



## Appendix B

### Air Quality Data – Auckland Council Northern Motorway (SH1) Takapuna site



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Figure B1 Location of the AC Takapuna air quality monitoring site



Source: Golder



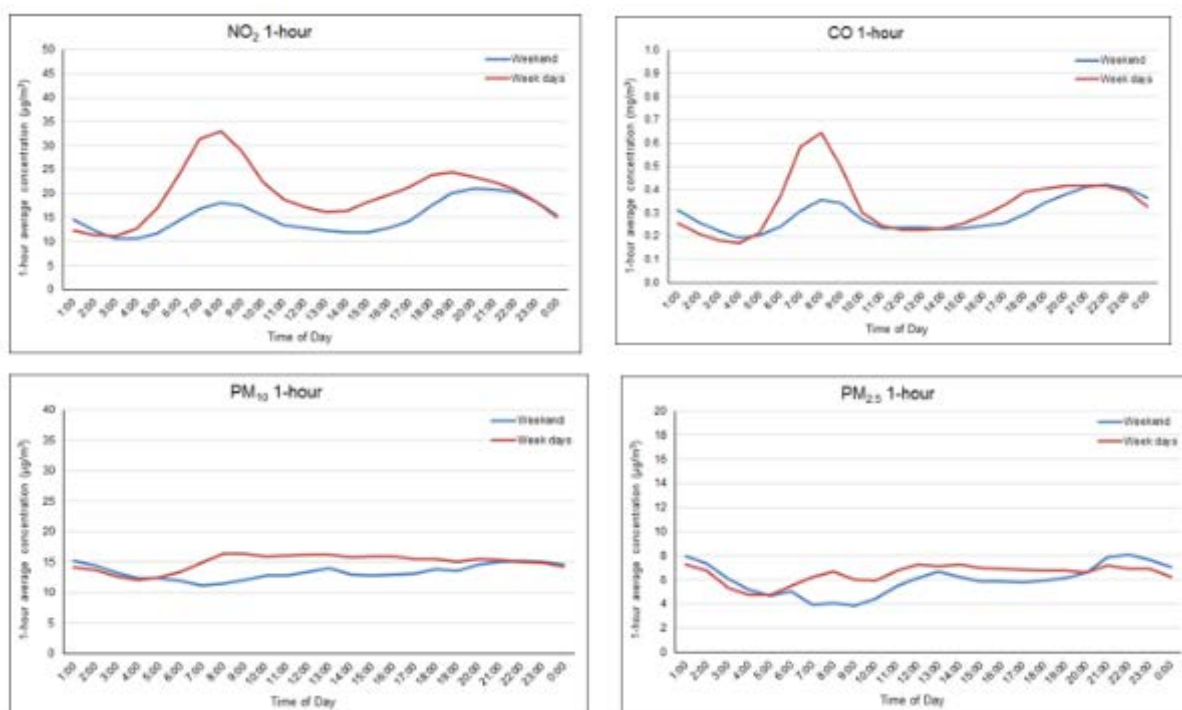
## Summary of data

Table B1 Summary air quality statistics AC Takapuna site, 01 January 2013 to 31 December 2015

Contaminant/ Averaging period	Unit	mean	75th %ile	90th %ile	95th %ile	Max	No of NES/ AAAQS exceedances
NO <sub>2</sub> 1-hour	µg/m <sup>3</sup>	18.8	26.4	38.5	46.0	97.7	0
NO <sub>2</sub> 24-hour	µg/m <sup>3</sup>	18.8	25.4	32.7	36.00	47.4	0
CO 1-hour	mg/m <sup>3</sup>	0.3	0.4	0.7	1.0	3.8	0
CO 8-hour	mg/m <sup>3</sup>	0.3	0.4	0.7	0.9	2.6	0
PM <sub>10</sub> 24-hour	µg/m <sup>3</sup>	14.5	17.2	20.5	22.8	32.6	0
PM <sub>2.5</sub> 24-hour	µg/m <sup>3</sup>	6.3	7.2	9.8	12.1	28.2	2

## Diurnal patterns of pollutant concentrations.

Figure B2 Weekday and Weekend diurnal patterns of NO<sub>2</sub> (a), CO(b), PM<sub>10</sub>(c) and PM<sub>2.5</sub>(d)



Source: Golder

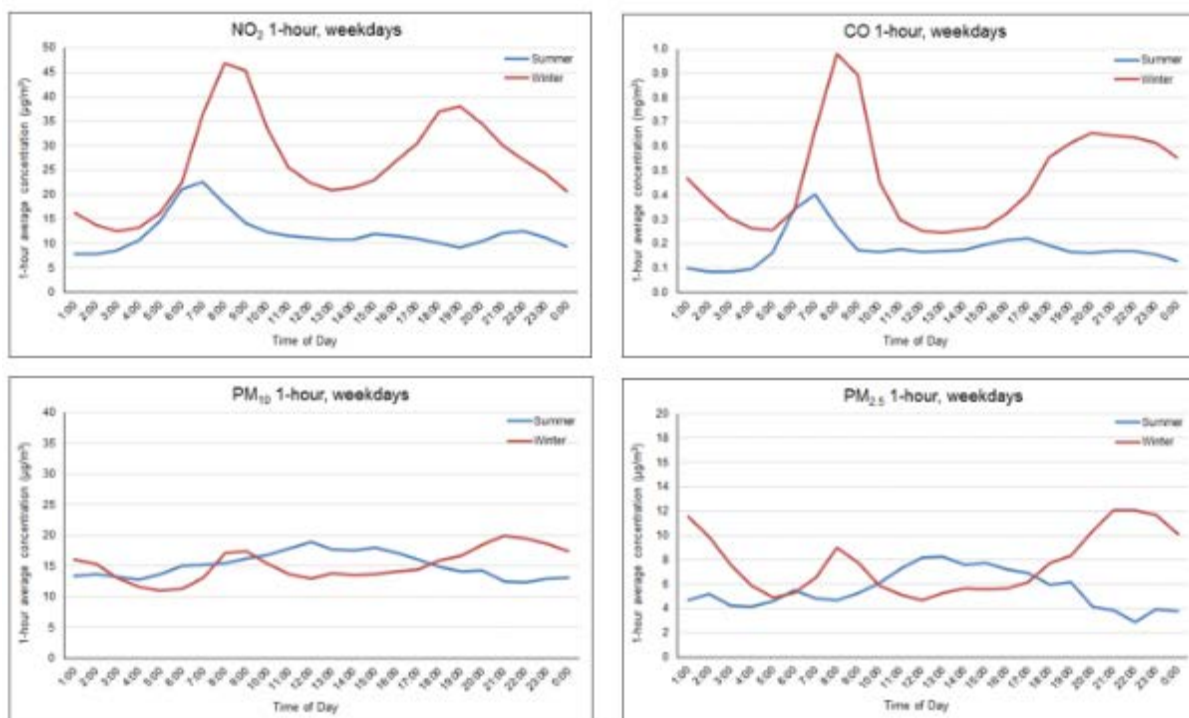


## Seasonal Variation of pollutant concentrations.

Table B2 Seasonal variation of mean pollutant concentrations AC Takapuna site, 1 January 2013 to 31 December 2015

Contaminant/ Averaging period	Unit	Summer (Dec., Jan. and Feb) average	Autumn (Mar., Apr. and May) average	Winter (Jun., Jul. and Aug.) average	Spring (Sep., Oct. and Nov.) average
NO <sub>2</sub> 1-hour	µg/m <sup>3</sup>	11.3	20.5	25.5	17.5
NO <sub>2</sub> 24-hour	µg/m <sup>3</sup>	11.3	20.5	25.4	17.5
CO 1-hour	mg/m <sup>3</sup>	0.2	0.4	0.5	0.3
CO 8-hour	mg/m <sup>3</sup>	0.2	0.4	0.5	0.3
PM <sub>10</sub> 24-hour	µg/m <sup>3</sup>	14.5	14.6	15.0	13.7
PM <sub>2.5</sub> 24-hour	µg/m <sup>3</sup>	5.4	6.4	7.8	5.6

Figure B3 Summer and winter weekday diurnal patterns of NO<sub>2</sub>(a), CO(b), PM<sub>10</sub>(c) and PM<sub>2.5</sub>(d)



Source: Golder