

## **APPENDIX 10.3**

### **AIR QUALITY MODELLING RESULTS**

## Appendix 10.3: Air Quality Modelling Results

Table A1: Predicted Annual Mean NO<sub>2</sub> Concentrations (µg/m<sup>3</sup>) for Floors Levels within the Development

Floor	Building																					School	Playing field
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
G	26.6	26.0	25.8	24.9	29.8	26.7	25.0	24.9	26.8	27.2	24.9	25.1	25.5	26.0	24.8	24.7	25.2	25.3	25.0	25.0	24.9	25.4	25.7
1	26.1	25.7	25.6	24.7	28.1	26.2	24.9	24.9	26.1	26.4	24.9	25.0	25.3	25.7	24.8	24.7	25.0	25.2	24.9	24.9	24.7	25.3	
2	25.3	25.5	25.4	24.5	25.8	25.4	24.8	24.8	25.2	25.3	24.7	24.8	25.0	25.2	24.8	24.6	24.7	25.1	24.9	24.9	24.6	25.1	
3	24.8	25.4	25.3	24.4		24.9	24.7	24.7	24.7	24.8	24.6	24.6	24.8	24.9	24.7	24.6	24.6	24.9	24.8	24.8	24.5		
4		25.3	25.2	24.4			24.5	24.5	24.3	24.5	24.5	24.5	24.6	24.7	24.6	24.6	24.5	24.8					
5		25.3	25.2	24.3			24.4	24.4		24.4	24.4	24.5	24.6	24.5	24.5	24.5	24.5	24.7					
6		25.2		24.3			24.3	24.3		24.3	24.3			24.5		24.4	24.6						
7		25.2		24.3			24.3	24.3									24.4						
8		24.3		24.2																			
9				24.2																			

Table A2: Predicted Annual Mean NO<sub>2</sub> Concentrations (µg/m<sup>3</sup>) for Floors Levels within the Development Assuming No Improvement in NO<sub>x</sub> and NO<sub>2</sub>

Floor	Building																					School	Playing field
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
G	33.4	29.8	29.6	27.4	<b>42.2</b>	33.6	28.4	28.3	34.0	35.4	28.2	28.9	29.8	31.5	27.9	27.4	28.2	29.1	28.3	28.3	27.4	29.6	30.1
1	31.8	29.7	29.5	27.2	37.4	32.2	28.2	28.2	32.1	32.8	28.1	28.6	29.4	30.6	27.8	27.4	27.9	28.9	28.2	28.2	27.3	29.3	
2	29.3	29.6	29.3	26.9	30.8	29.7	27.9	27.9	29.1	29.4	27.8	28.0	28.5	29.1	27.6	27.3	27.5	28.6	28.1	28.1	27.0	28.7	
3	27.9	29.3	29.1	26.7		28.1	27.5	27.5	27.6	27.9	27.4	27.4	27.7	28.0	27.4	27.2	27.2	28.2	27.8	27.8	26.9		
4		29.1	29.0	26.6			27.1	27.1	26.8	27.1	27.0	26.9	27.2	27.4	27.2	27.0	27.0	27.9					
5		29.1	28.8	26.5			26.7	26.7			26.7	26.6	26.9	27.0	27.0	26.9	26.8	27.5					
6		28.9		26.4			26.5	26.5			26.4	26.4			26.8		26.6	27.2					
7		28.8		26.3			26.3	26.3										26.5					
8		26.4		26.2																			
9				26.1																			

Note: Exceedance of the AQS Objective shown in Bold. Building 5 includes a hotel, gym and office and as such the annual mean NO<sub>2</sub> concentration does not apply in this location.

Table A3: Predicted Annual Mean PM<sub>10</sub> Concentrations (µg/m<sup>3</sup>) for Floors Levels within the Development

Floor	Building																					School	Playing field
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
G	19.3	19.0	19.0	18.6	20.3	19.3	18.6	18.6	19.2	19.4	18.6	18.7	18.8	19.1	18.6	18.5	18.7	18.7	18.6	18.6	18.6	18.8	18.7
1	19.1	19.0	18.9	18.6	19.7	19.1	18.6	18.6	19.0	19.1	18.6	18.7	18.8	18.9	18.6	18.5	18.7	18.7	18.6	18.6	18.6	18.7	
2	18.8	18.9	18.8	18.5	18.9	18.8	18.6	18.6	18.7	18.7	18.6	18.6	18.7	18.7	18.5	18.5	18.6	18.6	18.6	18.6	18.5	18.7	
3	18.6	18.8	18.8	18.5		18.6	18.5	18.5	18.6	18.6	18.5	18.5	18.6	18.6	18.5	18.5	18.5	18.6	18.5	18.6	18.5		
4		18.8	18.8	18.4			18.5	18.5	3.0	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5				
5		18.8	18.8	18.4			18.5	18.5		18.5	18.4	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5				
6		18.8		18.4			18.4	18.4		18.4	18.4				18.4		18.4	18.5					
7		18.7		18.4			18.4	18.4									18.4						
8		18.4		18.4																			
9				18.4																			

Table A4: Predicted Annual Mean PM<sub>10</sub> Number of Days >50µg/m<sup>3</sup> for Floors Levels within the Development

Floor	Building																				School	Playing field	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			21
G	1	1	2	2	2	2	1	1	1	3	1	1	1	1	1	1	2	2	1	1	1	2	1
1	1	1	2	2	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	2	2	2		2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
4		2	2	1			1	1	3	2	1	1	2	2	1	1	2	1					
5		2	2	1			1	1			1	1	2	2	1	1	1	1					
6		2		1			1	1			1	1			1		1	1					
7		2		1			1	1									1						
8		2		1																			
9				1																			

Table A5: Predicted Annual Mean PM<sub>2.5</sub> Concentrations (µg/m<sup>3</sup>) for Floors Levels within the Development

Floor	Building																					School	Playing field
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
G	11.4	11.3	11.3	11.1	12.0	11.4	11.1	11.1	11.4	11.5	11.1	11.1	11.2	11.3	11.1	11.0	11.1	11.1	11.1	11.1	11.1	11.2	9.7
1	11.3	11.3	11.2	11.1	11.7	11.3	11.1	11.1	11.3	11.3	11.1	11.1	11.2	11.3	11.0	11.0	11.1	11.1	11.1	11.1	11.1	11.0	11.1
2	11.2	11.2	11.2	11.0	11.2	11.2	11.1	11.1	11.1	11.1	11.0	11.1	11.1	11.1	11.0	11.0	11.0	11.1	11.1	11.1	11.1	11.0	11.1
3	11.1	11.2	11.2	11.0		11.1	11.0	11.0	11.0	11.1	11.0	11.0	11.0	11.1	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	
4		11.2	11.2	11.0			11.0	11.0	3.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0			
5		11.2	11.1	11.0			11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0				
6		11.2		11.0			11.0	11.0		11.0	11.0				11.0		11.0	11.0					
7		11.1		11.0			11.0	11.0									11.0						
8		11.0		11.0																			
9				10.9																			