Roads and Maritime Services

TRAQ: Emissions and Air Quality Screening Assessment Report (Version 1.3)

Date of report: User name:	16-Jun-2022 16 rbrowell	:12							
INPUT DATA Simulation name Road type	2021 Base Case Arterial	9							
Traffic data Lane 1 Lane 2	Traffic per day 18000 18000	Speed (km/h) 60 60	Grade (%) 0 0	Length (km) 1.5 1.5					
Median strip	none								
Traffic mix (%) Lane 1 Lane 2	CP 75.6 75.6	CD 2.2 2.2	LDCP 9.6 9.6	LDCD 3.2 3.2	HDCP 0.2 0.2	RT 5.3 5.3	AT 2.7 2.7	BusD 0.6 0.6	MC 0.6 0.6
24-hour average speed Peak hour percentage of daily (%)	36 10	Default							
Year of assessment Local landuse Air quality environment Season Cold start emissions	2021 Residential Wallsend Worst-case Included	Default Default							
METEOROLOGICAL CONDITIONS									
Wind direction Wind speed Atmospheric stability Temperature	Worst-case wind 1 m/s F class (stable r 15 deg C	d angle night time conditio	ons)						
EMISSIONS (Air Pollutants)									
Lane 1 Lane 2	g/km/v CO 0.96 0.96	g/km/v NOx 0.34 0.34	g/km/v PM10 0.05 0.05	kg/h CO 2.6 2.6	kg/h NOx 0.92 0.92	kg/h PM10 0.14 0.14			
EMISSIONS (Greenhouse Gases)									
Lane 1 Lane 2	Fuel consumption Petrol 175.8 175.8	on (L/h) Diesel 100.2 100.2	CO2-e emissior Petrol 2.38032 2.38032	factors (kg/L) Diesel 2.69814 2.69814		CO2-e emission 0.7 0.7 1.4	ns (t CO2-e/h)	CO2-e emission 2514.2 2514.2 5028.3	ns (t CO2-e/y)
PREDICTED ROADSIDE CONCENTR	ATIONS AND AS	SESSMENT							
Maximum 1-hour average CO concentr Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb	ations (mg/m3) Due to roadway 0.9 0.3 0.2 0.2	Background 0.3 0.3 0.3 0.3 0.3	Cumulative 1.2 0.6 0.5 0.5	Criteria 30 30 30 30 30	Assessment Compliance Compliance Compliance Compliance				
40 m from kerb 50 m from kerb	0.2 0.1	0.3 0.3	0.5 0.4	30 30	Compliance Compliance				

Default Default

75 m from kerb	0.1	0.3	0.4	30	Compliance
100 m from kerb	0.1	0.3	0.4	30	Compliance
150 m from kerb	0.1	0.3	0.4	30	Compliance
200 m from kerb	0.1	0.3	0.4	30	Compliance
Maximum 8-hour average CO concentr	ations (mg/m3)				
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment
At kerb (0 m)	0.7	0.3	1.0	10	Compliance
10 m from kerb	0.2	0.3	0.5	10	Compliance
20 m from kerb	0.2	0.3	0.5	10	Compliance
30 m from kerb	0.1	0.3	0.4	10	Compliance
40 m from kerb	0.1	0.3	0.4	10	Compliance
50 m from kerb	0.1	0.3	0.4	10	Compliance
75 m from kerb	0.1	0.3	0.4	10	Compliance
100 m from kerb	0.1	0.3	0.4	10	Compliance
150 m from kerb	0.1	0.3	0.4	10	Compliance
200 m from kerb	0	0.3	0.3	10	Compliance
Maximum 1-hour average NO2 concen	trations (ug/m3)				
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment
At kerb (0 m)	32.9	1.2	34.1	246	Compliance
10 m from kerb	17.1	1.2	18.3	246	Compliance
20 m from kerb	15.5	1.2	16.7	246	Compliance
30 m from kerb	12.5	1.2	13.7	246	Compliance
40 m from kerb	10.8	1.2	12.0	246	Compliance
50 m from kerb	9.6	1.2	10.8	246	Compliance
75 m from kerb	7.8	1.2	9.0	246	Compliance
100 m from kerb	6.7	1.2	7.9	246	Compliance
150 m from kerb	5.4	1.2	6.6	246	Compliance
200 m from kerb	4.5	1.2	5.7	246	Compliance
Annual average NO2 concentrations (u	g/m3) Due te reedwov	Doolaround	Cumulativa	Critoria	Accoment
At least (0, m)		Баскугочно		Cillena	Assessment
At kerb (0 m)	6.6	0.5	7.1	62	Compliance
10 m from kerb	3.4	0.5	3.9	62	Compliance
20 m from kerb	3.1	0.5	3.6	62	Compliance
30 m from kerb	2.5	0.5	3.0	62	Compliance
40 m from kerb	2.2	0.5	2.7	62	Compliance
50 m from kerb	1.9	0.5	2.4	62	Compliance
75 m from kerb	1.6	0.5	2.1	62	Compliance
100 m from kerb	1.3	0.5	1.8	62	Compliance
150 m from kerb	1.1	0.5	1.6	62	Compliance
200 m from kerb	0.9	0.5	1.4	62	Compliance
Maximum 24 hour average DM10 cone	ontrationa (ua/ma				
Receptor location		Dookaround	Cumulativa	Critorio	Accoment
At korb (0 m)				Chiena	Assessment
	25.7	20.8	40.5	50	Non-compliance
	8.9	20.8	29.7	50	Compliance
	0.1	∠U.Ծ	20.9	00	Compliance
	4.9	∠U.ŏ	25.7	50	Compliance
40 m from kerb	4.2	∠U.8	25.0	50	Compliance
50 m from kerb	3.7	20.8	24.5	50	Compliance
/5 m from kerb	3	20.8	23.8	50	Compliance
100 m from kerb	2.6	20.8	23.4	50	Compliance
150 m from kerb	21	20.8	22.9	50	Compliance
	2.1			50	

Annual average PM10 concentrations (ug/m3)

Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment
At kerb (0 m)	10.3	14.2	24.5	25	Compliance
10 m from kerb	3.6	14.2	17.8	25	Compliance
20 m from kerb	2.4	14.2	16.6	25	Compliance
30 m from kerb	2	14.2	16.2	25	Compliance
40 m from kerb	1.7	14.2	15.9	25	Compliance
50 m from kerb	1.5	14.2	15.7	25	Compliance
75 m from kerb	1.2	14.2	15.4	25	Compliance
100 m from kerb	1.1	14.2	15.3	25	Compliance
150 m from kerb	0.8	14.2	15.0	25	Compliance
200 m from kerb	0.7	14.2	14.9	25	Compliance

END OF REPORT

Roads and Maritime Services

TRAQ: Emissions and Air Quality Screening Assessment Report (Version 1.3)

Date of report: User name:	16-Sep-2022 10 ppandey	:52							
INPUT DATA Simulation name Road type	2037 Base Case Arterial	9							
Traffic data Lane 1 Lane 2	Traffic per day 22202 22202	Speed (km/h) 60 60	Grade (%) 0 0	Length (km) 1.5 1.5					
Median strip	none								
Traffic mix (%) Lane 1 Lane 2	CP 75.6 75.6	CD 2.2 2.2	LDCP 9.6 9.6	LDCD 3.2 3.2	HDCP 0.2 0.2	RT 5.3 5.3	AT 2.7 2.7	BusD 0.6 0.6	MC 0.6 0.6
24-hour average speed Peak hour percentage of daily (%)	35.5 10	Default							
Year of assessment Local landuse Air quality environment Season Cold start emissions	2036 Residential Newcastle / Wa Worst-case Included	llsend Default Default							
METEOROLOGICAL CONDITIONS									
Wind direction Wind speed Atmospheric stability Temperature	Worst-case wind 1 m/s F class (stable r 15 deg C	d angle night time conditio	ons)						
EMISSIONS (Air Pollutants)									
Lane 1 Lane 2	g/km/v CO 0.78 0.78	g/km/v NOx 0.18 0.18	g/km/v PM10 0.05 0.05	kg/h CO 2.58 2.58	kg/h NOx 0.61 0.61	kg/h PM10 0.17 0.17			
EMISSIONS (Greenhouse Gases)									
Lane 1 Lane 2	Fuel consumptio Petrol 196.8 196.8	on (L/h) Diesel 121.5 121.5	CO2-e emissior Petrol 2.38032 2.38032	factors (kg/L) Diesel 2.69814 2.69814		CO2-e emission 0.8 0.8 1.6	ns (t CO2-e/h)	CO2-e emission 2906.4 2906.4 5812.8	ns (t CO2-e/y)
PREDICTED ROADSIDE CONCENTR	ATIONS AND AS	SESSMENT							
Maximum 1-hour average CO concentr Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 40 m from kerb	ations (mg/m3) Due to roadway 0.9 0.3 0.2 0.2 0.1	Background 0.3 0.3 0.3 0.3 0.3	Cumulative 1.2 0.6 0.5 0.5 0.4	Criteria 30 30 30 30 30	Assessment Compliance Compliance Compliance Compliance				
50 m from kerb	0.1	0.3	0.4	30	Compliance				

Default Default

75 m from kerb	0.1	0.3	0.4	30	Compliance					
100 m from kerb	0.1	0.3	0.4	30	Compliance					
150 m from kerb	0.1	0.3	0.4	30	Compliance					
200 m from kerb	0.1	0.3	0.4	30	Compliance					
Maximum 8-hour average CO concentr	Maximum 8-hour average CO concentrations (mg/m3)									
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment					
At kerb (0 m)	0.6	0.3	0.9	10	Compliance					
10 m from kerb	0.2	0.3	0.5	10	Compliance					
20 m from kerb	0.1	0.3	0.4	10	Compliance					
30 m from kerb	0.1	0.3	0.4	10	Compliance					
40 m from kerb	0.1	0.3	0.4	10	Compliance					
50 m from kerb	0.1	0.3	0.4	10	Compliance					
75 m from kerb	0.1	0.3	0.4	10	Compliance					
100 m from kerb	0.1	0.3	0.4	10	Compliance					
150 m from kerb	0	0.3	0.3	10	Compliance					
200 m from kerb	0	0.3	0.3	10	Compliance					
	·	0.0	0.0		e e i i pi i e i i e e					
Maximum 1-hour average NO2 concen	trations (ug/m3)									
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment					
At kerb (0 m)	21.2	1.2	22.4	246	Compliance					
10 m from kerb	10.7	1.2	11.9	246	Compliance					
20 m from kerb	9.6	1.2	10.8	246	Compliance					
30 m from kerb	7.7	1.2	8.9	246	Compliance					
40 m from kerb	6.6	1.2	7.8	246	Compliance					
50 m from kerb	5.9	1.2	7.1	246	Compliance					
75 m from kerb	48	12	60	246	Compliance					
100 m from kerb	4 1	12	5.3	246	Compliance					
150 m from kerb	33	1.2	4 5	246	Compliance					
200 m from kerb	2.8	1.2	4.0	240	Compliance					
	2.0	1.2	4.0	240	Compliance					
Annual average NO2 concentrations (u	g/m3)									
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment					
At kerb (0 m)	4.2	0.5	4.7	62	Compliance					
10 m from kerb	2.1	0.5	2.6	62	Compliance					
20 m from kerb	1.9	0.5	2.4	62	Compliance					
30 m from kerb	1.5	0.5	2.0	62	Compliance					
40 m from kerb	1.3	0.5	1.8	62	Compliance					
50 m from kerb	12	0.5	17	62	Compliance					
75 m from kerb	1	0.5	1.5	62	Compliance					
100 m from kerb	0.8	0.5	13	62	Compliance					
150 m from kerb	0.0	0.5	1.0	62	Compliance					
200 m from kerb	0.7	0.5	1.2	62	Compliance					
	0.0	0.5	1.1	02	Compliance					
Maximum 24-hour average PM10 conc	entrations (ug/m3	5)								
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment					
At kerb (0 m)	28.7	20.8	49.5	50	Non-compliance					
10 m from kerb	9.6	20.8	30.4	50	Compliance					
20 m from kerb	6.5	20.8	27.3	50	Compliance					
30 m from kerb	5.2	20.8	26.0	50	Compliance					
40 m from kerb	4.5	20.8	25.3	50	Compliance					
50 m from kerb	4	20.8	24.8	50	Compliance					
75 m from kerb	32	20.8	24.0	50	Compliance					
100 m from kerb	2.2	20.0	23.6	50	Compliance					
150 m from kerb	2.0	20.0	20.0	50	Compliance					
	2.2	20.8	22.1	50	Compliance					
200 m from kerb	2.3	20.8	23.1	50 50	Compliance					

Annual average PM10 concentrations (ug/m3)

Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment
At kerb (0 m)	11.5	14.2	25.7	25	Non-compliance
10 m from kerb	3.9	14.2	18.1	25	Compliance
20 m from kerb	2.6	14.2	16.8	25	Compliance
30 m from kerb	2.1	14.2	16.3	25	Compliance
40 m from kerb	1.8	14.2	16.0	25	Compliance
50 m from kerb	1.6	14.2	15.8	25	Compliance
75 m from kerb	1.3	14.2	15.5	25	Compliance
100 m from kerb	1.1	14.2	15.3	25	Compliance
150 m from kerb	0.9	14.2	15.1	25	Compliance
200 m from kerb	0.8	14.2	15.0	25	Compliance

END OF REPORT

Roads and Maritime Services

TRAQ: Emissions and Air Quality Screening Assessment Report (Version 1.3)

Date of report: User name:	16-Sep-2022 10 ppandey	:53							
INPUT DATA									
Simulation name Road type	2037 Project Ca Arterial	ISE							
Traffic data	Traffic per day	Speed (km/h)	Grade (%)	Length (km)					
l ane 1	22841	60	0	1 5					
Lane 2	22841	60	0	1.5					
	22041	00	0	1.0					
Median strip	none								
Traffic mix (%)	CP	CD	LDCP	LDCD	HDCP	RT	АТ	BusD	MC
Lane 1	75.6	2.2	9.6	3.2	0.2	5.3	2.7	0.6	0.6
Lane 2	75.6	22	9.6	32	0.2	53	27	0.6	0.6
	10.0	<i>L</i> . <i>L</i>	0.0	0.2	0.2	0.0	2.1	0.0	0.0
24-hour average speed Peak hour percentage of daily (%)	35.5 10	Default							
	0000								
Year of assessment	2036								
Local landuse	Residential								
Air quality environment	Newcastle / Wa	llsend							
Season	Worst-case	Default							
Cold start emissions	Included	Default							
METEOROLOGICAL CONDITIONS									
Wind direction	Worst-case wind	d angle							
Wind speed	1 m/s	angio							
Atmospheric stability	F class (stable r	hight time condition	ane)						
Temperature	15 deg C	light time condition	5115)						
Temperature	15 deg C								
EMISSIONS (Air Pollutants)									
· · · · · ·	g/km/v	g/km/v	g/km/v	kg/h	kg/h	kg/h			
	ĊO	NOx	PM10	CO	NOx	PM10			
Lane 1	0.78	0.18	0.05	2.66	0.63	0.17			
Lane 2	0.78	0.18	0.05	2.66	0.63	0.17			
EMISSIONS (Greenhouse Gases)	–						(* 000 * 1)	000 · ·	(1.000 L)
	Fuel consumptio	on (L/h)	CO2-e emission	n tactors (kg/L)		CO2-e emissio	ns (t CO2-e/h)	CO2-e emission	ns (t CO2-e/y)
	Petrol	Diesel	Petrol	Diesel				0000 (
Lane 1	202.5	125	2.38032	2.69814		0.8		2990.4	
Lane 2	202.5	125	2.38032	2.69814		0.8		2990.4	
						1.6		5980.8	
PREDICTED ROADSIDE CONCENTR	ATIONS AND AS	SESSMENT							
Maximum 1-hour average CO concentr	rations (ma/m3)								
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment				
At kerb (0 m)			1 2	30	Compliance				
10 m from kerb	0.9	0.0	0.6	30	Compliance				
20 m from korb	0.3	0.3	0.0	30	Compliance				
20 m from kerb	0.2	0.3	0.5	3U 20	Compliance				
	0.2	0.3	0.5	30	Compliance				
40 m from kerb	U.1	0.3	0.4	30	Compliance				
50 m from kerb	U.1	0.3	0.4	30	Compliance				

Default Default

	0.1	0.3	0.4	30	Compliance
100 m from kerb	0.1	0.3	0.4	30	Compliance
150 m from kerb	0.1	0.3	0.4	30	Compliance
200 m from kerb	0.1	0.3	0.4	30	Compliance
Maximum 8-hour average CO concent	rations (mg/m3)				
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment
At kerb (0 m)	0.6	0.3	0.9	10	Compliance
10 m from kerb	0.2	0.3	0.5	10	Compliance
20 m from kerb	0.1	0.3	0.4	10	Compliance
30 m from kerb	0.1	0.3	0.4	10	Compliance
40 m from kerb	0.1	0.3	0.4	10	Compliance
50 m from kerb	0.1	0.3	0.4	10	Compliance
75 m from kerb	0.1	0.3	0.4	10	Compliance
100 m from kerb	0.1	0.3	0.4	10	Compliance
150 m from kerb	0	0.3	0.3	10	Compliance
200 m from kerb	0	0.3	0.3	10	Compliance
Maximum 1-hour average NO2 concer	trations (ug/m3)				
Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment
At kerb (0 m)	21.7	1.2	22.9	246	Compliance
10 m from kerb	10.9	1.2	12.1	246	Compliance
20 m from kerb	9.8	1.2	11.0	246	Compliance
30 m from kerb	7.8	1.2	9.0	246	Compliance
40 m from kerb	6.7	1.2	7.9	246	Compliance
50 m from kerb	6	1.2	7.2	246	Compliance
75 m from kerb	4.9	1.2	6.1	246	Compliance
100 m from kerb	4.2	1.2	5.4	246	Compliance
150 m from kerb	3.4	1.2	4.6	246	Compliance
∠uu m trom kerb	2.9	1.2	4.1	246	Compliance
200 m from kerd	2.9	1.2	4.1	246	Compliance
Annual average NO2 concentrations (u	2.9 g/m3)	1.2	4.1	246	Compliance
Annual average NO2 concentrations (u Receptor location	2.9 g/m3) Due to roadway	1.2 Background	4.1 Cumulative	246 Criteria	Compliance Assessment
Annual average NO2 concentrations (u Receptor location At kerb (0 m)	2.9 g/m3) Due to roadway 4.3	1.2 Background 0.5	4.1 Cumulative 4.8	246 Criteria 62	Compliance Assessment Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2	1.2 Background 0.5 0.5	4.1 Cumulative 4.8 2.7	246 Criteria 62 62	Compliance Assessment Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2	1.2 Background 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5	246 Criteria 62 62 62	Compliance Assessment Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6	1.2 Background 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1	246 Criteria 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 40 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3	1.2 Background 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8	246 Criteria 62 62 62 62 62 62	Assessment Compliance Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 40 m from kerb 50 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7	246 Criteria 62 62 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 40 m from kerb 50 m from kerb 75 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5	246 Criteria 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 50 m from kerb 75 m from kerb 100 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3	246 Criteria 62 62 62 62 62 62 62 62 62	Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 50 m from kerb 50 m from kerb 100 m from kerb 150 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2	246 Criteria 62 62 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 40 m from kerb 50 m from kerb 100 m from kerb 150 m from kerb 200 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7 0.6	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2 1.1	246 Criteria 62 62 62 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 40 m from kerb 50 m from kerb 75 m from kerb 100 m from kerb 200 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7 0.6	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2 1.1	246 Criteria 62 62 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 50 m from kerb 50 m from kerb 150 m from kerb 150 m from kerb 200 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7 0.6 eentrations (ug/m3	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2 1.1	246 Criteria 62 62 62 62 62 62 62 62 62 62 62	Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance
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Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 40 m from kerb 50 m from kerb 50 m from kerb 150 m from kerb 150 m from kerb 200 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7 0.6 centrations (ug/m3) Due to roadway 29.4 9.8 6.6	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2 1.1 Cumulative 50.2 30.6 27.4	246 Criteria 62 62 62 62 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance
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Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 30 m from kerb 50 m from kerb 50 m from kerb 150 m from kerb 150 m from kerb 200 m from kerb 20 m from kerb 20 m from kerb 20 m from kerb 30 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7 0.6 eentrations (ug/m3 Due to roadway 29.4 9.8 6.6 5.3 4.5	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2 1.1 Cumulative 50.2 30.6 27.4 26.1 25.3	246 Criteria 62 62 62 62 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance Compliance
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Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 30 m from kerb 50 m from kerb 50 m from kerb 150 m from kerb 150 m from kerb 200 m from kerb 20 m from kerb 30 m from kerb 30 m from kerb 50 m from kerb 50 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7 0.6 centrations (ug/m3) Due to roadway 29.4 9.8 6.6 5.3 4.5 4 3.3 2.8	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2 1.1 Cumulative 50.2 30.6 27.4 26.1 25.3 24.8 24.1 23.6	246 Criteria 62 62 62 62 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance
Annual average NO2 concentrations (u Receptor location At kerb (0 m) 10 m from kerb 20 m from kerb 30 m from kerb 30 m from kerb 50 m from kerb 50 m from kerb 150 m from kerb 150 m from kerb 200 m from kerb 30 m from kerb 50 m from kerb 30 m from kerb 50 m from kerb	2.9 g/m3) Due to roadway 4.3 2.2 2 1.6 1.3 1.2 1 0.8 0.7 0.6 centrations (ug/m3) Due to roadway 29.4 9.8 6.6 5.3 4.5 4 3.3 2.8 2.3	1.2 Background 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	4.1 Cumulative 4.8 2.7 2.5 2.1 1.8 1.7 1.5 1.3 1.2 1.1 Cumulative 50.2 30.6 27.4 26.1 25.3 24.8 24.1 23.6 23.1	246 Criteria 62 62 62 62 62 62 62 62 62 62 62 62 62	Compliance Assessment Compliance
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Annual average PM10 concentrations (ug/m3)

Receptor location	Due to roadway	Background	Cumulative	Criteria	Assessment
At kerb (0 m)	11.8	14.2	26.0	25	Non-compliance
10 m from kerb	3.9	14.2	18.1	25	Compliance
20 m from kerb	2.6	14.2	16.8	25	Compliance
30 m from kerb	2.1	14.2	16.3	25	Compliance
40 m from kerb	1.8	14.2	16.0	25	Compliance
50 m from kerb	1.6	14.2	15.8	25	Compliance
75 m from kerb	1.3	14.2	15.5	25	Compliance
100 m from kerb	1.1	14.2	15.3	25	Compliance
150 m from kerb	0.9	14.2	15.1	25	Compliance
200 m from kerb	0.8	14.2	15.0	25	Compliance

END OF REPORT