

# Hollicombe remediation air quality update

<b>Date</b>	From 1 August 2016 to 31 August 2016.
<b>Description of works</b>	Demolition of large building near Torbay Road. Reinstating excavations with remediated soil.
<b>Air quality summary</b>	Daily average concentrations of particulate matter (PM) fraction PM10 exceeded the threshold of 50 µg m <sup>-3</sup> on one day at A8 Torbay Road. This event was caused by demolition of the large building at the front of the site. Daily average concentrations of PM2.5 at A8 were less than the threshold of 25 µg m <sup>-3</sup> on all days. Daily average concentrations of PM10 and PM2.5 were less than threshold concentrations at A1 and A4 on all days. Gas and vapour concentrations were less than concentration thresholds at all locations.

Particulate concentrations (24 h mean µg m <sup>-3</sup> )						
Date	A1 School		A4 Site West		A8 Torbay Road	
	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
01/08/2016 Mon	7.76	1.27	9.78	2.11	12.16	2.86
02/08/2016 Tue	1.69	0.65	9.52	3.38	9.36	3.71
03/08/2016 Wed	10.73	4.75	19.62	7.99	21.98	7.91
04/08/2016 Thu	15.61	5.94	17.33	7.91	17.12	8.14
05/08/2016 Fri	13.51	4.79	18.1	5.96	58.1	7.86
06/08/2016 Sat	7.27	2.13	6.87	2.27	9.79	3.16
07/08/2016 Sun	11.81	5.02	10.81	5.98	11.58	6.47
08/08/2016 Mon	16.51	6.54	16.98	8.22	42.57	10.32
09/08/2016 Tue	19.34	6.95	21.43	8.79	37.87	9.89
10/08/2016 Wed	8.70	3.15	11.36	3.76	20.32	4.75
11/08/2016 Thu	13.52	5.44	24.31	6.61	32.47	8.4
12/08/2016 Fri	11.88	4.15	14.39	4.16	30.76	6.42
13/08/2016 Sat	5.11	1.34	4.56	1.62	6.22	2.04
14/08/2016 Sun	7.05	2.51	6.71	2.78	10.98	3.71
15/08/2016 Mon	11.69	3.95	14.38	4.87	38.35	7.51
16/08/2016 Tue	19.20	6.43	20.89	7.59	38.35	10.02
17/08/2016 Wed	19.36	6.43	20.04	7.56	34.62	10.43
18/08/2016 Thu	12.47	5.80	17.11	9.29	32.93	12.17
19/08/2016 Fri	18.24	7.94	21.26	9.68	30.03	11.51
20/08/2016 Sat	20.19	11.86	24.78	14.06	25.67	15.06
21/08/2016 Sun	17.78	8.37	19.2	9.98	18.97	10.61
22/08/2016 Mon	16.03	5.94	21.14	8.13	31.51	9.27
23/08/2016 Tue	16.96	6.03	21.07	8.25	33.91	10.26
24/08/2016 Wed	15.12	4.97	19.03	7	20.27	6.85
25/08/2016 Thu	10.15	3.12	15.89	5.24	32.04	6.39
26/08/2016 Fri	8.08	2.01	11.08	2.21	20.97	3.63
27/08/2016 Sat	11.49	3.61	14.5	4.09	19.13	5.47
28/08/2016 Sun	9.13	3.25	10.95	3.86	10.34	4.55
29/08/2016 Mon	8.48	2.87	10.98	3.24	11.72	4.14
30/08/2016 Tue	14.65	2.58	16.73	3.86	27.39	5.16
31/08/2016 Wed	14.63	3.02	15.54	5.04	29.57	7.71

All data are 24 h mean concentrations determined with laser nephelometer direct read particle samplers. Thresholds for PM10 and PM2.5 concentrations are 50 and 25 µg m<sup>-3</sup> respectively. PM10 = particulate matter of diameter less than or equal to 10 micrometres. PM2.5 = particulate matter of diameter less than or equal to 2.5 micrometres. ND = no data available. As a guide, the particulate concentrations have been assigned coloured air quality index bands as used in the Daily Air Quality Index to provide detail about air pollution levels in a simple way. The colours are divided into four pollution bands: low, moderate, high and very high. For example, low levels of particulate pollution are shown in green colours and very high pollution shown in purple. See table at bottom of page for further information.

<b>Have any thresholds been exceeded during the period</b>	<b>Yes</b>
<i>If yes, describe below</i>	
The daily average concentration of PM10 exceeded the threshold of 50 µg m <sup>-3</sup> on 5 August at location A8 (Torbay Road).	
The deposition gauge sample collected during March from A8 (Torbay Road) did not exceed the threshold for deposition rate but the collected material did contain detectable concentrations of polycyclic aromatic hydrocarbons (PAHs). There are currently no statutory Environmental Quality Standards in the UK for releases to land of PAH by deposition. However, the concentrations of benzo(a)pyrene and naphthalene in the collected material were less than the concentrations permitted within soil for use as clean cover at the site.	

### Key to banding of particulate concentrations

Pollution Band	Colour	Concentrations	
		PM10* µg m <sup>-3</sup>	PM2.5* µg m <sup>-3</sup>
Low		0 - 16	0 - 11
		17 - 33	12 - 23
		34 - 50	24 - 35
Moderate		51 - 58	36 - 41
		59 - 66	42 - 47
		67 - 75	48 - 53
High		76 - 83	54 - 58
		84 - 91	59 - 64
		92 - 100	65 - 70
V High		101>	71>

\*24 h mean EU ref equivalent