

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 |
| NO ₂ concentration at average point within band for do-minimum (bmin) | 8.79 | 4.28 | 0 | 3.96 | |
| NO ₂ concentration at average point within band for do-something (bsome) | 8.8 | 4.27 | 0 | 3.97 | |
| Do-minimum NO ₂ assessment (c=amin*bmin) | 8.79 | 4.28 | 0 | 3.96 | 17.03 |
| Do-something NO ₂ assessment (c=asome*bsome) | 8.8 | 4.27 | 0 | 3.97 | 17.04 |
| Net total route for NO ₂ (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* |
| NO ₂ concentration at average point within band for do-minimum (bmin) | 4.17 | 3.58 | 3.28 | 3.27 | |
| NO ₂ concentration at average point within band for do-something (bsome) | 4.12 | 3.57 | 3.28 | 3.27 | |
| Do-minimum NO ₂ assessment (c=amin*bmin) | 95.91 | 82.34 | 98.4 | 58.86 | 335.51 |
| Do-something NO ₂ assessment (c=asome*bsome) | 94.76 | 82.11 | 98.4 | 58.86 | 334.13 |
| Net total route for NO ₂ (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 |
| NO ₂ concentration at average point within band for do-minimum (bmin) | 3.78 | 0 | 0 | 0 | |
| NO ₂ concentration at average point within band for do-something (bsome) | 3.8 | 0 | 0 | 0 | |
| Do-minimum NO ₂ assessment (c=amin*bmin) | 7.56 | 0 | 0 | 0 | 7.56 |
| Do-something NO ₂ assessment (c=asome*bsome) | 7.6 | 0 | 0 | 0 | 7.6 |
| Net total route for NO ₂ (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 NO2 assessment (c=amin*bmin) | 108.48 | 86.62 | 98.4 | 62.82 | 356.32 |
| Do-something NO2 assessment (c=asome*bsome) | 107.36 | 86.38 | 98.4 | 62.83 | 354.97 |
| | -1.12 | -0.24 | 0 | 0.01 | -1.35 |
| Net total assessment for NO2 (II-I) | | | | | |
| 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 |
| Do-something pm10 assessment (c=asome*bsome) | 11.65 | 10.36 | 0 | 10.32 | 32.33 |
| 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 |
| Do-something pm10 assessment (c=asome*bsome) | 238.97 | 234.83 | 298.2 | 178.92 | 950.92 |
| 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 (bsome) | 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*bsome) | 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*bsome) | 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 |