



# The Sizewell C Project

6.14 Environmental Statement Addendum  
Volume 3: Environmental Statement Addendum Appendices  
Chapter 9 Rail  
Appendices 9.4.A-B Air Quality

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## APPENDIX 9.4.A RAIL AIR QUALITY BASELINE

## APPENDIX 9.4.A: RAIL AIR QUALITY BASELINE

### A.1. Current baseline

#### a) Proposed rail extension

**Table 9.4.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 Near the Proposed Rail Extension**

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> )
LE2	8.1	15.2	9.2
LE3	9.2	15.3	9.2
LE15	7.1	15.0	9.1
LE16	7.0	15.0	9.0
LE17	6.9	14.3	8.9
LE18	7.0	14.8	9.0
LE19	7.2	15.1	9.2
LE20	7.1	14.8	9.0
LE21	7.1	14.8	9.0
LE22	7.2	14.9	9.1
LE23	7.0	14.8	9.0
LE24	7.1	14.8	9.0
LE53	7.1	14.8	9.0
LE54	7.0	14.8	9.0
LE55	7.7	15.1	9.1
LE56	9.0	15.1	9.3

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

\* Receptor locations are presented in **Figure 5.1** of **Volume 9** in the **ES** (Doc Ref. 6.10) [APP-550].

#### a) Saxmundham to Leiston Branch Line

**Table 9.4.A.2: NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations for the Baseline Year 2018 at Nearby Sensitive Receptors Near Saxmundham to Leiston Branch Line**

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> )
LE1	13.7	14.8	9.8
LE8	10.5	14.5	9.6
LE9	17.4	15.0	9.9



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> )
LE12	9.7	15.1	9.4
LE20	7.1	14.8	9.0
LE21	7.1	14.8	9.0
LE22	7.2	14.9	9.1
LE24	7.1	14.8	9.0
LE34	7.5	14.9	9.2
LE35	8.0	14.3	9.5
LE36	8.6	15.0	9.3
LE37	8.5	15.0	9.3
LE38	8.5	15.0	9.3
LE40	7.6	14.9	9.2
LE53	7.1	14.8	9.0
LE55	7.7	15.1	9.1
LE56	9.0	15.1	9.3
SX4	14.0	15.4	9.8
SX16	10.1	14.9	9.5
SX17	8.0	14.6	9.3
SX19	7.1	16.1	9.4

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

\* Receptor locations are presented in **Figure 5.2** of **Volume 9** in the **ES** (Doc Ref. 6.10) [APP-550].

## A.2. Future baseline

### b) Proposed rail extension

**Table 9.4.A.3: NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations for the Baseline Year 2023 at Nearby Sensitive Receptors Near the Proposed Rail Extension Route**

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> )
LE2	6.6	14.2	8.4
LE3	7.4	14.3	8.4
LE15	6.0	14.0	8.2
LE16	5.9	13.9	8.2
LE17	5.9	13.3	8.0
LE18	6.0	13.7	8.2

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> )
LE19	6.1	14.1	8.3
LE20	6.0	13.7	8.2
LE21	6.0	13.7	8.2
LE22	6.1	13.9	8.3
LE23	5.9	13.7	8.2
LE24	6.0	13.7	8.2
LE53	6.0	13.7	8.2
LE54	5.9	13.7	8.2
LE55	6.4	14.1	8.3
LE56	7.5	14.1	8.5

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

**Table 9.4.A.4: NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations for the Baseline Year 2028 at Nearby Sensitive Receptors Near the Proposed Rail Extension Route**

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> )
LE2	5.7	13.9	8.1
LE3	6.1	13.9	8.1
LE15	5.3	13.6	8.0
LE16	5.2	13.6	7.9
LE17	5.2	13.0	7.8
LE18	5.3	13.4	7.9
LE19	5.4	13.8	8.1
LE20	5.3	13.4	7.9
LE21	5.3	13.4	7.9
LE22	5.4	13.5	8.0
LE23	5.3	13.4	7.9
LE24	5.3	13.4	7.9
LE53	5.3	13.4	7.9
LE54	5.3	13.4	7.9
LE55	5.6	13.7	8.0
LE56	6.3	13.8	8.2

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

a) Saxmundham to Leiston Branch Line

**Table 9.4.A.5: 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> )
LE1	10.6	13.7	8.9
LE8	8.7	13.5	8.8
LE9	14.3	14.0	9.1
LE12	8.3	14.2	8.6
LE20	6.0	13.7	8.2
LE21	6.0	13.7	8.2
LE22	6.1	13.9	8.3
LE24	6.0	13.7	8.2
LE34	6.4	13.8	8.4
LE35	6.8	13.2	8.6
LE36	7.3	14.0	8.5
LE37	7.4	14.0	8.5
LE38	7.6	14.0	8.5
LE40	6.5	13.8	8.4
LE53	6.0	13.7	8.2
LE55	6.4	14.1	8.3
LE56	7.5	14.1	8.5
SX4	11.1	14.4	9.0
SX16	8.3	13.8	8.6
SX17	6.7	13.5	8.5
SX19	6.1	15.0	8.6

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

**Table 9.4.A.6: 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> )
LE1	8.5	13.4	8.7
LE8	7.3	13.2	8.5
LE9	10.8	13.6	8.8

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> )
LE12	6.8	13.8	8.3
LE20	5.3	13.4	7.9
LE21	5.3	13.4	7.9
LE22	5.4	13.5	8.0
LE24	5.3	13.4	7.9
LE34	5.7	13.5	8.1
LE35	6.1	12.8	8.3
LE36	6.3	13.7	8.2
LE37	6.3	13.7	8.2
LE38	6.4	13.7	8.2
LE40	5.8	13.5	8.1
LE53	5.3	13.4	7.9
LE55	5.6	13.7	8.0
LE56	6.3	13.8	8.2
SX4	8.6	14.0	8.7
SX16	6.9	13.5	8.4
SX17	6.0	13.2	8.2
SX19	5.4	14.7	8.3

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

## APPENDIX 9.4.B RECEPTORS WITH A CHANGE IN MAGNITUDE OF CHANGE DESCRIPTORS



## APPENDIX 9.4.B: RECEPTORS WITH A CHANGE IN MAGNITUDE OF CHANGE DESCRIPTORS

**Table 9.4.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 if different)	Effect Descriptor (Descriptor presented in ES in brackets if different)
	Concentration (µg/m³)	Magnitude of Change (µg/m³)		
NO <sub>2</sub>				
SX4	11.4	0.3	Imperceptible (Very Low)	Negligible

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

**Table 9.4.B.2: Pollutant Concentrations with a Change in Magnitude of Change Descriptor for Operation of the Proposed Development During 2028 Average Day Compared to the ES Assessment**

Receptor	2028 average day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets if different)	Effect Descriptor (Descriptor presented in ES in brackets if different)
	Concentration (µg/m³)	Magnitude of Change (µg/m³)		
NO <sub>2</sub>				
LE2	6.1	0.4	Imperceptible (Very Low)	Negligible
LE8	7.6	0.3	Imperceptible (Very Low)	Negligible
PM <sub>2.5</sub>				
LE1	8.8	0.2	Imperceptible (Very Low)	Negligible

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

**Table 9.4.B.3: Pollutant Concentrations with a Change in Magnitude of Change Descriptor for Operation of the Proposed Development During 2028 Busiest Day Compared to the ES Assessment**

Receptor	2028 busiest day		Magnitude of Change Descriptor (Descriptor presented in ES in brackets if different)	Effect Descriptor (Descriptor presented in ES in brackets if different)
	Concentration (µg/m³)	Magnitude of Change (µg/m³)		
NO <sub>2</sub>				
LE2	6.1	0.4	Imperceptible (Very Low)	Negligible
LE8	7.6	0.3	Imperceptible (Very Low)	Negligible
PM <sub>2.5</sub>				
LE1	8.8	0.2	Imperceptible (Very Low)	Negligible

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