

# Hollicombe remediation air quality update

<b>Date</b>	From 1 December to 31 December 2016.
<b>Description of works</b>	Demolition of small building and removal of gas distribution pipes at south of site. Reinstating excavations with remediated soil.
<b>Air quality summary</b>	Daily average concentrations of particulate matter (PM) fractions PM10 and PM2.5 were less than the threshold concentrations at all locations. Gas and vapour concentrations were less than the threshold concentrations at all locations.

Particulate concentrations (24 h mean $\mu\text{g m}^{-3}$ )						
Date	A1 School		A4 Site West		A8 Torbay Road	
	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
01/12/2016 Thu	9.26	3.43	9.89	5.61	15.51	7.06
02/12/2016 Fri	7.21	2.31	7.33	3.76	19.69	5.42
03/12/2016 Sat	22.13	6.82	25.56	11.52	39.15	15.34
04/12/2016 Sun	31.22	9.29	35.38	15.21	46.37	19.94
05/12/2016 Mon	26.7	6.2	26.66	10.76	43.17	13.91
06/12/2016 Tue	14.89	4.61	15.91	7.33	28.26	8.86
07/12/2016 Wed	17.66	5.69	19.69	8.98	29.16	10.29
08/12/2016 Thu	11.02	4.09	15.42	7.14	21.26	9.04
09/12/2016 Fri	19.35	6.3	26.89	10.42	32.02	11.83
10/12/2016 Sat	13.76	4.69	22.97	7.65	25.84	9.37
11/12/2016 Sun	18.3	4.56	15.92	3.85	17.41	4.81
12/12/2016 Mon	11.82	2.58	18.73	4.52	20.89	5.81
13/12/2016 Tue	19.44	5.3	30.62	9.59	25.84	9.99
14/12/2016 Wed	31.42	7.57	32.59	10.29	44.89	13.77
15/12/2016 Thu	18.08	5.55	24.98	8.32	28.88	10.42
16/12/2016 Fri	22.93	5.88	26.29	9.45	46.06	12.66
17/12/2016 Sat	10.08	2.6	15.93	3.89	22.16	5.14
18/12/2016 Sun	7.11	2.27	7.31	2.63	11.21	3.49
19/12/2016 Mon	11.9	4.35	13.18	6.59	23.02	8.53
20/12/2016 Tue	9.97	2.8	16.88	5.54	19.67	6.32
21/12/2016 Wed	27.57	10.21	34.28	12.86	36.56	15.72
22/12/2016 Thu	17.39	4.61	19.56	4.74	21.52	6.29
23/12/2016 Fri	19.8	6.11	26.5	7.74	24.55	10.17
24/12/2016 Sat	25.97	11.5	39.66	15.08	35.21	18.32
25/12/2016 Sun	6.55	3.03	11.01	5.12	9.81	5.83
26/12/2016 Mon	17.83	5	19.39	5.91	18.49	7.19
27/12/2016 Tue	16.81	5.37	17.54	6.76	20.83	8.09
28/12/2016 Wed	25.09	6.58	20.93	8.62	31.1	11.58
29/12/2016 Thu	16.32	4.52	12.37	4.95	19.07	6.73
30/12/2016 Fri	6.02	2.33	8.21	3.33	14.72	4.9
31/12/2016 Sat	6.57	2.39	9.28	3.75	14.16	4.99

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  $\mu\text{g m}^{-3}$  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> <i>If yes, describe below</i>	<b>N</b>
The deposition gauge sample collected during December 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 and soil criteria for residential with plant uptake land use scenario. The road and traffic are also potential sources of the contaminants of concern.	

### Key to banding of particulate concentrations

Pollution Band	Colour	Concentrations	
		PM10* $\mu\text{g m}^{-3}$	PM2.5* $\mu\text{g m}^{-3}$
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