

Nitrogen dioxide (NO₂) diffusion tube data –Mill Road for 2019, 2020 and 2021.

Data from these tubes has been bias corrected as per the Defra guidance. The bias correction factor for 2020 has been used for the 2021 data as a full year of data is needed to calculate the bias correction factor.

The tubes give an indication of NO₂ concentrations over a month and are generally used as a way of spotting long term trends.

For Local Air Quality Management reports the annual average data from the tubes is used.

There are three tubes in the vicinity of Mill Road these are located as follows:

14 : Located on the corner of Mawson Road and Mill Road

36 : Located on Cockburn Street

62 : Located on the corner of Mill Road and Madras Road

bias corrected data 2021		Jan	Feb	March	April
14	Mill Road	m	18.2	16.1	16.5
36	Cockburn Street	16.2	12.7	12.7	10.3
62	Mill Road 2	20.2	17.9	17.9	m

bias corrected data 2020		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
14	Mill Road	41.1	19.5	20.7	16.6	15.9	18.1	14.3	m	22.6	24.7	31.5	32
36	Cockburn Street	23.5	18.2	17	10.8	9.7	10.8	12.1	12.7	14.8	19.6	25.6	22.5
62	Mill Road 2	41	21.5	21.5	16	11.9	15.5	10	19.7	m	21.5	29.7	29

bias corrected data 2019		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
14	Mill Road	42.7	43.1	29.4	31.6	29.9	23.5	21.9	19.9	28.7	33.6	m	m
36	Cockburn Street	36.6	32.8	24.7	18.6	17.8	14.9	13.3	16.3	19.6	26.6	m	m
62	Mill Road 2	m	m	31.2	29.2	26.8	23.2	16.7	21.3	28.9	35.8	47.8	30.7

NB: m= missing

The data for 2021 and 2020 reflects the lockdowns which took place during the pandemic. In a “normal” year higher concentrations of NO₂ are expected in the winter months and lower concentrations during the summer months. There is no particulate monitoring for Mill Road.

During 2019 when the bridge was closed for July and August some low cost monitoring to see if there were any effects on air quality were undertaken. As with reports undertaken during the pandemic, it proved difficult to separate out the seasonal element from the data to see if there were changes in air quality e.g. NO₂ concentrations or whether this was the normal seasonal effect. Gas main works which took place on Mill Road on both sides of the bridge and the closure of part of Mill Road following the fire in a number of buildings may also have had an impact.