

Appendix 4
DMRB / TAG Quantitative Assessment

Appendix 4.1. NO₂.

A68 NO2						
Pollutant: NO2	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(i)	(ii)	(iii)	(iv)	(v=i+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Properties (amin)	1	1		1	3	
Properties (asome)	1	1		1	3	
NO2concentration at average point within band for do-minimum (bmin)	8.79	4.28	0	3.96		
NO2concentration at average point within band for do-something (bsume)	8.8	4.27	0	3.97		
Do-minimum NO2assessment (c=amin*bmin)	8.79	4.28	0	3.96	17.03	Total route assess NO2 (I)
Do-something NO2 assessment (c=asome*bsume)	8.8	4.27	0	3.97	17.04	Total route assess NO2 (II)
Net total route for NO2 (II-I)	0.01	-0.01	0	0.01	0.01	

C83 LINK A						
Pollutant: NO2	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(i)	(ii)	(iii)	(iv)	(v=i+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Properties (amin)	23	23	30	18	94	*
Properties (asome)	23	23	30	18	94	*
NO2concentration at average point within band for do-minimum (bmin)	4.17	3.58	3.28	3.27		
NO2concentration at average point within band for do-something (bsume)	4.12	3.57	3.28	3.27		
Do-minimum NO2assessment (c=amin*bmin)	95.91	82.34	98.4	58.86	335.51	Total route assess NO2 (I)
Do-something NO2assessment (c=asome*bsume)	94.76	82.11	98.4	58.86	334.13	Total route assess NO2 (II)
Net total route for NO2 (II-I)	-1.15	-0.23	0	0	-1.38	

SIDE ROAD LINK						
Pollutant: NO2	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(i)	(ii)	(iii)	(iv)	(v=i+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Properties (amin)	2	0	0	0	2	
Properties (asome)	2	0	0	0	2	
NO2concentration at average point within band for do-minimum (bmin)	3.78	0	0	0		
NO2concentration at average point within band for do-something (bsume)	3.8	0	0	0		
Do-minimum NO2assessment (c=amin*bmin)	7.56	0	0	0	7.56	Total route assess NO2 (I)
Do-something NO2assessment (c=asome*bsume)	7.6	0	0	0	7.6	Total route assess NO2 (II)
Net total route for NO2 (II-I)	0.04	0	0	0	0.04	

Summary Table for NO2						
Pollutant: NO2	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(i)	(ii)	(iii)	(iv)	(v=i+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Total properties across all routes (min)	26	24	30	19	99	
Total properties across all routes (som)	24	24	30	21	99	
Do-minimum NO2assessment (c=amin*bmin)	108.48	86.62	98.4	62.82	356.32	Total route assess NO2 (I)
Do-something NO2 assessment (c=asome*bsome)	107.36	86.38	98.4	62.83	354.97	Total route assess NO2 (II)
Net total assessment for NO2 (II-I)	-1.12	-0.24	0	0.01	-1.35	
Number of properties with an improvement						47
Number of properties with no change						48
Number of properties with a deterioration						4

Appendix 4.2. PM₁₀.

A68/D47/5 PM10						
Pollutant: PM10	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(i)	(ii)	(iii)	(iv)	(v=i+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Properties (amin)	1	1		1	3	
Properties (asome)	1	1		1	3	
PM10 concentration at average point within band for do-minimum (bmin)	11.6	10.37	0	10.31		
PM10 concentration at average point within band for do-something (bsome)	11.65	10.36	0	10.32		
Do-minimum PM10 assessment (c=amin*bmin)	11.6	10.37	0	10.31	32.28	Total route assess PM10 (I)
Do-something pm10 assessment (c=asome*bsome)	11.65	10.36	0	10.32	32.33	Total route assess PM10 (II)
Net total route for PM10 (II-I)	0.05	-0.01	0	0.01	0.05	

C83 LINK A						
Pollutant: PM10	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(i)	(ii)	(iii)	(iv)	(v=i+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Properties (amin)	23	23	30	18	94	
Properties (asome)	23	23	30	18	94	
PM10 concentration at average point within band for do-minimum (bmin)	10.39	10.21	9.94	9.94		
PM10 concentration at average point within band for do-something (bsome)	10.39	10.21	9.94	9.94		
Do-minimum PM10 assessment (c=amin*bmin)	238.97	234.83	298.2	178.92	950.92	Total route assess PM10 (I)
Do-something pm10 assessment (c=asome*bsome)	238.97	234.83	298.2	178.92	950.92	Total route assess PM10 (II)
Net total route for PM10 (II-I)	0	0	0	0	0	

SIDE ROAD LINK						
Pollutant: PM10	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(I)	(ii)	(iii)	(iv)	(v=I+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Properties (amin)	2	0	0	0	2	
Properties (asome)	2	0	0	0	2	
PM10 concentration at average point within band for do-minimum (bmin)	10.27	0	0	0		
PM10 concentration at average point within band for do-something (bsume)	10.28	0	0			
Do-minimum PM10 assessment (c=amin*bmin)	20.54	0	0	0	20.54	Total route assess PM10 (I)
Do-something pm10 assessment (c=asome*bsume)	20.56	0	0	0	20.56	Total route assess PM10 (II)
Net total route for PM10 (II-I)	0.02	0	0	0	0.02	

Summary Table for PM10						
Pollutant: PM10	0 – 50 m	50 – 100 m	100 – 150m	150 – 200m	0 – 200m	
	(I)	(ii)	(iii)	(iv)	(v=I+ii+iii+iv)	
	At 20m:	At 70m:	At 115m:	At 175m:		
Total properties across all routes (min)	26	24	30	19	99	
Total properties across all routes (som)	26	24	30	19	99	
Do-minimum PM10 assessment (c=amin*bmin)	271.11	245.2	298.2	189.23	1003.74	Total route assess PM10 (I)
Do-something PM10 assessment (c=asome*bsume)	271.18	245.19	298.2	189.24	1003.81	Total route assess PM10 (II)
Net total assessment for PM10 (II-I)	0.07	-0.01	0	0.01	0.07	
Number of properties with an improvement					1	
Number of properties with no change					94	
Number of properties with a deterioration					4	