



# The Sizewell C Project

6.14 Environmental Statement Addendum  
Volume 3: Environmental Statement Addendum Appendices  
Chapter 5 Two Village Bypass  
Appendices 5.4.A-B Air Quality

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Planning Act 2008  
Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009





**NOT PROTECTIVELY MARKED**

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## APPENDIX 5.4.A MODELLED AIR QUALITY BASELINES

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## APPENDIX 5.4.A: TWO VILLAGE BYPASS AIR QUALITY BASELINE

### A.1. Current baseline

**Table 5.4.A.1: NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations for the Baseline Year 2018 at Nearby Sensitive Receptors**

Receptor	2018 NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	2018 PM <sub>10</sub> Concentration (µg/m <sup>3</sup> )	2018 PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
SX5	16.6	16.4	10.0
SX6	39.4	19.6	12.2
SX7	24.0	17.2	10.6
SX8	7.2	15.6	9.3
SX9	7.3	15.6	9.3
SX10	12.6	16.8	9.9
SX15	26.5	17.9	10.9
WM1	8.6	15.0	9.3

\* All values have been rounded to the nearest decimal place.

\* Receptor locations are presented in **Figure 5.1** of **Volume 5** in the **ES** (Doc Ref. 6.6) [APP-420]

### A.2. Future baseline

**Table 5.4.A.2: NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations for the Baseline Year 2023 at Nearby Sensitive Receptors**

Receptor	2023 NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	2023 PM <sub>10</sub> Concentration (µg/m <sup>3</sup> )	2023 PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
SX5	12.1	15.3	9.1
SX6	27.3	18.4	11.1
SX7	17.0	16.1	9.7
SX8	6.0	14.6	8.5
SX9	6.1	14.6	8.5
SX10	9.7	15.7	9.1
SX15	18.7	16.8	10.0
WM1	6.9	14.0	8.4

\*All values have been rounded to the nearest decimal place.

\* Receptor locations are presented in **Figure 5.1** of **Volume 5** in the **ES** (Doc Ref. 6.6) [APP-420]

**Table 5.4.A.3: NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations for the Baseline Year 2028 at Nearby Sensitive Receptors**

Receptor	2028 NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	2028 PM <sub>10</sub> Concentration (µg/m <sup>3</sup> )	2028 PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
SX5	9.1	15.0	8.9
SX6	18.6	18.2	10.8
SX7	12.1	15.8	9.4
SX8	5.3	14.2	8.2
SX9	5.4	14.2	8.2
SX10	7.6	15.4	8.8
SX15	13.2	16.5	9.7
WM1	5.9	13.6	8.2

\*All values have been rounded to the nearest decimal place.

\* Receptor locations are presented in **Figure 5.1** of **Volume 5** in the **ES** (Doc Ref. 6.6) [APP-420]

**Table 5.4.A.4: NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations for the Baseline Year 2034 at Nearby Sensitive Receptors**

Receptor	2034 NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	2034 PM <sub>10</sub> Concentration (µg/m <sup>3</sup> )	2034 PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
SX5	8.6	15.1	8.9
SX6	16.9	18.4	11.0
SX7	11.2	15.9	9.5
SX8	5.3	14.2	8.2
SX9	5.3	14.2	8.2
SX10	7.3	15.4	8.8
SX15	12.1	16.6	9.8
WM1	5.9	13.7	8.2

\*All values have been rounded to the nearest decimal place.

\* Receptor locations are presented in **Figure 5.1** of **Volume 5** in the **ES** (Doc Ref. 6.6) [APP-420]



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## APPENDIX 5.4.B RECEPTORS WITH A CHANGE IN MAGNITUDE OF CHANGE DESCRIPTORS

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## APPENDIX 5.4.B: RECEPTORS WITH A CHANGE IN MAGNITUDE OF CHANGE DESCRIPTORS

**Table 5.4.B.1: Pollutant Concentrations with a Change in Magnitude of Change Descriptor for Construction Phase Year 2023 Compared to the ES Assessment**

Receptor	2023 average day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets)	Effect Descriptor (Descriptor presented in ES in brackets)
	Concentration ( $\mu\text{g}/\text{m}^3$ )	Magnitude of Change ( $\mu\text{g}/\text{m}^3$ )		
<b>NO<sub>2</sub></b>				
SX7	18.1	1.1	Low (Very Low)	Negligible (Negligible)
<b>PM<sub>2.5</sub></b>				
SX6	11.5	0.4	Very Low (Low)	Negligible (Negligible)
SX7	9.9	0.2	Imperceptible (Very Low)	Negligible (Negligible)
SX15	8.8	Less than 0.1	Imperceptible (Very Low)	Negligible (Negligible)

\*All values have been rounded to the nearest decimal place.

**Table 5.4.B.2: Pollutant Concentrations with a Change in Magnitude of Change Descriptor for Operation of the Proposed Development During the Operational Year 2028 Average Day Compared to the ES Assessment**

Receptor	2028 Average Day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets)	Effect Descriptor (Descriptor presented in ES in brackets)
	Concentration ( $\mu\text{g}/\text{m}^3$ )	Magnitude of Change ( $\mu\text{g}/\text{m}^3$ )		
<b>NO<sub>2</sub></b>				
SX5	6.6	-2.5	Medium (High)	Minor Beneficial (Moderate Beneficial)
SX8	8.3	3.0	Medium (Low)	Minor Adverse (Negligible)
SX9	7.9	2.5	Medium (Very Low)	Minor Adverse (Negligible)
WM1	8.5	2.6	Medium (Low)	Minor Adverse (Negligible)
<b>PM<sub>10</sub></b>				

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Receptor	2028 Average Day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets)	Effect Descriptor (Descriptor presented in ES in brackets)
	Concentration (µg/m <sup>3</sup> )	Magnitude of Change (µg/m <sup>3</sup> )		
SX5	13.9	-1.1	Low (Very Low)	Negligible
SX6	13.6	-4.6	High (Medium)	Moderate Beneficial (Minor Beneficial)
SX7	13.7	-2.1	Medium (Low)	Minor Beneficial (Negligible)
SX15	13.9	-2.6	Medium (Low)	Minor Beneficial (Negligible)
<b>PM<sub>2.5</sub></b>				
SX7	8.2	-1.2	Low (High)	Negligible (Moderate Beneficial)
SX15	8.2	-1.5	Medium (High)	Minor Beneficial (Moderate Beneficial)

\*All values have been rounded to the nearest decimal place.

**Table 5.4.B.3: Pollutant Concentrations with a Change in Magnitude of Change Descriptor for Operation of the Proposed Development During the Operational Year 2028 Busiest Day Compared to the ES Assessment**

Receptor	2028 Busiest Day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets)	Effect Descriptor (Descriptor presented in ES in brackets)
	Concentration (µg/m <sup>3</sup> )	Magnitude of Change (µg/m <sup>3</sup> )		
<b>NO<sub>2</sub></b>				
SX5	6.7	-2.4	Medium (High)	Minor Beneficial (Moderate Beneficial)
SX8	8.6	3.3	Medium (Low)	Minor Adverse (Negligible)
SX9	8.2	2.8	Medium (Very Low)	Minor Adverse (Negligible)
SX10	8.0	0.4	Very Low (Imperceptible)	Negligible (Negligible)
WM1	8.8	2.9	Medium (Imperceptible)	Minor Adverse (Negligible)
<b>PM<sub>10</sub></b>				

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Receptor	2028 Busiest Day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets)	Effect Descriptor (Descriptor presented in ES in brackets)
	Concentration ( $\mu\text{g}/\text{m}^3$ )	Magnitude of Change ( $\mu\text{g}/\text{m}^3$ )		
SX5	13.9	-1.1	Low (Very Low)	Negligible (Negligible)
SX6	13.6	-4.6	High (Medium)	Moderate Beneficial (Minor Beneficial)
SX7	13.7	-2.1	Medium (Low)	Minor Beneficial (Negligible)
SX15	13.9	-2.6	Medium (Low)	Minor Beneficial (Negligible)
<b>PM<sub>2.5</sub></b>				
SX7	8.2	-1.2	Low (High)	Negligible (Moderate Beneficial)
SX15	8.2	-1.5	Medium (High)	Minor Beneficial (Moderate Beneficial)

\*All values have been rounded to the nearest decimal place.

**Table 5.4.B.4: Pollutant Concentrations with a Change in Magnitude of Change Descriptor for Operation of the Proposed Development During the Operational Year 2034 Compared to the ES Assessment**

Receptor	2034 Busiest Day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets)	Effect Descriptor (Descriptor presented in ES in brackets)
	Concentration ( $\mu\text{g}/\text{m}^3$ )	Magnitude of Change ( $\mu\text{g}/\text{m}^3$ )		
<b>NO<sub>2</sub></b>				
SX5	6.0	-2.4	Medium (High)	Minor Beneficial (Moderate Beneficial)
SX8	7.2	1.8	Low (Very Low)	Negligible (Negligible)
SX9	7.1	1.6	Low (Very Low)	Negligible (Negligible)
<b>PM<sub>10</sub></b>				
SX6	13.6	-4.9	High (Medium)	Moderate Beneficial (Minor Beneficial)



**NOT PROTECTIVELY MARKED**

Receptor	2034 Busiest Day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets)	Effect Descriptor (Descriptor presented in ES in brackets)
	Concentration (µg/m <sup>3</sup> )	Magnitude of Change (µg/m <sup>3</sup> )		
SX7	13.8	-2.2	Medium (Low)	Minor Beneficial (Negligible)
SX15	13.9	-2.7	Medium (Low)	Minor Beneficial (Negligible)
<b>PM<sub>2.5</sub></b>				
SX7	8.3	-1.2	Low (High)	Negligible (Moderate Beneficial)
SX15	8.2	-1.6	Medium (High)	Minor Beneficial (Moderate Beneficial)

\*All values have been rounded to the nearest decimal place.