9	0%	Negligible
YZ.R31	8.7	8.8	0%	Negligible
YZ.R32	9.3	9.3	0%	Negligible
YZ.R33	8.3	8.3	0%	Negligible
YZ.R34	8.4	8.5	0%	Negligible
YZ.R35	8.5	8.5	0%	Negligible

Since the results in **Table 8g.11** are Negligible for all receptors aside from those in the Castle Donington AQMA (prefixed QR), a detailed **Figure 8g.2** is provided below, illustrating the impacts within the most impacted area of Castle Donington.

Figure 8g.2: 1a vs 2a PM<sub>2.5</sub> Impacts – Castle Donington (Human Receptors)

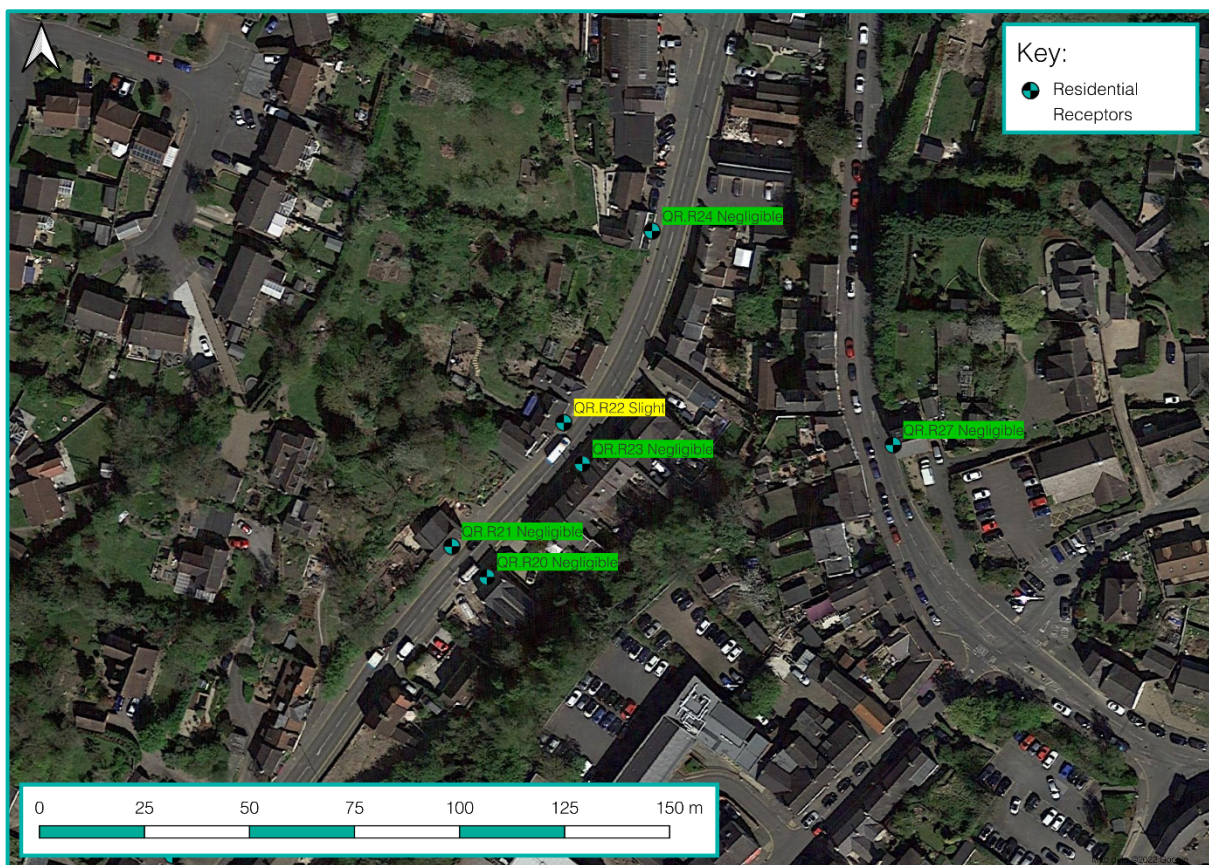


Table 8g.12: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (School Receptors)

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
AB.S1	7.4	7.7	2-5%	Negligible
CD.S1	7.2	7.2	0%	Negligible
QR.S1	10.2	10.2	0%	Negligible
QR.S2	7.3	7.3	0%	Negligible
VW.S1	8.2	8.3	0%	Negligible
YZ.S1	6.8	6.8	0%	Negligible

**Table 8g.13: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Care Home Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.CH1	8.9	9.0	0%	Negligible
OP.CH2	8.8	8.8	0%	Negligible
QR.CH1	7.8	7.8	0%	Negligible

**Table 8g.14: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Medical Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OP.MC1	10.1	10.2	0%	Negligible
VW.MC1	11.0	11.3	1%	Negligible
YZ.MC.1	6.6	6.6	0%	Negligible

**Table 8g.15: 2028 Stage 1a Vs 2a EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Equality Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 2a		
OS1	6.7	6.8	0%	Negligible
OS10	6.7	6.7	0%	Negligible
OS13	6.6	6.7	0%	Negligible
OS2	7.8	7.8	0%	Negligible
OS3	7.5	7.5	0%	Negligible
OS4	7.6	7.6	0%	Negligible
OS6	7.9	7.9	0%	Negligible
OS7	7.5	7.5	0%	Negligible
OS11	7.9	7.9	0%	Negligible
OS12	7.8	7.8	0%	Negligible
OS14	7.6	7.6	0%	Negligible

**Table 8g.16: Predicted 2028 (2a) NO<sub>2</sub> Concentrations at Future Receptors on EMG2 Project Site**

NO <sub>2</sub> Annual Mean (µg/m <sup>3</sup> )		
Receptor	Predicted Concentration	% of Objective
ABS.C1	15.1	38
ABS.C2	13.2	33

ABS.C3	14.2	36
ABS.C4	14.5	36
ABS.C5	19.6	49
ABS.C6	18.7	47
ABS.C7	13.9	35
ABS.C8	15.6	39

**Table 8g.17: Predicted 2028 (2a) PM<sub>10</sub> Concentrations at Future Receptors on EMG2 Project Site**

PM <sub>10</sub> Annual Mean (µg/m <sup>3</sup> )		
Receptor	Predicted Concentration	% of Objective
ABS.C1	13.2	33
ABS.C2	14.3	36
ABS.C3	14.6	37
ABS.C4	14.7	37
ABS.C5	16.6	42
ABS.C6	16.0	40
ABS.C7	16.6	42
ABS.C8	16.5	41

**Table 8g.18: Predicted 2028 (2a) PM<sub>2.5</sub> Concentrations at Future Receptors on EMG2 Project Site**

PM <sub>2.5</sub> Annual Mean (µg/m <sup>3</sup> )		
Receptor	Predicted Concentration	% of Limit
ABS.C1	7.0	35
ABS.C2	7.1	36
ABS.C3	7.3	37
ABS.C4	7.4	37
ABS.C5	8.4	42
ABS.C6	8.2	41
ABS.C7	8.0	40
ABS.C8	7.9	40

## 2028 1b Vs 2b EMG2 Project Impacts

Table 8g.19: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Residential Receptors)

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
AB.R1	12.0	12.6	1%	Negligible
AB.R2	12.1	12.3	0%	Negligible
AB.R3	13.1	13.4	1%	Negligible
AB.R4	11.7	11.8	0%	Negligible
AB.R5	18.1	18.4	1%	Negligible
AB.R6	15.4	15.7	1%	Negligible
AB.R7	11.2	11.2	0%	Negligible
AB.R8	13.9	14.0	0%	Negligible
AB.R9	16.0	16.5	1%	Negligible
AB.R10	15.9	16.1	0%	Negligible
AB.R11	9.3	9.3	0%	Negligible
AB.R12	12.9	13.4	1%	Negligible
AB.R13	9.8	10.1	1%	Negligible
AB.R14	10.6	11.5	2-5%	Negligible
AB.R15	10.9	12.1	2-5%	Negligible
AB.R16	9.7	10.0	1%	Negligible
AB.R17	9.9	10.2	1%	Negligible
AB.R18	10.7	11.0	1%	Negligible
AB.R19	10.6	10.7	0%	Negligible
CD.R1	11.8	11.9	0%	Negligible
CD.R2	11.4	11.5	0%	Negligible
CD.R3	11.3	11.7	1%	Negligible
CD.R4	10.8	11.1	1%	Negligible
CD.R5	11.2	11.6	1%	Negligible
CD.R6	12.3	13.0	2-5%	Negligible
CD.R7a	14.7	14.9	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
CD.R7b	14.8	15.0	0%	Negligible
CD.R8	11.6	11.7	0%	Negligible
CD.R9	13.5	13.7	0%	Negligible
CD.R10	15.6	15.9	1%	Negligible
CD.R11	13.8	14.1	1%	Negligible
CD.R12	11.5	11.7	0%	Negligible
CD.R13	15.0	15.5	1%	Negligible
CD.R14	17.1	17.8	2-5%	Negligible
CD.R15	18.0	18.8	2-5%	Negligible
CD.R16	18.0	18.7	2-5%	Negligible
CD.R17	22.7	24.0	2-5%	Negligible
CD.R18	12.4	12.7	1%	Negligible
CD.R19	19.1	20.0	2-5%	Negligible
CD.R20	16.9	17.7	2-5%	Negligible
CD.R21	20.6	21.8	2-5%	Negligible
CD.R22	11.7	12.0	1%	Negligible
CD.R23	12.0	12.4	1%	Negligible
CD.R24	11.9	12.0	0%	Negligible
CD.R25	9.8	9.8	0%	Negligible
CD.R26	9.7	9.7	0%	Negligible
CD.R27	9.7	9.7	0%	Negligible
CD.R28	9.7	9.7	0%	Negligible
CD.R29	14.0	14.2	0%	Negligible
CD.R30	13.2	13.3	0%	Negligible
CD.R36	16.6	16.7	0%	Negligible
CD.R37	23.3	23.6	1%	Negligible
EF.R1	13.7	13.9	1%	Negligible
EF.R2	15.2	15.5	1%	Negligible
EF.R3	13.6	13.8	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
EF.R4	13.6	13.8	0%	Negligible
EF.R5	14.4	14.6	0%	Negligible
EF.R6	12.0	12.1	0%	Negligible
EF.R7	12.5	12.6	0%	Negligible
EF.R8	11.3	11.4	0%	Negligible
EF.R9	12.7	12.8	0%	Negligible
EF.R10	13.5	13.5	0%	Negligible
EF.R11	13.4	13.4	0%	Negligible
EF.R12	14.0	14.0	0%	Negligible
EF.R13	13.5	13.5	0%	Negligible
EF.R14	13.6	13.7	0%	Negligible
EF.R15	14.5	14.6	0%	Negligible
EF.R16	12.6	12.6	0%	Negligible
EF.R17	13.4	13.4	0%	Negligible
EF.R18	12.9	12.9	0%	Negligible
EF.R19	12.0	12.0	0%	Negligible
EF.R20	10.9	10.9	0%	Negligible
MN.R1	27.7	28.2	1%	Negligible
MN.R2	16.2	16.7	1%	Negligible
MN.R3	15.8	16.3	1%	Negligible
MN.R4	21.4	22.8	2-5%	Negligible
MN.R5	23.4	24.0	1%	Negligible
MN.R6	21.1	21.6	1%	Negligible
MN.R7	18.3	18.6	1%	Negligible
MN.R8	17.4	17.7	1%	Negligible
MN.R9	13.5	13.7	0%	Negligible
MN.R10	17.0	17.2	0%	Negligible
MN.R11	15.6	15.7	0%	Negligible
MN.R12	17.8	17.8	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
MN.R13	16.6	16.6	0%	Negligible
MN.R14	22.7	23.1	1%	Negligible
MN.R15	14.4	14.7	1%	Negligible
QR.R1	9.6	9.6	0%	Negligible
QR.R2	12.6	12.7	0%	Negligible
QR.R3	13.2	13.4	0%	Negligible
QR.R4	12.0	12.1	0%	Negligible
QR.R5	10.4	10.5	0%	Negligible
QR.R6	11.0	11.1	0%	Negligible
QR.R7	26.4	28.3	2-5%	Negligible
QR.R8	29.5	31.8	6-10%	Moderate
QR.R9	16.4	17.2	2-5%	Negligible
QR.R10	30.1	32.4	6-10%	Moderate
QR.R11	21.3	22.7	2-5%	Negligible
QR.R12	14.6	15.1	1%	Negligible
QR.R13	27.1	29.2	2-5%	Negligible
QR.R14	26.4	28.3	2-5%	Negligible
QR.R15	28.9	31.2	6-10%	Moderate
QR.R16	19.7	20.9	2-5%	Negligible
QR.R17	21.3	22.7	2-5%	Negligible
QR.R18	20.8	22.1	2-5%	Negligible
QR.R19	27.0	29.0	2-5%	Negligible
QR.R20	29.6	31.9	6-10%	Moderate
QR.R21	31.6	34.1	6-10%	Moderate
QR.R22	32.8	35.4	6-10%	Moderate
QR.R23	30.8	33.3	6-10%	Moderate
QR.R24	30.7	33.1	6-10%	Moderate
QR.R25	12.0	12.1	0%	Negligible
QR.R26	10.8	10.9	0%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
QR.R27	11.4	11.3	0%	Negligible
QR.R28	10.9	10.9	0%	Negligible
QR.R29	13.5	13.7	0%	Negligible
QR.R30	13.1	13.3	0%	Negligible
QR.R31	12.7	12.8	0%	Negligible
QR.R32	13.2	13.3	0%	Negligible
QR.R33	14.3	14.5	1%	Negligible
QR.R34	15.4	15.6	1%	Negligible
QR.R35	15.8	16.0	1%	Negligible
QR.R36	17.1	17.4	1%	Negligible
QR.R37	13.2	13.3	0%	Negligible
QR.R38	10.4	10.4	0%	Negligible
QR.R39	10.1	10.2	0%	Negligible
QR.R40	10.3	10.3	0%	Negligible
QR.R41	10.2	10.2	0%	Negligible
QR.R42	10.4	10.4	0%	Negligible
QR.R43	10.6	10.5	0%	Negligible
QR.R44	10.6	10.6	0%	Negligible
QR.R45	13.0	13.4	1%	Negligible
QR.R46	11.0	11.2	0%	Negligible
QR.R47	12.2	12.5	1%	Negligible
QR.R48	11.6	11.8	1%	Negligible
QR.R49	12.2	12.5	1%	Negligible
QR.R50	12.0	12.3	1%	Negligible
TK.R1	14.3	14.4	0%	Negligible
TK.R2	10.8	10.9	0%	Negligible
TK.R3	11.9	11.9	0%	Negligible
TK.R4	9.7	10.0	1%	Negligible
TK.R5	12.7	12.9	1%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
TK.R6	13.2	13.5	1%	Negligible
TK.R7	11.2	11.4	1%	Negligible
TK.R8	9.1	9.2	0%	Negligible
U.R1	10.1	10.1	0%	Negligible
U.R2	9.1	9.2	0%	Negligible
U.R3	9.3	9.3	0%	Negligible
U.R4	9.5	9.5	0%	Negligible
U.R5	9.8	9.8	0%	Negligible
U.R6	9.3	9.3	0%	Negligible
VW.R1a	10.1	10.1	0%	Negligible
VW.R1b	9.6	9.7	0%	Negligible
VW.R2	8.9	8.9	0%	Negligible
VW.R3	9.3	9.3	0%	Negligible
VW.R4	9.7	9.8	0%	Negligible
VW.R5	9.7	9.8	0%	Negligible
VW.R6	9.0	9.0	0%	Negligible
VW.R7	14.8	14.9	0%	Negligible
VW.R8	10.3	10.3	0%	Negligible
VW.R9	10.5	10.5	0%	Negligible
VW.R10	10.6	10.6	0%	Negligible
VW.R11	10.7	10.8	0%	Negligible
VW.R12	10.7	10.9	0%	Negligible
VW.R13	11.7	11.8	0%	Negligible
VW.R14	15.8	16.3	1%	Negligible
VW.R15	14.1	14.5	1%	Negligible
VW.R16	13.6	13.9	1%	Negligible
VW.R17	14.5	14.9	1%	Negligible
VW.R18	17.0	17.6	2-5%	Negligible
VW.R19	17.1	17.8	2-5%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
VW.R20	14.8	15.2	1%	Negligible
VW.R21	14.7	15.2	1%	Negligible
VW.R22	15.0	15.5	1%	Negligible
VW.R23	16.2	16.7	1%	Negligible
VW.R24	19.5	20.3	2-5%	Negligible
VW.R25	10.6	10.7	0%	Negligible
VW.R26	16.1	16.7	1%	Negligible
VW.R27	13.1	13.4	1%	Negligible
VW.R28	11.0	11.3	1%	Negligible
VW.R29	11.0	11.3	1%	Negligible
VW.R30	10.7	10.8	0%	Negligible
VW.R31	13.2	13.2	0%	Negligible
VW.R32	13.7	13.7	0%	Negligible
VW.R33	13.8	13.8	0%	Negligible
VW.R34	12.7	12.8	0%	Negligible
VW.R35	14.7	14.9	0%	Negligible
X.R1a	20.6	20.8	0%	Negligible
X.R1b	16.0	16.1	0%	Negligible
X.R4	13.3	13.3	0%	Negligible
YZ.R1	8.3	8.4	0%	Negligible
YZ.R2	8.9	9.0	0%	Negligible
YZ.R3	15.7	16.2	1%	Negligible
YZ.R4	9.1	9.2	0%	Negligible
YZ.R5	11.9	12.5	1%	Negligible
YZ.R6	11.1	11.5	1%	Negligible
YZ.R7	11.6	12.0	1%	Negligible
YZ.R8	11.9	12.0	0%	Negligible
YZ.R9	10.2	10.3	0%	Negligible
YZ.R10	9.5	9.7	1%	Negligible

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
YZ.R11	14.3	14.6	1%	Negligible
YZ.R12	10.7	10.9	0%	Negligible
YZ.R13	9.3	9.4	0%	Negligible
YZ.R14	9.2	9.2	0%	Negligible
YZ.R15	10.6	10.7	0%	Negligible
YZ.R16	11.0	11.3	1%	Negligible
YZ.R17	13.0	13.4	1%	Negligible
YZ.R18	9.4	9.6	0%	Negligible
YZ.R19	11.6	12.0	1%	Negligible
YZ.R20	10.5	10.8	1%	Negligible
YZ.R21	10.1	10.3	0%	Negligible
YZ.R22	12.0	12.2	0%	Negligible
YZ.R23	15.0	15.1	0%	Negligible
YZ.R24	11.7	12.0	1%	Negligible
YZ.R25	11.7	11.9	1%	Negligible
YZ.R26	16.3	16.7	1%	Negligible
YZ.R27	15.5	15.9	1%	Negligible
YZ.R28	14.2	14.5	1%	Negligible
YZ.R29	10.7	10.8	0%	Negligible
YZ.R30	13.6	13.8	1%	Negligible
YZ.R31	13.0	13.3	1%	Negligible
YZ.R32	15.1	15.4	1%	Negligible
YZ.R33	11.1	11.2	0%	Negligible
YZ.R34	11.9	12.1	0%	Negligible
YZ.R35	11.9	12.1	1%	Negligible

Since the results in **Table 8g.19** are Negligible for all receptors aside from those in the Castle Donington AQMA (prefixed QR), a detailed **Figure 8g.3** is provided below, illustrating the impacts within the most impacted area of Castle Donington.

Figure 8g.3: 1b vs 2b NO<sub>2</sub> Impacts – Castle Donington (Human Receptors)



Table 8g.20: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (School Receptors)

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
AB.S1	11.9	13.9	2-5%	Negligible
CD.S1	10.3	10.4	0%	Negligible
QR.S1	13.9	14.1	1%	Negligible
QR.S2	10.1	10.0	0%	Negligible
VW.S1	10.3	10.3	0%	Negligible
YZ.S1	9.6	9.8	1%	Negligible

**Table 8g.21: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Care Home Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
QR.CH1	10.5	10.5	0%	Negligible

**Table 8g.22: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Medical Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
VW.MC1	14.8	15.2	1%	Negligible
YZ.MC.1	8.3	8.3	0%	Negligible

**Table 8g.23: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted NO<sub>2</sub> Concentration Change (Equality Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
OS1	9.9	10.2	1%	Negligible
OS10	9.6	9.8	0%	Negligible
OS13	9.7	9.8	0%	Negligible
OS2	10.3	10.4	0%	Negligible
OS3	10.1	10.1	0%	Negligible
OS4	10.2	10.2	0%	Negligible
OS6	10.6	10.6	0%	Negligible
OS7	10.1	10.1	0%	Negligible
OS11	10.5	10.6	0%	Negligible
OS12	10.5	10.5	0%	Negligible
OS14	10.2	10.2	0%	Negligible

**Table 8g.24: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Residential Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
AB.R1	15.8	16.0	1%	Negligible
AB.R2	14.1	14.1	0%	Negligible
AB.R3	14.8	14.9	0%	Negligible
AB.R4	13.5	13.5	0%	Negligible
AB.R5	16.4	16.5	0%	Negligible
AB.R6	15.1	15.2	0%	Negligible
AB.R7	13.0	13.0	0%	Negligible
AB.R8	13.7	13.7	0%	Negligible
AB.R9	13.6	13.8	0%	Negligible
AB.R10	16.3	16.3	0%	Negligible
AB.R11	12.8	12.8	0%	Negligible
AB.R12	14.6	14.8	1%	Negligible
AB.R13	12.6	12.7	0%	Negligible
AB.R14	12.9	13.4	1%	Negligible
AB.R15	13.1	13.7	1%	Negligible
AB.R16	12.5	12.6	0%	Negligible
AB.R17	12.6	12.8	0%	Negligible
AB.R18	12.9	13.1	0%	Negligible
AB.R19	12.9	12.9	0%	Negligible
CD.R1	14.3	14.3	0%	Negligible
CD.R2	14.1	14.1	0%	Negligible
CD.R3	13.9	14.1	0%	Negligible
CD.R4	13.8	13.9	0%	Negligible
CD.R5	13.9	14.1	0%	Negligible
CD.R6	14.3	14.6	1%	Negligible
CD.R7a	15.3	15.4	0%	Negligible
CD.R7b	15.4	15.4	0%	Negligible
CD.R8	14.1	14.1	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
CD.R9	15.0	15.1	0%	Negligible
CD.R10	16.1	16.3	0%	Negligible
CD.R11	14.3	14.4	0%	Negligible
CD.R12	14.1	14.2	0%	Negligible
CD.R13	16.0	16.2	1%	Negligible
CD.R14	17.1	17.4	1%	Negligible
CD.R15	17.5	17.9	1%	Negligible
CD.R16	16.9	17.3	1%	Negligible
CD.R17	20.2	21.0	2-5%	Negligible
CD.R18	14.6	14.7	0%	Negligible
CD.R19	18.1	18.7	1%	Negligible
CD.R20	17.0	17.4	1%	Negligible
CD.R21	19.0	19.7	2-5%	Negligible
CD.R22	14.2	14.3	0%	Negligible
CD.R23	14.3	14.5	0%	Negligible
CD.R24	13.3	13.4	0%	Negligible
CD.R25	12.7	12.8	0%	Negligible
CD.R26	12.7	12.7	0%	Negligible
CD.R27	12.7	12.7	0%	Negligible
CD.R28	13.5	13.5	0%	Negligible
CD.R29	14.6	14.7	0%	Negligible
CD.R30	14.2	14.3	0%	Negligible
CD.R36	16.5	16.5	0%	Negligible
CD.R37	17.3	17.5	0%	Negligible
EF.R1	15.7	15.7	0%	Negligible
EF.R2	16.3	16.4	0%	Negligible
EF.R3	14.7	14.8	0%	Negligible
EF.R4	15.1	15.2	0%	Negligible
EF.R5	16.9	17.0	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
EF.R6	14.4	14.4	0%	Negligible
EF.R7	15.3	15.3	0%	Negligible
EF.R8	15.2	15.2	0%	Negligible
EF.R9	13.9	13.9	0%	Negligible
EF.R10	14.1	14.1	0%	Negligible
EF.R11	14.1	14.1	0%	Negligible
EF.R12	14.4	14.4	0%	Negligible
EF.R13	14.1	14.1	0%	Negligible
EF.R14	14.2	14.2	0%	Negligible
EF.R15	14.7	14.8	0%	Negligible
EF.R16	14.6	14.6	0%	Negligible
EF.R17	15.0	15.0	0%	Negligible
EF.R18	14.7	14.7	0%	Negligible
EF.R19	15.4	15.4	0%	Negligible
EF.R20	14.0	14.0	0%	Negligible
MN.R1	19.9	20.1	0%	Negligible
MN.R2	17.7	17.9	1%	Negligible
MN.R3	17.5	17.7	1%	Negligible
MN.R4	19.9	20.6	2-5%	Negligible
MN.R5	21.9	22.2	1%	Negligible
MN.R6	20.5	20.8	1%	Negligible
MN.R7	19.2	19.3	0%	Negligible
MN.R8	18.7	18.8	0%	Negligible
MN.R9	16.6	16.7	0%	Negligible
MN.R10	18.4	18.5	0%	Negligible
MN.R11	17.7	17.7	0%	Negligible
MN.R12	18.9	18.9	0%	Negligible
MN.R13	18.2	18.3	0%	Negligible
MN.R14	19.3	19.4	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
MN.R15	17.1	17.2	0%	Negligible
QR.R1	13.3	13.3	0%	Negligible
QR.R2	13.7	13.7	0%	Negligible
QR.R3	14.0	14.1	0%	Negligible
QR.R4	13.7	13.7	0%	Negligible
QR.R5	12.9	12.9	0%	Negligible
QR.R6	12.8	12.8	0%	Negligible
QR.R7	21.1	22.3	2-5%	Negligible
QR.R8	23.1	24.6	2-5%	Negligible
QR.R9	15.5	15.9	1%	Negligible
QR.R10	23.5	25.1	2-5%	Negligible
QR.R11	18.2	19.0	2-5%	Negligible
QR.R12	14.6	14.9	1%	Negligible
QR.R13	21.6	22.9	2-5%	Negligible
QR.R14	21.1	22.4	2-5%	Negligible
QR.R15	22.8	24.2	2-5%	Negligible
QR.R16	17.3	17.9	2-5%	Negligible
QR.R17	18.2	19.0	2-5%	Negligible
QR.R18	17.9	18.6	2-5%	Negligible
QR.R19	21.5	22.8	2-5%	Negligible
QR.R20	23.2	24.8	2-5%	Negligible
QR.R21	24.5	26.3	2-5%	Negligible
QR.R22	25.3	27.2	2-5%	Negligible
QR.R23	24.0	25.7	2-5%	Negligible
QR.R24	23.9	25.6	2-5%	Negligible
QR.R25	14.4	14.4	0%	Negligible
QR.R26	12.8	12.8	0%	Negligible
QR.R27	13.1	13.0	0%	Negligible
QR.R28	12.8	12.8	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
QR.R29	13.9	14.0	0%	Negligible
QR.R30	13.7	13.8	0%	Negligible
QR.R31	13.7	13.8	0%	Negligible
QR.R32	14.0	14.1	0%	Negligible
QR.R33	14.6	14.7	0%	Negligible
QR.R34	14.4	14.5	0%	Negligible
QR.R35	14.6	14.8	0%	Negligible
QR.R36	15.3	15.5	0%	Negligible
QR.R37	13.3	13.3	0%	Negligible
QR.R38	12.9	12.9	0%	Negligible
QR.R39	12.7	12.7	0%	Negligible
QR.R40	12.8	12.8	0%	Negligible
QR.R41	12.7	12.8	0%	Negligible
QR.R42	13.4	13.3	0%	Negligible
QR.R43	14.8	14.8	0%	Negligible
QR.R44	14.8	14.8	0%	Negligible
QR.R45	13.9	14.1	1%	Negligible
QR.R46	12.9	13.0	0%	Negligible
QR.R47	13.5	13.6	0%	Negligible
QR.R48	13.2	13.3	0%	Negligible
QR.R49	13.5	13.6	0%	Negligible
QR.R50	13.4	13.5	0%	Negligible
TK.R1	14.9	15.0	0%	Negligible
TK.R2	13.7	13.8	0%	Negligible
TK.R3	14.2	14.2	0%	Negligible
TK.R4	12.8	12.9	0%	Negligible
TK.R5	14.2	14.3	0%	Negligible
TK.R6	15.4	15.5	0%	Negligible
TK.R7	14.5	14.6	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
TK.R8	13.4	13.5	0%	Negligible
U.R1	12.6	12.6	0%	Negligible
U.R2	12.1	12.1	0%	Negligible
U.R3	12.2	12.2	0%	Negligible
U.R4	12.3	12.3	0%	Negligible
U.R5	12.5	12.5	0%	Negligible
U.R6	12.2	12.2	0%	Negligible
VW.R1a	13.4	13.5	0%	Negligible
VW.R1b	13.2	13.2	0%	Negligible
VW.R2	12.9	12.9	0%	Negligible
VW.R3	13.0	13.1	0%	Negligible
VW.R4	13.6	13.6	0%	Negligible
VW.R5	13.5	13.6	0%	Negligible
VW.R6	13.1	13.1	0%	Negligible
VW.R7	17.3	17.3	0%	Negligible
VW.R8	14.1	14.1	0%	Negligible
VW.R9	14.3	14.3	0%	Negligible
VW.R10	14.3	14.3	0%	Negligible
VW.R11	14.3	14.4	0%	Negligible
VW.R12	14.4	14.5	0%	Negligible
VW.R13	14.9	15.0	0%	Negligible
VW.R14	17.5	17.9	1%	Negligible
VW.R15	16.4	16.7	1%	Negligible
VW.R16	16.5	16.7	1%	Negligible
VW.R17	17.1	17.4	1%	Negligible
VW.R18	19.0	19.5	1%	Negligible
VW.R19	19.1	19.6	1%	Negligible
VW.R20	17.6	18.0	1%	Negligible
VW.R21	17.3	17.7	1%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
VW.R22	17.5	17.9	1%	Negligible
VW.R23	17.8	18.2	1%	Negligible
VW.R24	19.9	20.6	2-5%	Negligible
VW.R25	14.3	14.4	0%	Negligible
VW.R26	17.7	18.1	1%	Negligible
VW.R27	16.2	16.4	1%	Negligible
VW.R28	14.7	14.9	0%	Negligible
VW.R29	14.7	14.9	0%	Negligible
VW.R30	14.5	14.6	0%	Negligible
VW.R31	16.7	16.7	0%	Negligible
VW.R32	17.0	17.0	0%	Negligible
VW.R33	17.2	17.2	0%	Negligible
VW.R34	15.4	15.4	0%	Negligible
VW.R35	16.8	16.9	0%	Negligible
X.R1a	15.1	15.2	0%	Negligible
X.R1b	14.0	14.0	0%	Negligible
X.R4	16.1	16.1	0%	Negligible
YZ.R1	12.4	12.4	0%	Negligible
YZ.R2	12.7	12.8	0%	Negligible
YZ.R3	16.8	17.1	1%	Negligible
YZ.R4	12.8	12.9	0%	Negligible
YZ.R5	14.5	14.8	1%	Negligible
YZ.R6	14.0	14.2	1%	Negligible
YZ.R7	13.9	14.1	0%	Negligible
YZ.R8	14.1	14.2	0%	Negligible
YZ.R9	13.3	13.3	0%	Negligible
YZ.R10	12.9	13.0	0%	Negligible
YZ.R11	15.3	15.4	0%	Negligible
YZ.R12	13.6	13.7	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
YZ.R13	13.0	13.0	0%	Negligible
YZ.R14	12.2	12.2	0%	Negligible
YZ.R15	12.8	12.8	0%	Negligible
YZ.R16	13.6	13.8	0%	Negligible
YZ.R17	15.1	15.3	0%	Negligible
YZ.R18	13.1	13.2	0%	Negligible
YZ.R19	14.4	14.6	1%	Negligible
YZ.R20	13.7	13.9	0%	Negligible
YZ.R21	13.3	13.4	0%	Negligible
YZ.R22	14.0	14.1	0%	Negligible
YZ.R23	15.8	15.9	0%	Negligible
YZ.R24	14.7	14.8	0%	Negligible
YZ.R25	14.7	14.8	0%	Negligible
YZ.R26	17.2	17.4	1%	Negligible
YZ.R27	16.7	16.9	1%	Negligible
YZ.R28	15.9	16.0	0%	Negligible
YZ.R29	13.6	13.7	0%	Negligible
YZ.R30	14.9	15.0	0%	Negligible
YZ.R31	14.8	15.0	0%	Negligible
YZ.R32	15.9	16.1	0%	Negligible
YZ.R33	14.0	14.0	0%	Negligible
YZ.R34	14.0	14.1	0%	Negligible
YZ.R35	14.3	14.4	0%	Negligible

Table 8g.25: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (School Receptors)

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
AB.S1	13.6	14.5	2-5%	Negligible
CD.S1	13.5	13.6	0%	Negligible
QR.S1	14.0	14.1	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
QR.S2	13.2	13.2	0%	Negligible
VW.S1	14.1	14.1	0%	Negligible
YZ.S1	12.9	13.0	0%	Negligible

Table 8g.26: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Care Home Receptors)

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
QR.CH1	12.6	12.6	0%	Negligible

Table 8g.27: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Medical Receptors)

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
VW.MC1	16.4	16.6	0%	Negligible
YZ.MC.1	12.2	12.3	0%	Negligible

Table 8g.28: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>10</sub> Concentration Change (Equality Receptors)

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
OS1	12.6	12.8	0%	Negligible
OS10	12.5	12.5	0%	Negligible
OS13	12.5	12.6	0%	Negligible
OS2	12.5	12.5	0%	Negligible
OS3	12.4	12.4	0%	Negligible
OS4	12.5	12.5	0%	Negligible
OS6	12.6	12.6	0%	Negligible
OS7	12.4	12.4	0%	Negligible
OS11	12.6	12.6	0%	Negligible
OS12	12.6	12.6	0%	Negligible
OS14	12.5	12.5	0%	Negligible

Table 8g.29: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Residential Receptors)

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
AB.R1	7.3	7.4	1%	Negligible
AB.R2	7.2	7.2	0%	Negligible
AB.R3	7.5	7.6	0%	Negligible
AB.R4	7.1	7.1	0%	Negligible
AB.R5	8.7	8.7	0%	Negligible
AB.R6	8.0	8.0	0%	Negligible
AB.R7	6.9	6.9	0%	Negligible
AB.R8	7.0	7.0	0%	Negligible
AB.R9	7.2	7.3	0%	Negligible
AB.R10	7.7	7.7	0%	Negligible
AB.R11	6.7	6.7	0%	Negligible
AB.R12	7.4	7.5	1%	Negligible
AB.R13	6.7	6.8	0%	Negligible
AB.R14	6.9	7.1	1%	Negligible
AB.R15	7.0	7.3	1%	Negligible
AB.R16	6.7	6.7	0%	Negligible
AB.R17	6.7	6.8	0%	Negligible
AB.R18	6.9	7.0	0%	Negligible
AB.R19	6.9	6.9	0%	Negligible
CD.R1	7.5	7.6	0%	Negligible
CD.R2	7.4	7.5	0%	Negligible
CD.R3	7.4	7.5	0%	Negligible
CD.R4	7.3	7.3	0%	Negligible
CD.R5	7.4	7.4	0%	Negligible
CD.R6	7.6	7.7	1%	Negligible
CD.R7a	7.7	7.8	0%	Negligible
CD.R7b	7.7	7.8	0%	Negligible
CD.R8	7.1	7.1	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
CD.R9	7.5	7.6	0%	Negligible
CD.R10	8.1	8.2	0%	Negligible
CD.R11	7.6	7.7	0%	Negligible
CD.R12	7.5	7.5	0%	Negligible
CD.R13	8.4	8.6	1%	Negligible
CD.R14	9.0	9.2	1%	Negligible
CD.R15	9.2	9.5	1%	Negligible
CD.R16	8.9	9.1	1%	Negligible
CD.R17	10.6	11.1	2-5%	Negligible
CD.R18	7.7	7.8	0%	Negligible
CD.R19	9.6	9.9	1%	Negligible
CD.R20	9.0	9.2	1%	Negligible
CD.R21	10.0	10.4	2-5%	Negligible
CD.R22	7.1	7.2	0%	Negligible
CD.R23	7.2	7.3	0%	Negligible
CD.R24	7.1	7.1	0%	Negligible
CD.R25	6.6	6.7	0%	Negligible
CD.R26	6.6	6.6	0%	Negligible
CD.R27	6.6	6.6	0%	Negligible
CD.R28	6.7	6.7	0%	Negligible
CD.R29	7.5	7.5	0%	Negligible
CD.R30	7.3	7.3	0%	Negligible
CD.R36	7.7	7.8	0%	Negligible
CD.R37	8.8	8.9	0%	Negligible
EF.R1	7.7	7.8	0%	Negligible
EF.R2	8.0	8.1	0%	Negligible
EF.R3	7.9	7.9	0%	Negligible
EF.R4	8.1	8.1	0%	Negligible
EF.R5	8.4	8.4	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
EF.R6	7.7	7.7	0%	Negligible
EF.R7	7.5	7.5	0%	Negligible
EF.R8	7.5	7.5	0%	Negligible
EF.R9	7.6	7.7	0%	Negligible
EF.R10	8.6	8.6	0%	Negligible
EF.R11	8.6	8.6	0%	Negligible
EF.R12	8.7	8.8	0%	Negligible
EF.R13	8.6	8.6	0%	Negligible
EF.R14	8.7	8.7	0%	Negligible
EF.R15	8.9	9.0	0%	Negligible
EF.R16	7.5	7.5	0%	Negligible
EF.R17	7.7	7.7	0%	Negligible
EF.R18	7.5	7.5	0%	Negligible
EF.R19	8.1	8.1	0%	Negligible
EF.R20	7.0	7.0	0%	Negligible
MN.R1	9.9	10.0	1%	Negligible
MN.R2	8.4	8.5	1%	Negligible
MN.R3	8.3	8.5	1%	Negligible
MN.R4	9.6	9.9	2-5%	Negligible
MN.R5	10.6	10.8	1%	Negligible
MN.R6	9.9	10.0	1%	Negligible
MN.R7	9.2	9.2	0%	Negligible
MN.R8	8.9	9.0	0%	Negligible
MN.R9	7.8	7.9	0%	Negligible
MN.R10	8.8	8.8	0%	Negligible
MN.R11	8.4	8.4	0%	Negligible
MN.R12	9.0	9.0	0%	Negligible
MN.R13	8.7	8.7	0%	Negligible
MN.R14	9.1	9.2	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
MN.R15	7.8	7.8	0%	Negligible
QR.R1	7.0	7.0	0%	Negligible
QR.R2	8.0	8.1	0%	Negligible
QR.R3	8.2	8.2	0%	Negligible
QR.R4	7.3	7.3	0%	Negligible
QR.R5	6.9	6.9	0%	Negligible
QR.R6	7.6	7.6	0%	Negligible
QR.R7	11.9	12.5	2-5%	Negligible
QR.R8	13.0	13.8	2-5%	Negligible
QR.R9	9.0	9.2	1%	Negligible
QR.R10	13.2	14.0	2-5%	Negligible
QR.R11	10.4	10.8	2-5%	Negligible
QR.R12	8.5	8.6	1%	Negligible
QR.R13	12.2	12.9	2-5%	Negligible
QR.R14	12.0	12.6	2-5%	Negligible
QR.R15	12.8	13.6	2-5%	Negligible
QR.R16	9.9	10.3	2-5%	Negligible
QR.R17	10.4	10.8	2-5%	Negligible
QR.R18	10.2	10.6	2-5%	Negligible
QR.R19	12.2	12.8	2-5%	Negligible
QR.R20	13.0	13.9	2-5%	Negligible
QR.R21	13.7	14.7	2-5%	Negligible
QR.R22	14.2	15.1	2-5%	Slight
QR.R23	13.5	14.3	2-5%	Negligible
QR.R24	13.4	14.3	2-5%	Negligible
QR.R25	8.3	8.4	0%	Negligible
QR.R26	7.6	7.6	0%	Negligible
QR.R27	7.7	7.7	0%	Negligible
QR.R28	7.6	7.6	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
QR.R29	8.1	8.2	0%	Negligible
QR.R30	8.0	8.1	0%	Negligible
QR.R31	8.0	8.1	0%	Negligible
QR.R32	8.2	8.2	0%	Negligible
QR.R33	8.5	8.6	0%	Negligible
QR.R34	7.8	7.9	0%	Negligible
QR.R35	7.9	8.0	0%	Negligible
QR.R36	8.3	8.4	0%	Negligible
QR.R37	7.2	7.3	0%	Negligible
QR.R38	6.9	6.9	0%	Negligible
QR.R39	6.8	6.8	0%	Negligible
QR.R40	6.9	6.9	0%	Negligible
QR.R41	6.8	6.8	0%	Negligible
QR.R42	7.0	7.0	0%	Negligible
QR.R43	7.0	7.0	0%	Negligible
QR.R44	7.0	7.0	0%	Negligible
QR.R45	8.1	8.2	1%	Negligible
QR.R46	7.6	7.6	0%	Negligible
QR.R47	7.9	8.0	0%	Negligible
QR.R48	7.8	7.8	0%	Negligible
QR.R49	7.9	8.0	0%	Negligible
QR.R50	7.9	7.9	0%	Negligible
TK.R1	7.4	7.5	0%	Negligible
TK.R2	6.9	6.9	0%	Negligible
TK.R3	7.0	7.1	0%	Negligible
TK.R4	6.7	6.7	0%	Negligible
TK.R5	7.3	7.3	0%	Negligible
TK.R6	7.7	7.8	0%	Negligible
TK.R7	7.3	7.4	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
TK.R8	6.6	6.6	0%	Negligible
U.R1	7.1	7.1	0%	Negligible
U.R2	6.9	6.9	0%	Negligible
U.R3	6.9	6.9	0%	Negligible
U.R4	7.0	7.0	0%	Negligible
U.R5	7.1	7.1	0%	Negligible
U.R6	6.9	6.9	0%	Negligible
VW.R1a	7.2	7.2	0%	Negligible
VW.R1b	7.1	7.1	0%	Negligible
VW.R2	6.9	6.9	0%	Negligible
VW.R3	7.0	7.0	0%	Negligible
VW.R4	7.2	7.3	0%	Negligible
VW.R5	7.2	7.3	0%	Negligible
VW.R6	7.0	7.0	0%	Negligible
VW.R7	8.5	8.5	0%	Negligible
VW.R8	8.0	8.0	0%	Negligible
VW.R9	8.1	8.1	0%	Negligible
VW.R10	8.1	8.2	0%	Negligible
VW.R11	8.2	8.2	0%	Negligible
VW.R12	8.2	8.2	0%	Negligible
VW.R13	8.5	8.5	0%	Negligible
VW.R14	9.8	10.0	1%	Negligible
VW.R15	9.2	9.4	1%	Negligible
VW.R16	9.3	9.4	1%	Negligible
VW.R17	9.6	9.8	1%	Negligible
VW.R18	10.6	10.8	1%	Negligible
VW.R19	10.6	10.9	1%	Negligible
VW.R20	9.8	10.0	1%	Negligible
VW.R21	9.7	9.9	1%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
VW.R22	9.8	10.0	1%	Negligible
VW.R23	9.9	10.2	1%	Negligible
VW.R24	11.1	11.4	2-5%	Negligible
VW.R25	8.1	8.2	0%	Negligible
VW.R26	9.9	10.1	1%	Negligible
VW.R27	9.1	9.3	1%	Negligible
VW.R28	8.4	8.4	0%	Negligible
VW.R29	8.4	8.4	0%	Negligible
VW.R30	8.2	8.3	0%	Negligible
VW.R31	9.7	9.7	0%	Negligible
VW.R32	9.8	9.8	0%	Negligible
VW.R33	9.9	9.9	0%	Negligible
VW.R34	8.5	8.5	0%	Negligible
VW.R35	9.3	9.3	0%	Negligible
X.R1a	8.4	8.5	0%	Negligible
X.R1b	7.7	7.8	0%	Negligible
X.R4	10.7	10.7	0%	Negligible
YZ.R1	6.8	6.8	0%	Negligible
YZ.R2	6.9	7.0	0%	Negligible
YZ.R3	9.1	9.3	1%	Negligible
YZ.R4	7.0	7.0	0%	Negligible
YZ.R5	7.9	8.1	1%	Negligible
YZ.R6	7.6	7.7	1%	Negligible
YZ.R7	7.6	7.7	1%	Negligible
YZ.R8	7.7	7.8	0%	Negligible
YZ.R9	7.2	7.3	0%	Negligible
YZ.R10	7.0	7.1	0%	Negligible
YZ.R11	8.3	8.4	0%	Negligible
YZ.R12	7.4	7.5	0%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
YZ.R13	7.3	7.3	0%	Negligible
YZ.R14	7.0	7.0	0%	Negligible
YZ.R15	7.4	7.4	0%	Negligible
YZ.R16	7.2	7.3	0%	Negligible
YZ.R17	7.9	8.0	1%	Negligible
YZ.R18	7.1	7.2	0%	Negligible
YZ.R19	7.8	7.9	1%	Negligible
YZ.R20	7.5	7.5	0%	Negligible
YZ.R21	7.3	7.4	0%	Negligible
YZ.R22	7.7	7.8	0%	Negligible
YZ.R23	8.7	8.8	0%	Negligible
YZ.R24	7.8	7.9	0%	Negligible
YZ.R25	7.8	7.9	0%	Negligible
YZ.R26	10.1	10.2	1%	Negligible
YZ.R27	9.8	9.9	1%	Negligible
YZ.R28	9.4	9.5	0%	Negligible
YZ.R29	8.2	8.3	0%	Negligible
YZ.R30	8.9	9.0	0%	Negligible
YZ.R31	8.7	8.8	0%	Negligible
YZ.R32	9.3	9.4	0%	Negligible
YZ.R33	8.3	8.3	0%	Negligible
YZ.R34	8.4	8.5	0%	Negligible
YZ.R35	8.5	8.5	0%	Negligible

Since the results in **Table 8g.29** are Negligible for all receptors aside from those in the Castle Donington AQMA (prefixed QR), a detailed **Figure 8g.4** is provided below, illustrating the impacts within the most impacted area of Castle Donington.

Figure 8g.4: 1b vs 2b PM<sub>2.5</sub> Impacts – Castle Donington (Human Receptors)

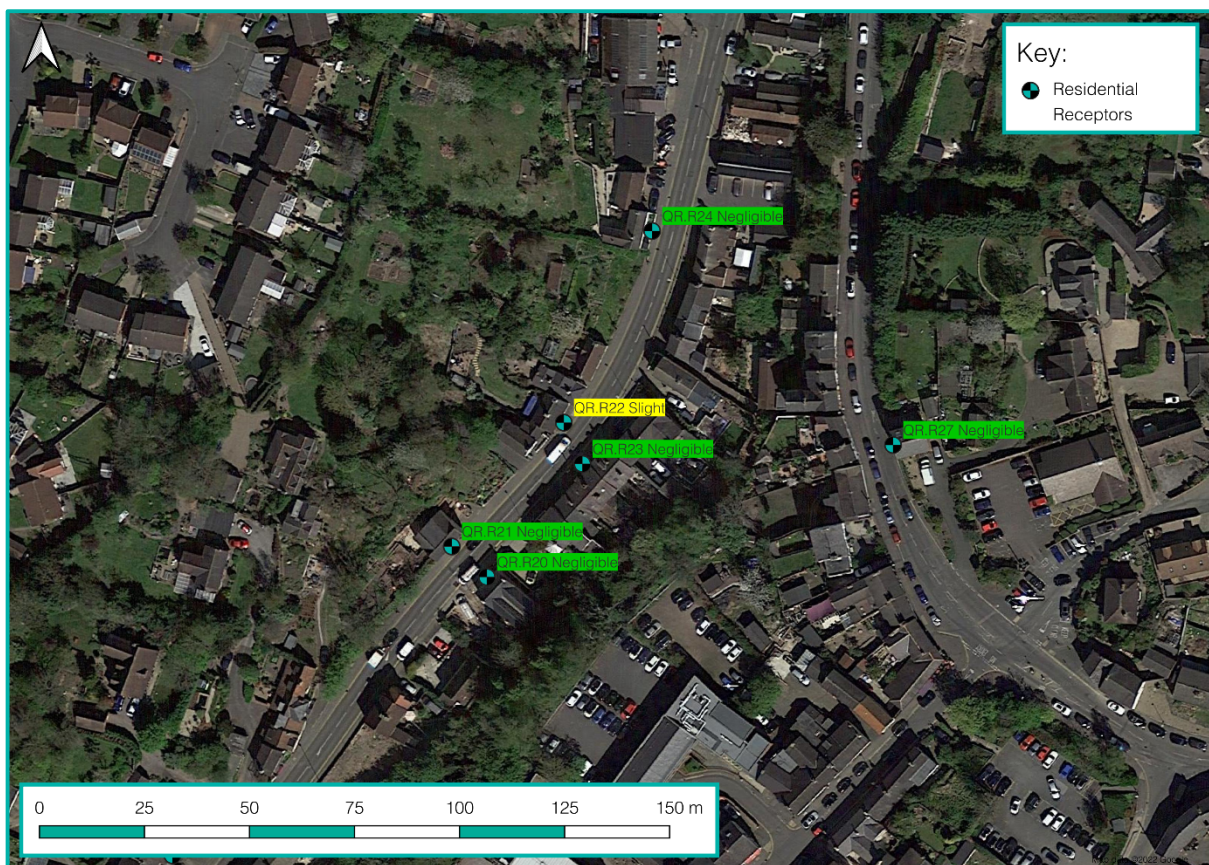


Table 8g.30: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (School Receptors)

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
AB.S1	7.2	7.7	2-5%	Negligible
CD.S1	7.2	7.2	0%	Negligible
QR.S1	8.2	8.2	0%	Negligible
QR.S2	6.9	6.9	0%	Negligible
VW.S1	8.0	8.0	0%	Negligible
VW.MC1	9.5	9.7	1%	Negligible

Table 8g.31: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Care Home Receptors)

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
QR.CH1	7.4	7.4	0%	Negligible

**Table 8g.32: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Medical Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
VW.MC1	9.5	9.7	1%	Negligible
YZ.MC.1	6.7	6.7	0%	Negligible

**Table 8g.33: 2028 Stage 1b Vs 2b EMG2 Project Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Equality Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 2b		
OS1	6.7	6.8	0%	Negligible
OS10	6.6	6.7	0%	Negligible
OS13	6.6	6.7	0%	Negligible
OS2	7.4	7.4	0%	Negligible
OS3	7.3	7.4	0%	Negligible
OS4	7.4	7.4	0%	Negligible
OS6	7.5	7.5	0%	Negligible
OS7	7.3	7.4	0%	Negligible
OS11	7.5	7.5	0%	Negligible
OS12	7.4	7.4	0%	Negligible
OS14	7.4	7.4	0%	Negligible

**Table 8g.34: Predicted 2028 (2b) NO<sub>2</sub> Concentrations at Future Receptors on EMG2 Project Site**

NO <sub>2</sub> Annual Mean (µg/m <sup>3</sup> )		
Receptor	Predicted Concentration	% of Objective
ABS.C1	15.0	38
ABS.C2	13.1	33
ABS.C3	14.1	35
ABS.C4	14.4	36
ABS.C5	19.4	49
ABS.C6	18.6	46
ABS.C7	13.8	34
ABS.C8	15.4	39

**Table 8g.35: Predicted 2028 (2b) PM<sub>10</sub> Concentrations at Future Receptors on EMG2 Project Site**

PM <sub>10</sub> Annual Mean (µg/m <sup>3</sup> )		
Receptor	Predicted Concentration	% of Objective
ABS.C1	13.2	33
ABS.C2	14.3	36
ABS.C3	14.6	36
ABS.C4	14.7	37
ABS.C5	16.6	41
ABS.C6	16.0	40
ABS.C7	16.6	41
ABS.C8	16.4	41

**Table 8g.36: Predicted 2028 (2b) PM<sub>2.5</sub> Concentrations at Future Receptors on EMG2 Project Site**

PM <sub>2.5</sub> Annual Mean (µg/m <sup>3</sup> )		
Receptor	Predicted Concentration	% of Limit
ABS.C1	7.0	35
ABS.C2	7.1	36
ABS.C3	7.3	36
ABS.C4	7.3	37
ABS.C5	8.4	42
ABS.C6	8.1	41

ABS.C7	8.0	40
ABS.C8	7.9	39

## 2028 1a Vs 1a With EMG 2 Project Construction Phase Impacts

**Table 8g.37: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted NO<sub>2</sub> Concentration Change (Residential Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.R11	11.0	11.1	0%	Negligible
VW.R12	11.1	11.2	0%	Negligible
VW.R13	12.4	12.5	0%	Negligible
VW.R14	18.2	18.6	1%	Negligible
VW.R16	15.1	15.4	1%	Negligible
VW.R17	16.4	16.7	1%	Negligible
VW.R18	19.8	20.3	1%	Negligible
VW.R19	20.0	20.5	1%	Negligible
VW.R20	16.8	17.1	1%	Negligible
VW.R21	16.7	17.1	1%	Negligible
VW.R22	17.1	17.5	1%	Negligible
VW.R23	18.7	19.2	1%	Negligible
VW.R24	23.1	23.9	2-5%	Negligible
VW.R25	11.0	11.0	0%	Negligible
VW.R26	18.6	19.1	1%	Negligible
VW.R27	14.5	14.8	1%	Negligible
X.R1a	20.2	20.2	0%	Negligible
X.R1b	16.4	16.5	0%	Negligible
X.R2	16.4	16.4	0%	Negligible
X.R3	17.4	17.4	0%	Negligible
X.R5	12.3	12.3	0%	Negligible
X.R6	10.2	10.2	0%	Negligible

**Table 8g.38: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted NO<sub>2</sub> Concentration Change (School Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.S1	10.3	10.4	0%	Negligible

**Table 8g.39: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted NO<sub>2</sub> Concentration Change (Medical Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.MC1	14.9	15.2	1%	Negligible

**Table 8g.40: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>10</sub> Concentration Change (Residential Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.R11	14.3	14.4	0%	Negligible
VW.R12	14.4	14.4	0%	Negligible
VW.R13	15.0	15.0	0%	Negligible
VW.R14	17.6	17.9	1%	Negligible
VW.R16	16.5	16.7	0%	Negligible
VW.R17	17.2	17.4	1%	Negligible
VW.R18	19.1	19.4	1%	Negligible
VW.R19	19.2	19.6	1%	Negligible
VW.R20	17.7	17.9	1%	Negligible
VW.R21	17.4	17.6	1%	Negligible
VW.R22	17.6	17.9	1%	Negligible
VW.R23	17.9	18.1	1%	Negligible
VW.R24	20.1	20.5	1%	Negligible
VW.R25	14.3	14.4	0%	Negligible
VW.R26	17.8	18.1	1%	Negligible
VW.R27	16.3	16.4	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
X.R1a	15.3	15.3	0%	Negligible
X.R1b	14.4	14.4	0%	Negligible
X.R2	14.6	14.6	0%	Negligible
X.R3	16.1	16.1	0%	Negligible
X.R5	13.3	13.3	0%	Negligible
X.R6	13.0	13.0	0%	Negligible

**Table 8g.41: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>10</sub> Concentration Change (School Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.S1	14.1	14.1	0%	Negligible

**Table 8g.42: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>10</sub> Concentration Change (Medical Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.MC1	16.4	16.6	0%	Negligible

**Table 8g.43: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Residential Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.R11	8.2	8.2	0%	Negligible
VW.R12	8.2	8.2	0%	Negligible
VW.R13	8.5	8.5	0%	Negligible
VW.R14	9.9	10.0	1%	Negligible
VW.R16	9.3	9.4	0%	Negligible
VW.R17	9.6	9.8	1%	Negligible
VW.R18	10.6	10.8	1%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.R19	10.7	10.9	1%	Negligible
VW.R20	9.9	10.0	1%	Negligible
VW.R21	9.8	9.9	1%	Negligible
VW.R22	9.9	10.0	1%	Negligible
VW.R23	10.0	10.1	1%	Negligible
VW.R24	11.2	11.4	1%	Negligible
VW.R25	8.1	8.2	0%	Negligible
VW.R26	10.0	10.1	1%	Negligible
VW.R27	9.2	9.3	0%	Negligible
X.R1a	8.5	8.5	0%	Negligible
X.R1b	7.9	8.0	0%	Negligible
X.R2	8.0	8.0	0%	Negligible
X.R3	8.3	8.3	0%	Negligible
X.R5	7.3	7.3	0%	Negligible
X.R6	7.0	7.0	0%	Negligible

**Table 8g.44: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>2.5</sub> Concentration Change (School Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.S1	8.0	8.0	0%	Negligible

**Table 8g.45: 2028 Stage 1a Vs 1a With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Medical Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1a	2028 Stage 1a (With Construction)		
VW.MC1	9.2	9.3	0%	Negligible

## 2028 1b Vs 1b With EMG 2 Project Construction Phase Impacts

Table 8g.46: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted NO<sub>2</sub> Concentration Change (Residential Receptors)

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.R11	11.0	11.1	0%	Negligible
VW.R12	11.1	11.2	0%	Negligible
VW.R13	12.4	12.5	0%	Negligible
VW.R14	18.0	18.5	1%	Negligible
VW.R16	15.0	15.3	1%	Negligible
VW.R17	16.2	16.6	1%	Negligible
VW.R18	19.5	20.1	2-5%	Negligible
VW.R19	19.7	20.3	2-5%	Negligible
VW.R20	16.6	17.0	1%	Negligible
VW.R21	16.5	16.9	1%	Negligible
VW.R22	16.9	17.3	1%	Negligible
VW.R23	18.5	19.0	1%	Negligible
VW.R24	22.8	23.6	2-5%	Negligible
VW.R25	10.9	11.0	0%	Negligible
VW.R26	18.4	18.9	1%	Negligible
VW.R27	14.3	14.6	1%	Negligible
X.R1a	20.6	20.8	0%	Negligible
X.R1b	16.0	16.1	0%	Negligible
X.R4	13.3	13.3	0%	Negligible
YZ.R11	15.8	16.1	1%	Negligible
YZ.R12	11.5	11.7	0%	Negligible

**Table 8g.47: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted NO<sub>2</sub> Concentration Change (School Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.S1	10.3	10.4	0%	Negligible

**Table 8g.48: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted NO<sub>2</sub> Concentration Change (Medical Receptors)**

Receptor ID	NO <sub>2</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.MC1	14.8	15.1	1%	Negligible

**Table 8g.49: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>10</sub> Concentration Change (Residential Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.R11	14.3	14.4	0%	Negligible
VW.R12	14.4	14.4	0%	Negligible
VW.R13	14.9	15.0	0%	Negligible
VW.R14	17.5	17.8	1%	Negligible
VW.R16	16.5	16.6	0%	Negligible
VW.R17	17.1	17.3	1%	Negligible
VW.R18	19.0	19.3	1%	Negligible
VW.R19	19.1	19.4	1%	Negligible
VW.R20	17.6	17.8	1%	Negligible
VW.R21	17.3	17.5	1%	Negligible
VW.R22	17.5	17.8	1%	Negligible
VW.R23	17.8	18.0	1%	Negligible
VW.R24	20.0	20.3	1%	Negligible
VW.R25	14.3	14.3	0%	Negligible
VW.R26	17.7	18.0	1%	Negligible
VW.R27	16.2	16.3	0%	Negligible

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
X.R1a	15.1	15.2	0%	Negligible
X.R1b	14.0	14.0	0%	Negligible
X.R4	16.1	16.1	0%	Negligible
YZ.R11	15.3	15.4	0%	Negligible
YZ.R12	13.6	13.7	0%	Negligible

**Table 8g.50: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>10</sub> Concentration Change (School Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.S1	14.1	14.1	0%	Negligible

**Table 8g.51: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>10</sub> Concentration Change (Medical Receptors)**

Receptor ID	PM <sub>10</sub> Annual Mean Concentration		% Change of Objective	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.MC1	16.4	16.5	0%	Negligible

**Table 8g.52: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Residential Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.R11	8.2	8.2	0%	Negligible
VW.R12	8.2	8.2	0%	Negligible
VW.R13	8.5	8.5	0%	Negligible
VW.R14	9.8	9.9	1%	Negligible
VW.R16	9.3	9.4	0%	Negligible
VW.R17	9.6	9.7	1%	Negligible
VW.R18	10.6	10.7	1%	Negligible
VW.R19	10.6	10.8	1%	Negligible

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.R20	9.9	10.0	1%	Negligible
VW.R21	9.7	9.8	1%	Negligible
VW.R22	9.8	9.9	1%	Negligible
VW.R23	9.9	10.1	1%	Negligible
VW.R24	11.1	11.3	1%	Negligible
VW.R25	8.1	8.2	0%	Negligible
VW.R26	9.9	10.1	1%	Negligible
VW.R27	9.1	9.2	0%	Negligible
X.R1a	8.4	8.5	0%	Negligible
X.R1b	7.7	7.8	0%	Negligible
X.R4	9.5	9.6	0%	Negligible
YZ.R11	8.4	8.4	0%	Negligible
YZ.R12	7.4	7.5	0%	Negligible

**Table 8g.53: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>2.5</sub> Concentration Change (School Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.S1	8.0	8.0	0%	Negligible

**Table 8g.54: 2028 Stage 1b Vs 1b With EMG 2 Project Construction Phase Impacts – Predicted PM<sub>2.5</sub> Concentration Change (Medical Receptors)**

Receptor ID	PM <sub>2.5</sub> Annual Mean Concentration		% Change of Limit	Impact Descriptor
	2028 Stage 1b	2028 Stage 1b (With Construction)		
VW.MC1	9.2	9.3	0%	Negligible

## Summary Tables for Worst Case Scenarios

Summary Tables are provided below to assist in ease of reading the results. Since the impacts at all receptors outside the Castle Donington AQMA were Negligible in all scenarios, only the 'worst-case' impacts in Castle Donington AQMA (Receptors QR.R7 to QR.R24) are presented.

**Table 8g.55** compares the impacts of the Stage 1a vs 2a scenario (**Table 8g.1**) and Stage 1b vs 2b scenario (**Table 8g.19**) for NO<sub>2</sub> impacts. As set out, the impacts are generally of a greater magnitude in the 'B' scenarios than the 'A' scenarios, and hence this can be deemed the worst-case scenario for NO<sub>2</sub> impacts in the Castle Donington AQMA.

**Table 8g.55: Comparison of NO<sub>2</sub> Impacts in Castle Donington**

Receptor ID	NO <sub>2</sub> Impacts in Castle Donington - Comparison			
	2028 Stage 1a vs 2a		2028 Stage 1b vs 2b	
	% Change of Objective	Impact Descriptor	% Change of Objective	Impact Descriptor
QR.R7	2-5%	Negligible	2-5%	Negligible
QR.R8	2-5%	Slight	6-10%	Moderate
QR.R9	2-5%	Negligible	2-5%	Negligible
QR.R10	2-5%	Slight	6-10%	Moderate
QR.R11	2-5%	Negligible	2-5%	Negligible
QR.R12	1%	Negligible	1%	Negligible
QR.R13	2-5%	Negligible	2-5%	Negligible
QR.R14	2-5%	Negligible	2-5%	Negligible
QR.R15	2-5%	Slight	6-10%	Moderate
QR.R16	2-5%	Negligible	2-5%	Negligible
QR.R17	2-5%	Negligible	2-5%	Negligible
QR.R18	2-5%	Negligible	2-5%	Negligible
QR.R19	2-5%	Negligible	2-5%	Negligible
QR.R20	2-5%	Slight	6-10%	Moderate
QR.R21	6-10%	Moderate	6-10%	Moderate
QR.R22	6-10%	Moderate	6-10%	Moderate
QR.R23	2-5%	Slight	6-10%	Moderate
QR.R24	2-5%	Slight	6-10%	Moderate

**Table 8g.56** compares the impacts of the Stage 1a vs 2a scenario (**Table 8g.6**) and Stage 1b vs 2b scenario (**Table 8g.24**) for PM<sub>10</sub> impacts. As set out, the impacts are broadly the same in both scenarios, therefore it would not be appropriate to assign one scenario as ‘worst-case’ in this instance.

**Table 8g.56: Comparison of PM<sub>10</sub> Impacts in Castle Donington**

Receptor ID	PM <sub>10</sub> Impacts in Castle Donington - Comparison			
	2028 Stage 1a vs 2a		2028 Stage 1b vs 2b	
	% Change of Objective	Impact Descriptor	% Change of Objective	Impact Descriptor
QR.R7	2-5%	Negligible	2-5%	Negligible
QR.R8	2-5%	Negligible	2-5%	Negligible
QR.R9	1%	Negligible	1%	Negligible
QR.R10	2-5%	Negligible	2-5%	Negligible
QR.R11	2-5%	Negligible	2-5%	Negligible
QR.R12	1%	Negligible	1%	Negligible
QR.R13	2-5%	Negligible	2-5%	Negligible
QR.R14	2-5%	Negligible	2-5%	Negligible
QR.R15	2-5%	Negligible	2-5%	Negligible
QR.R16	2-5%	Negligible	2-5%	Negligible
QR.R17	2-5%	Negligible	2-5%	Negligible
QR.R18	2-5%	Negligible	2-5%	Negligible
QR.R19	2-5%	Negligible	2-5%	Negligible
QR.R20	2-5%	Negligible	2-5%	Negligible
QR.R21	2-5%	Negligible	2-5%	Negligible
QR.R22	2-5%	Negligible	2-5%	Negligible
QR.R23	2-5%	Negligible	2-5%	Negligible
QR.R24	2-5%	Negligible	2-5%	Negligible

**Table 8g.57** compares the impacts of the Stage 1a vs 2a scenario (**Table 8g.11**) and Stage 1b vs 2b scenario (**Table 8g.29**) for PM<sub>2.5</sub> impacts. As set out, the impacts are broadly the same in both scenarios, therefore it would not be appropriate to assign one scenario as ‘worst-case’ in this instance.

**Table 8g.57: Comparison of PM<sub>2.5</sub> Impacts in Castle Donington**

Receptor ID	PM <sub>2.5</sub> Impacts in Castle Donington - Comparison			
	2028 Stage 1a vs 2a		2028 Stage 1b vs 2b	
	% Change of Limit	Impact Descriptor	% Change of Limit	Impact Descriptor
QR.R7	2-5%	Negligible	2-5%	Negligible
QR.R8	2-5%	Negligible	2-5%	Negligible
QR.R9	1%	Negligible	1%	Negligible
QR.R10	2-5%	Negligible	2-5%	Negligible
QR.R11	2-5%	Negligible	2-5%	Negligible
QR.R12	1%	Negligible	1%	Negligible
QR.R13	2-5%	Negligible	2-5%	Negligible
QR.R14	2-5%	Negligible	2-5%	Negligible
QR.R15	2-5%	Negligible	2-5%	Negligible
QR.R16	2-5%	Negligible	2-5%	Negligible
QR.R17	2-5%	Negligible	2-5%	Negligible
QR.R18	2-5%	Negligible	2-5%	Negligible
QR.R19	2-5%	Negligible	2-5%	Negligible
QR.R20	2-5%	Negligible	2-5%	Negligible
QR.R21	2-5%	Negligible	2-5%	Negligible
QR.R22	2-5%	Slight	2-5%	Slight
QR.R23	2-5%	Negligible	2-5%	Negligible
QR.R24	2-5%	Negligible	2-5%	Negligible