

A photograph of a busy street in Boot Hill, Portland. In the foreground, a white van is partially visible on the left. A white bus is in the center, with a sign that says "I ♥ 75% ON MY CAR INSURANCE". To the right, there are several cars, including a dark Audi. In the background, there are buildings, trees, and various signs, including a green sign for "Portland A354" and a white sign for "Old Harbour Timewalk Brewers Quay Nothe Fort".

# How Polluted is Boot Hill?

**Review of Air Quality  
Monitoring Processes and Data**

Here to help us to make sense of the  
process and data

Please welcome

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W&PBC

Representative of Coralie McGown (Public  
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**Air Quality Objectives**    Source: Data from W&PBC Public Health

**Nitrogen dioxide (NO<sub>2</sub>)**

**1 hour mean for the protection of human health: 200µg/m<sup>3</sup> not to be exceeded more than 18 times per calendar year**

**Annual mean for the protection of human health: 40 µg/m<sup>3</sup>**

**Particulate Matter (PM<sub>10</sub>)**

**24 hour limit for the protection of human health - 50 µg/m<sup>3</sup> not to be exceeded more than 35 times per calendar year**

**Annual limit for the protection of human health - 40 µg/m<sup>3</sup>**

All Diff Tubes MUST be adjusted for bias (LAQM.TG(09)Chapter 3).

No exceedances of the NO<sub>2</sub> hourly mean.

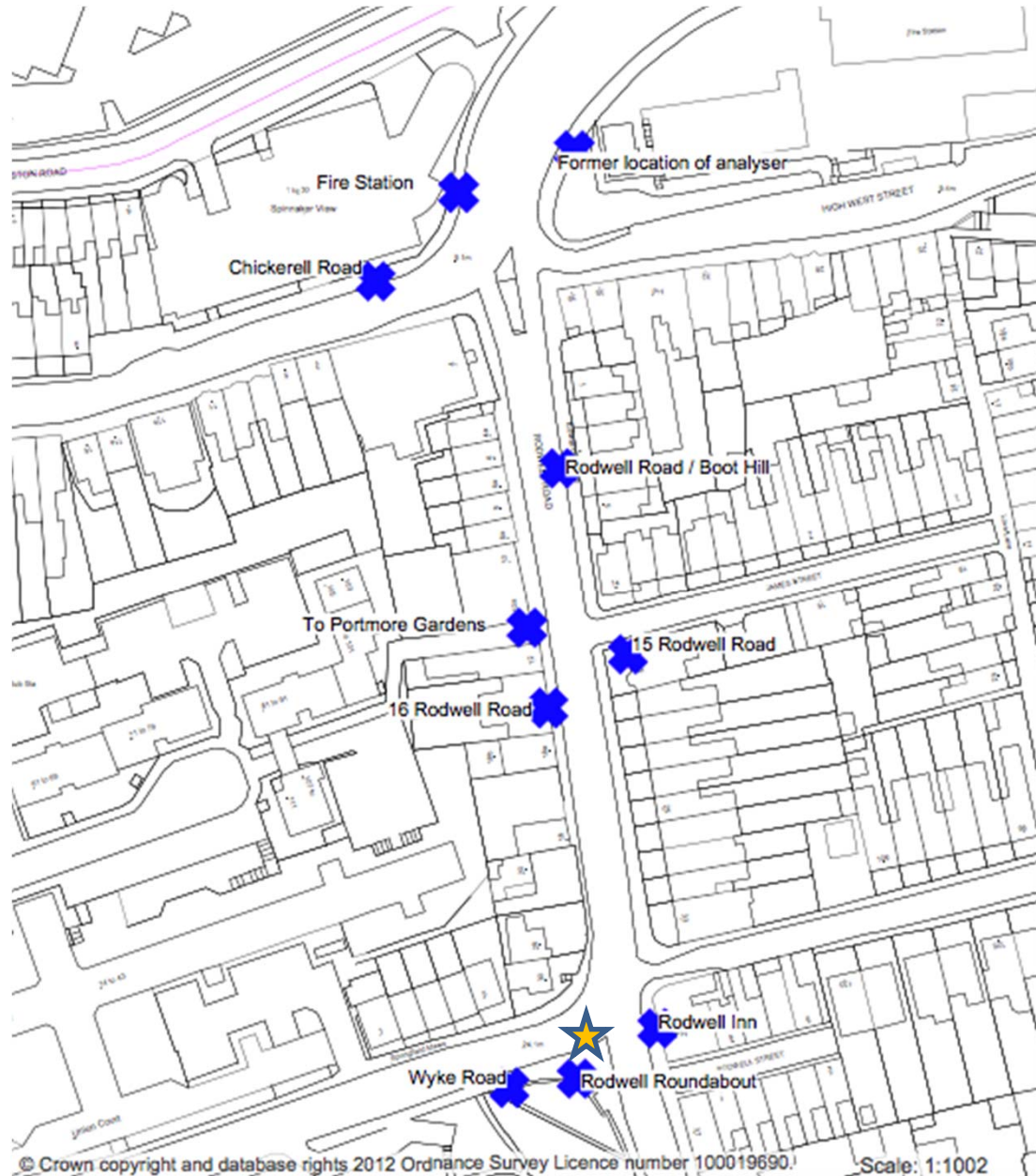
AQO's apply AT THE FAÇADE OF DOMESTIC DWELLINGS (LAQM.TG(09) Chapter1). Not at the road or Kerbside.

If AQO are exceeded, then AQMA shall be declared (LAQM.TG(09) Chapter1)

## Estimated location of Diffusion Tubes

- 10 Rodwell Road
- 29 Fire Station
- 30 15 Rodwell Road
- 31 Rodwell Roundabout
- 32 To Portmore Gardens
- 49 Rodwell Roundabout II
- 50 Rodwell Roundabout III
- 51 Rodwell Inn
- 52 16 Rodwell Road
- 53 Wyke Road
- 30A 15 Rodwell Road (High)

★ Air Quality Monitor, also known as Real Time Analyser



Courtesy of Steve Elsworth

# RT (Real Time) Analyser Results 2013-2015

	NO <sub>2</sub>		
	2013	2014	2015
Jan	33.32	28.87	Poor
Feb	31.65	28.82	No Data
Mar	37.43	34.62	No Data
Apr	31.32	31.81	No Data
May	28.76	30.58	No Data
Jun	28.7	34.26	Poor
Jul	29.5	31.11	22.88
Aug	29.29	Poor	28.07
Sep	25.65	36.43	27.26
Oct	22.54	Poor	31.5
Nov	29.52	Poor	24.56
Dec	23.02	Poor	



The Air Quality Monitor, positioned opposite The Rodwell

Fault with A/C unit 2015 - replaced with new enclosure

Nov = to date & consequently will change

Poor = insufficient data to provide a mean

Source: Data from W&PBC Public Health

## Rodwell Road Diffusion Tube Results 2013

2013 Monitoring Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean	Bias Adjustment Factor	Annual Mean corrected for bias
<b>10 Rodwell Road</b>	51.4	58	84.04		41.1	43.5	57.3	42.94	42.2	38.2	38.6	33.62	48.26	0.6	<b>28.95</b>
<b>29 Fire Station</b>	28.1	33.1	39.21		21.6	22.7	26.64	22.99	24.7	20.6	29.9	20.82	26.39	0.6	<b>15.83</b>
<b>30 15 Rodwell Road</b>	30.6	39	32.68		7.49	26.7	28.51	32.69	23.3	26.5	36.5	23.61	27.95	0.6	<b>16.77</b>
<b>31 Rodwell Roundabout</b>	46.1	40.6	49.6		41.9	36.7	41.13	47.37	32.1	36.1	46.9	36.69	41.37	0.6	<b>24.82</b>
<b>32 To Portmore Gardens</b>	38.9	28.6	44.04		43	34.3	45.61	37.54	32.4	37.3	29.6	44.15	37.76	0.6	<b>22.66</b>
<b>49 Rodwell Roundabout II</b>	M	38.1	54.04		39.8	38.4	41.96	M	42.5	37.8	44.4	40.31	41.90	0.6	<b>25.14</b>
<b>50 Rodwell Roundabout III</b>	44.7	M	56.05		43.2	37.7	43.88	47.08	38.3	39.4	54.6	38.83	44.38	0.6	<b>26.63</b>
<b>51 Rodwell Inn</b>	46.3	45.7	60.12		41.4	34.1	57.06	42.52	42.2	43.4	44.8	35.19	44.79	0.6	<b>26.88</b>
<b>52 16 Rodwell Road</b>	60.5	44.3	55.67		41.4	42.2	59.73	44.21	43.7	48.9	47.2	47.37	48.64	0.6	<b>29.19</b>
<b>53 Wyke Road</b>	33.2	31.6	47.13		25.9	Monitoring Ceased - consistently low AM						34.45	0.6	<b>20.67</b>	
<b>30A 15 Rodwell Road (High)</b>	30.1	32.2	33.2		7.8	23.6	30.73	31.14	23.6	26.7	34.2	25.02	27.11	0.6	<b>16.27</b>

Source: Data from W&PBC Public Health

## Rodwell Road Diffusion Tube Results 2014

Monitoring Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean	Bias Adjustment Factor	Annual Mean corrected for bias
10 Rodwell Road	53.19	31.59	52.8	57.48	28.63	53.72	46.1	32.41	60.35	35.7	56.55	28.23	44.73	0.76	33.99
29 Fire Station			31.77	27.95	28.63	27.87	24.98	16.21	31.57	14	31.04	23.53	25.76	0.76	19.57
30 15 Rodwell Road	28.37	22.1	29.69	32.31	26.96	26.26	30.01	24.82	28.62	26.72	31.07	27.4	27.86	0.76	21.17
31 Rodwell Roundabout		31.2	47.18	45.69	44.32	41.66	45.48	35.46	43	33.59	69.58	33.13	42.75	0.76	32.49
32 To Portmore Gardens	40.32	35.12	41.02	46.57	43.11	40.68	39.1	41.19	39.23	37.09	43.07	28.22	39.56	0.76	30.07
49 Rodwell Roundabout II	42.32	36.57	40.54	41.73	40.98	38.91	46.78	34.31	42.56	37.17	71.48	29.83	41.93	0.76	31.87
50 Rodwell Roundabout III	35.75	33.3	31.19		67.79	42.25	42.84	36.73	44.33	36.59	43.08	30.86	40.43	0.76	30.73
51 Rodwell Inn	41.94	32.49	44.73	46	28.64	45.64	42.23	41	58.62	36.47	44.42	29.61	40.98	0.76	31.15
52 16 Rodwell Road	58.81		39.64	51.15	47.38	51.94	51.53	49.87	44.77	45.85	24.85	45.85	46.51	0.76	35.35
30A 15 Rodwell Road (High)	27.25	21.06	28.23	29.94	53.43	28.72	30.67	25.05	27.28	23.46	29.52	24.7	29.11	0.76	22.12

Source: Data from W&PBC Public Health

## Rodwell Road Diffusion Tube Results 2015

Monitoring Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean	Bias Adjustment Factor	Annual Mean corrected for bias
10 Rodwell Road	44.31	36.02	46.13	54.25	34.59	44.69	38.06	48.32	54.3	56.76					0
30 15 Rodwell Road	33.16	29.04	29.98	26.04	22.93	28.01	24.02	29.77	28.49	39.89					0
31 Rodwell Roundabout	38.29	m	m	38.47	33.54	33.53	35.26	47.36	40.41	53.1					0
32 To Portmore Gardens	30.21	32.92	36.23	42.64	34.75	m	m	44.78	33.76	41.82					0
49 Rodwell Roundabout II	39.21	38.88	41.4	38.65	37.67	32.43	35.54	40.55	39.04	48.05					0
50 Rodwell Roundabout III	38.83	35.6	36.64	39.77	36.28	37.85	35.64	38.76	37.43	45.01					0
51 Rodwell Inn	33.94	35.6	41.7	55.68	35.39	37.01	37.32	45.14	45.71	49.79					0
52 16 Rodwell Road	46.84	46.96	44.24	46.10	40.06	48.99	m	m	43.83	52.77					0

Source: Data from W&PBC Public Health



# How does Boot Hill compare with other areas in the Borough?

Diffusion Tubes Data from other WPBC Monitoring Areas

Adjusted Annual Mean (same factor as Boot Hill: 2013=0.6, 2014=0.76)

Monitoring Location	2013 Final Results	2014 Final Results
16 Rodwell Rd	29.19	35.35
10 Rodwell Rd	28.95	33.99
31 Rodwell Roundabout	24.82	32.49
51 Rodwell Inn	26.88	31.15
45 Upwey Street	37.02	28.44
46 Dominoes	37.97	29.76
8 King Street	35.44	25.65
53 Wyke Road	34.45	
35 Cockles Lane	32.59	
44 Melcombe House	31.79	25.75
42 King Street CCTV	28.20	21.93
8A King Street (High)	27.31	
36 60 Lanehouse Rocks Road	23.09	
5 Fortuneswell	22.66	
12 Portland Road	20.40	
14 Lanehouse Rocks Road	20.45	
34 Wyke Juniors	19.95	
17 Colocation	19.91	
37 Wyke Rd / Cross Rd Junc	19.44	
20 Colocation II	18.60	
21 Colocation III	17.42	
38 Buxton Rd / Cross Rd Junc	16.19	
4 St Georges Estate	9.45	5.82

Source:  
Data from  
W&PBC  
Public Health

## Particulate Matter (PM<sub>10</sub>) Results    Data from W&PBC Public Health

Year	Results (µg/m <sup>3</sup> )	Data Capture
2011	19.8 (Annual Mean)	99.8
2012	23.8 (Annual Mean)	97.18
2013	30.91 (Annual Mean)	Approx. 97
2014	30.02 (Annual Mean)	Approx. 80
2015	16.79 (6/12 Period Mean)	Approx. 98 for that period

- Unable to verify the data capture for these 3 years at this time
- Not calculated against the 24hr AQO because of uncertainty with data capture. Will be reviewed in full for next Defra AQ Report – around April 2016. However, unlikely to exceed.
- Only one monitoring location due to costs, size, noise etc. (continuous analyser)
- If exceed, would proceed to Detailed Assessment & include source apportionment as sea salt is likely to be the majority source.

# Questions & Answers

