



West Winch Housing Access Road

Environmental Statement, Chapter 6: Air Quality, Appendix 5: Human Receptor Results

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1 Operational Phase: Human Receptor Results

- 1.1.1 Table 1-1 to Table 1-3 outline background NO₂, PM₁₀ and PM_{2.5} concentrations used in the operational phase assessment.

Table 1-1 Annual Mean NO₂ Concentrations in the Opening and Design Year Scenarios

Receptor ID	Baseline 2019 (µg/m³)	DM 2027 (µg/m³)	DS 2027 (µg/m³)	Change (DS- DM) (µg/m³)	DM 2042 (µg/m³)	DS 2042 (µg/m³)	Change (DS- DM) (µg/m³)
P1	10.9	8.0	9.6	1.6	7.9	9.6	1.7
P2	11.0	8.0	9.8	1.8	7.9	9.8	1.9
P3	9.1	6.8	8.6	1.8	6.8	8.8	2.0
P4	9.2	6.9	8.5	1.6	6.9	8.4	1.5
P5	8.9	6.7	8.3	1.6	6.6	8.3	1.7
P6	9.5	6.8	8.0	1.2	6.7	7.8	1.1
P7	8.9	6.7	8.3	1.6	6.6	8.1	1.5
P8	9.3	6.9	7.1	0.2	6.9	7.1	0.2
R01	13.0	8.0	7.2	-0.8	7.7	7.3	-0.4
R02	17.3	11.1	11.1	0.0	10.5	10.5	0.0
R03	19.7	11.9	12.2	0.3	11.1	11.1	0.0
R04	17.2	10.9	8.6	-2.3	10.3	10.1	-0.2
R05	19.4	11.0	8.7	-2.3	10.5	9.5	-1.0
R06	17.0	9.4	7.6	-1.8	8.9	7.9	-1.0
R07	9.0	6.7	6.9	0.2	6.7	6.9	0.2

Receptor ID	Baseline 2019 (µg/m³)	DM 2027 (µg/m³)	DS 2027 (µg/m³)	Change (DS- DM) (µg/m³)	DM 2042 (µg/m³)	DS 2042 (µg/m³)	Change (DS- DM) (µg/m³)
R08	17.5	10.8	11.2	0.4	10.3	10.4	0.1
R09	15.8	9.7	10.0	0.3	9.3	9.3	0.0
R10	14.8	10.5	10.4	-0.1	10.3	10.3	0.0
R11	14.9	10.5	10.5	0.0	10.4	10.4	0.0
R12	16.7	11.3	11.3	0.0	11.0	11.1	0.1
R13	13.0	9.8	9.7	-0.1	9.6	9.6	0.0
R14	16.4	9.3	7.5	-1.8	8.8	8.0	-0.8
R15	12.4	8.1	7.1	-1.0	7.8	7.3	-0.5
R16	14.2	8.6	7.5	-1.1	8.3	7.7	-0.6
R17	21.9	10.3	10.0	-0.3	9.6	10.0	0.4
R18	9.6	7.1	7.1	0.0	7.0	7.0	0.0
R19	13.6	8.1	8.0	-0.1	7.8	7.9	0.1
R20	13.2	8.3	7.4	-0.9	8.0	7.5	-0.5
R21	13.6	8.4	7.0	-1.4	8.0	7.3	-0.7
R22	12.6	8.0	6.9	-1.1	7.8	7.0	-0.8
R23	13.8	8.1	7.4	-0.7	7.8	7.4	-0.4



Receptor ID	Baseline 2019 ($\mu\text{g}/\text{m}^3$)	DM 2027 ($\mu\text{g}/\text{m}^3$)	DS 2027 ($\mu\text{g}/\text{m}^3$)	Change (DS-DM) ($\mu\text{g}/\text{m}^3$)	DM 2042 ($\mu\text{g}/\text{m}^3$)	DS 2042 ($\mu\text{g}/\text{m}^3$)	Change (DS-DM) ($\mu\text{g}/\text{m}^3$)
R24	21.5	11.7	8.8	-2.9	11.0	9.5	-1.5
R25	13.8	8.9	9.0	0.1	8.7	8.7	0.0
R26	17.1	11.5	11.5	0.0	11.2	11.3	0.1
R27	10.6	7.5	7.3	-0.2	7.3	7.2	-0.1
R28	20.2	11.2	9.1	-2.1	10.6	9.6	-1.0
R29	17.4	10.7	8.5	-2.2	10.2	9.3	-0.9
R30	15.1	8.5	6.8	-1.7	8.1	6.9	-1.2
R31	9.8	7.1	7.1	0.0	7.0	7.1	0.1
R32	11.6	8.1	8.1	0.0	8.0	8.0	0.0
R33	16.5	10.9	10.8	-0.1	10.4	10.4	0.0
R34	15.1	8.7	7.2	-1.5	8.3	7.6	-0.7
R35	22.8	11.0	8.2	-2.8	10.3	8.6	-1.7
R36	12.4	7.9	7.0	-0.9	7.6	7.0	-0.6

Table 1-2 Annual Mean PM₁₀ Concentrations in the Opening and Design Year Scenarios

Receptor ID	Baseline 2019 (µg/m ³)	DM 2027 (µg/m ³)	DS 2027 (µg/m ³)	Change (DS- DM) (µg/m ³)	DM 2042 (µg/m ³)	DS 2042 (µg/m ³)	Change (DS- DM) (µg/m ³)
P1	16.4	15.2	15.7	0.5	15.2	15.8	0.6
P2	16.4	15.2	15.7	0.5	15.2	15.8	0.6
P3	16.0	14.8	15.4	0.6	14.8	15.6	0.8
P4	16.0	14.9	15.4	0.5	14.9	15.5	0.6
P5	15.8	14.7	15.2	0.5	14.7	15.4	0.7
P6	16.4	15.2	15.6	0.4	15.2	15.7	0.5
P7	15.8	14.7	15.2	0.5	14.7	15.3	0.6
P8	16.0	14.9	14.9	0.0	14.9	15.0	0.1
R01	16.9	15.6	15.3	-0.3	15.7	15.4	-0.3
R02	17.5	16.3	16.3	0.0	16.3	16.3	0.0
R03	18.0	16.6	16.7	0.1	16.6	16.6	0.0
R04	17.3	16.0	15.3	-0.7	16.1	15.9	-0.2
R05	17.6	16.2	15.4	-0.8	16.2	15.8	-0.4
R06	17.2	15.7	15.1	-0.6	15.8	15.3	-0.5
R07	16.6	15.4	15.4	0.0	15.4	15.5	0.1

Receptor ID	Baseline 2019 (µg/m³)	DM 2027 (µg/m³)	DS 2027 (µg/m³)	Change (DS- DM) (µg/m³)	DM 2042 (µg/m³)	DS 2042 (µg/m³)	Change (DS- DM) (µg/m³)
R08	17.8	16.4	16.5	0.1	16.5	16.5	0.0
R09	17.3	15.9	16.0	0.1	16.0	16.0	0.0
R10	16.8	15.6	15.6	0.0	15.6	15.6	0.0
R11	16.8	15.6	15.6	0.0	15.6	15.6	0.0
R12	17.1	15.8	15.8	0.0	15.9	15.9	0.0
R13	15.9	14.8	14.8	0.0	14.8	14.8	0.0
R14	17.1	15.7	15.0	-0.7	15.8	15.3	-0.5
R15	16.4	15.2	14.8	-0.4	15.2	14.9	-0.3
R16	16.8	15.5	15.0	-0.5	15.5	15.2	-0.3
R17	18.5	16.6	16.4	-0.2	16.7	16.8	0.1
R18	16.1	14.9	14.9	0.0	14.9	14.9	0.0
R19	17.1	15.7	15.6	-0.1	15.8	15.8	0.0
R20	16.6	15.4	15.0	-0.4	15.4	15.1	-0.3
R21	16.5	15.3	14.8	-0.5	15.3	14.9	-0.4
R22	16.4	15.2	14.8	-0.4	15.2	14.9	-0.3
R23	17.1	15.7	15.4	-0.3	15.8	15.4	-0.4

Receptor ID	Baseline 2019 (µg/m³)	DM 2027 (µg/m³)	DS 2027 (µg/m³)	Change (DS- DM) (µg/m³)	DM 2042 (µg/m³)	DS 2042 (µg/m³)	Change (DS- DM) (µg/m³)
R24	18.0	16.3	15.4	-0.9	16.4	15.8	-0.6
R25	18.1	16.8	16.9	0.1	16.9	16.9	0.0
R26	17.1	15.9	15.9	0.0	16.0	16.0	0.0
R27	16.2	15.0	15.0	0.0	15.1	15.0	-0.1
R28	17.7	16.2	15.5	-0.7	16.3	15.8	-0.5
R29	17.3	16.0	15.4	-0.6	16.1	15.7	-0.4
R30	17.3	15.8	15.2	-0.6	15.9	15.2	-0.7
R31	16.1	14.9	14.9	0.0	14.9	15.0	0.1
R32	17.7	16.5	16.5	0.0	16.6	16.6	0.0
R33	17.4	16.2	16.2	0.0	16.3	16.3	0.0
R34	16.8	15.4	14.8	-0.6	15.5	15.0	-0.5
R35	18.1	16.3	15.3	-1.0	16.4	15.6	-0.8
R36	16.4	15.2	14.8	-0.4	15.2	14.8	-0.4

Table 1-3 Annual Mean PM_{2.5} Concentrations in the Opening and Design Years

Receptor ID	Baseline 2019 (µg/m ³)	DM 2027 (µg/m ³)	DS 2027 (µg/m ³)	Change (DS- DM) (µg/m ³)	DM 2042 (µg/m ³)	DS 2042 (µg/m ³)	Change (DS- DM) (µg/m ³)
P1	9.9	8.9	9.2	0.3	8.9	9.3	0.4
P2	9.9	8.9	9.2	0.3	8.9	9.3	0.4
P3	9.6	8.7	9.0	0.3	8.7	9.1	0.4
P4	9.6	8.7	9.0	0.3	8.7	9.1	0.4
P5	9.6	8.6	8.9	0.3	8.6	9.0	0.4
P6	9.8	8.8	9.0	0.2	8.8	9.0	0.2
P7	9.6	8.6	8.9	0.3	8.6	9.0	0.4
P8	9.6	8.7	8.7	0.0	8.7	8.7	0.0
R01	10.1	9.0	8.8	-0.2	9.1	8.9	-0.2
R02	10.5	9.4	9.5	0.1	9.5	9.5	0.0
R03	10.7	9.6	9.7	0.1	9.6	9.6	0.0
R04	10.5	9.5	9.0	-0.5	9.5	9.4	-0.1
R05	10.7	9.5	9.1	-0.4	9.6	9.3	-0.3
R06	10.4	9.2	8.8	-0.4	9.2	8.9	-0.3
R07	9.7	8.8	8.8	0.0	8.8	8.8	0.0

Receptor ID	Baseline 2019 (µg/m³)	DM 2027 (µg/m³)	DS 2027 (µg/m³)	Change (DS- DM) (µg/m³)	DM 2042 (µg/m³)	DS 2042 (µg/m³)	Change (DS- DM) (µg/m³)
R08	10.9	9.8	9.9	0.1	9.8	9.9	0.1
R09	10.4	9.3	9.4	0.1	9.4	9.4	0.0
R10	10.6	9.6	9.6	0.0	9.6	9.6	0.0
R11	10.6	9.6	9.6	0.0	9.6	9.6	0.0
R12	10.7	9.7	9.7	0.0	9.8	9.8	0.0
R13	9.6	8.7	8.7	0.0	8.7	8.7	0.0
R14	10.3	9.2	8.8	-0.4	9.2	8.9	-0.3
R15	9.9	8.9	8.7	-0.2	8.9	8.7	-0.2
R16	10.1	9.0	8.8	-0.2	9.1	8.9	-0.2
R17	11.1	9.6	9.5	-0.1	9.7	9.7	0.0
R18	9.7	8.7	8.7	0.0	8.7	8.7	0.0
R19	10.2	9.1	9.0	-0.1	9.1	9.1	0.0
R20	10.0	9.0	8.8	-0.2	9.0	8.8	-0.2
R21	10.0	8.9	8.7	-0.2	9.0	8.8	-0.2
R22	9.9	8.9	8.7	-0.2	8.9	8.7	-0.2
R23	10.2	9.1	8.9	-0.2	9.1	8.9	-0.2

Receptor ID	Baseline 2019 (µg/m³)	DM 2027 (µg/m³)	DS 2027 (µg/m³)	Change (DS- DM) (µg/m³)	DM 2042 (µg/m³)	DS 2042 (µg/m³)	Change (DS- DM) (µg/m³)
R24	10.9	9.6	9.1	-0.5	9.7	9.3	-0.4
R25	10.4	9.4	9.4	0.0	9.4	9.4	0.0
R26	10.8	9.8	9.8	0.0	9.8	9.8	0.0
R27	9.8	8.8	8.7	-0.1	8.8	8.8	0.0
R28	10.8	9.6	9.2	-0.4	9.6	9.3	-0.3
R29	10.5	9.4	9.1	-0.3	9.5	9.3	-0.2
R30	10.3	9.2	8.8	-0.4	9.2	8.8	-0.4
R31	9.7	8.7	8.7	0.0	8.7	8.7	0.0
R32	10.1	9.2	9.2	0.0	9.2	9.2	0.0
R33	10.4	9.4	9.4	0.0	9.5	9.4	-0.1
R34	10.1	9.1	8.7	-0.4	9.1	8.8	-0.3
R35	10.9	9.5	8.9	-0.6	9.6	9.1	-0.5
R36	9.9	8.9	8.7	-0.2	8.9	8.7	-0.2