2015 Updating and Screening Assessment for East Hampshire District Council

In fulfillment of Part IV of the
Environment Act 1995
Local Air Quality Management

October 2015

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Executive Summary

This report is East Hampshire District Council's 2015 Updating and Screening Assessment and forms part of the review and assessment of air quality in East Hampshire. The Updating and Screening Assessment is intended to identify potential areas within the District where emissions from a range of sources could adversely impact sensitive receptors. The assessment has been carried out in accordance with the Government's published Technical Guidance LAQM.TG (09).

All relevant air quality monitoring data, transport information and emissions from industrial processes in the District have been considered in the production of this report.

The Updating and Screening Assessment shows that the air quality objectives included in the Air Quality Regulations are likely to be achieved for all pollutants throughout East Hampshire and has not identified the need to proceed to a Detailed Assessment for any pollutants.

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1 Introduction

1.1 Description of Local Authority Area

East Hampshire is a rural District which borders West Sussex and Surrey and lies to the north of the urban areas of Portsmouth and Havant. The District covers an area of approximately 200 square miles and has a population of approximately 117,000 people[1]. It is renowned for its attractive countryside, much of which is of an exceptionally high quality. Much of the District lies within the South Downs National Park.

The District is based around the two market towns of Petersfield and Alton with other major centres at Whitehill, Bordon and Horndean. The rest of the District is characterised by many attractive villages, the largest of which are Liphook and Liss. The towns and villages contain many buildings and areas of architectural, archaeological and historic interest, which contribute greatly to the attractive appearance and character of the District's built environment.

The District is bisected by the A3 (Motorway and Trunk Road), which is a major transport link between London and Portsmouth. Other roads of local importance include the A31 (Farnham to Winchester), the A32 (Alton to Fareham), the A272 (Winchester to Petersfield), the A325 (A3 to Farnham via Bordon) and the A339 (Alton to Basingstoke). Rail services to London and the South coast stop at Liphook, Liss, Petersfield and Rowlands Castle. There are also stations at Alton and Bentley. The Mid Hants Watercress Line operates steam trains between Alton and Ropley.
East Hampshire has a range of manufacturing and service industries, mainly in small to medium sized firms, and a significant public sector presence. In the countryside, agriculture remains an important sector of the local economy.

A map of East Hampshire is shown in Appendix 1.

1.2 Purpose of Report

This report fulfils the requirements of the Local Air Quality Management process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England,

Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedences are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

The objective of this Updating and Screening Assessment is to identify any matters that have changed which may lead to risk of an air quality objective being exceeded. A checklist approach and screening tools are used to identify significant new sources or changes and whether there is a need for a Detailed Assessment. The USA report should provide an update of any outstanding information requested previously in Review and Assessment reports.

1.3 Air Quality Objectives

The air quality objectives applicable to LAQM **in England** are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1.1. This table shows the objectives in units of micrograms per cubic metre $\mu g/m^3$ (milligrammes per cubic metre, mg/m^3 for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Table 1.1 Air Quality Objectives included in Regulations for the purpose of LAQM in England

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m^3	Running annual mean	31.12.2003
	5.00 µg/m^3	Running annual mean	31.12.2010
1,3-Butadiene	2.25 µg/m^3	Running annual mean	31.12.2003
Carbon monoxide	10.0 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.5 µg/m^3	Annual mean	31.12.2004
	0.25 µg/m^3	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m^3 not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m^3	Annual mean	31.12.2005
Particles (PM_{10}) (gravimetric)	50 µg/m^3, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m^3	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m^3, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m^3, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m^3, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

A summary of the conclusions of previous rounds of review and assessment carried out by East Hampshire District Council (EHDC) are shown in Table 1.2. Further detail can be found in the individual reports which are available on the Council's website or on request from Environmental Health.

Table 1.2 Summary of previous rounds of Review and Assessment

Previous report	Date produced	Brief outcome
LAQM Review & Assessment Report[2]	December 2000	Air quality objectives achieved
Updating and Screening Assessment[3]	August 2003	Air quality objectives achieved, but identified that several areas require further investigation.
Progress Report[4]	September 2004	Addressed areas raised in 2003 USA. Identified that a Detailed Assessment was required for nitrogen dioxide at A3 Bramshott Chase and A325 Chalet Hill/ Bordon.
Detailed Assessment[5]	July 2005	Air quality objectives achieved
Updating and Screening Assessment[6]	June 2006	Identified that a Detailed Assessment was required for nitrogen dioxide at A3 Bramshott/Grayshott, A325 Chalet Hill/Bordon and A3 Horndean/Portsmouth Road
Detailed Assessment[7]	August 2008	Predicted air quality objectives achieved at A3 Horndean/Portsmouth Road and A325 Chalet Hill/Bordon, but some concern that results in the report may be optimistic. Some minor alterations were made to the report as agreed with DEFRA.
2008 Detailed Assessment with 2008 Progress Report[7]	May 2009	2008 Detailed Assessment submitted with agreed changes including 2008 Progress Report attached as an Appendix. Air quality objectives achieved with exception of nitrogen dioxide at the A325/ Chalet Hill, Bordon. EHDC agreed to review the position during 2009.
Updating and Screening Assessment[8]	April 2009	Air quality objectives achieved, but highlighted Bordon being reviewed during 2009
Air Quality Update: Shortened Detailed Assessment of nitrogen dioxide in Bordon[9]	September 2009	Likely exceedance of the annual mean objective for nitrogen dioxide identified at A325/Chalet Hill junction. EHDC proposed to review position and determine the extent of AQMA early in 2010 when a complete dataset for 2009 was available.
Progress Report[10]	April 2010	Air quality objectives achieved with the exception of one position at A325/Chalet Hill junction. EHDC to declare an AQMA.
Progress Report[11]	April 2011	Air quality objectives achieved with the exception of one position at A325/Chalet Hill junction within Bordon AQMA.
Updating and Screening Assessment[12]	April 2012	Air quality objectives achieved, except for exceedances within Bordon AQMA
Further Assessment[13]	June 2012	Nitrogen dioxide above 40 $\mu g/m^3$ within the AQMA, but not at relevant exposure locations. AQMA revocation recommended. AQMA revoked in February 2013. Revocation Order in Appendix 8
Progress Report[14]	April 2013	Air quality objectives achieved for all pollutants
Progress Report[15]	May 2014	Air quality objectives achieved for all pollutants

2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

East Hampshire District Council currently operates one continuous air quality monitoring station which monitors nitrogen dioxide levels.

The station is located along the A325 High Street, Bordon close to the junction with Chalet Hill. Monitoring commenced in March 2005. The station is classified as a roadside monitoring site which is approximately 4 metres from the kerb. The station's location is shown in Figure 2.1 below and is representative of relevant exposure at Chalet Court, Bordon. The station is not part of the national monitoring network.

The data from the Bordon air quality station is collected via a GSM modem. Data management during 2014 was carried out by Envitech/AQDM who screen and validate the raw data and provide the Council with written reports of the results on a quarterly basis. All monitoring data collected by East Hampshire District Council provided in this report has been ratified.

Figure 2.1 Location of the Bordon Air Quality Monitoring Station

Nitrogen dioxide is monitored at the station using a Monitor Labs chemiluminescent analyser, which is housed in a secure air-conditioned cabin. The analyser is serviced every 6 months. During 2014 services were carried out by SupportingU and ESU1.

The analyser is also checked and calibrated using gases by the Council every month in accordance with the Council's written procedure and the results are recorded in the site log.

QA/QC data is provided in Appendix 2.

Table 2.1 Details of Automatic Monitoring Sites

Site Name	Site Type	OS Grid Reference	Pollutants Monitored	In AQMA?	Monitoring Technique	Relevant Exposure?	Distance to Kerb of Nearest Road (m)	Does this Location Represent Worst-Case Exposure?
Bordon	Urban background	479646, 135341	NO_2	No	Chemiluminescent analyser	No. Representative of relevant exposure	4m	N

2.1.2 Non-Automatic Monitoring Sites

Nitrogen dioxide is also measured in East Hampshire using diffusion tubes. During 2014 nitrogen dioxide concentrations were measured at 16 locations in East Hampshire. The tubes are supplied and analysed by Gradko International Ltd, a UKAS accredited laboratory, and prepared by using 50% v/v TEA in acetone methodology. Further details on the QA/QC of the diffusion tubes and calculation of the bias adjustment factor used in this report can be seen in Appendix 2. Maps showing the locations of the diffusion tube monitoring sites can be seen in Appendix 3.

Changes to Diffusion Tube Locations

There have been no changes to diffusion tube locations since the 2014 Progress Report. Results are now available for new position, Horndean Post Office (HR7). Monitoring commenced at HR7 in January 2014 after lampposts used for monitoring at Horndean Roundabout (HR2) and Horndean 24 London Road (HR4) were removed during the redevelopment of the Gales Brewery site. It is recognised that monitoring at HR7 does not represent relevant exposure and since the redevelopment of the Brewery site new opportunities for monitoring have recently become available. This tube will be moved at the end of 2015 to a more suitable position representative of relevant exposure which will be reported in the 2016 Progress Report.

Table 2.2 Details of Non-Automatic Monitoring Sites

Site Ref	Site Name	Site Type	OS Grid Reference	Tube Height (m)	In AQMA?	Is monitoring collocated with a continuous analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure	Distance to kerb of nearest road (m)	Does this location represent worst-case exposure?
AB1	Alton, Orchard House	Urban background	472109, 139487	3	N	N	Yes (0m)	N/A	N/A
BR4	Bordon, Corals (1) Chalet Hill	Roadside	479666, 135345	2.56	N	N	No Relevant exposure at 1st/2nd level (2m)	2.9	Yes
BR7	Bordon, Corals (2) Chalet Hill	Roadside	479666, 135345	3.31	N	N	Yes (1m)	2.9	Yes
BR1	Bordon, Ashmead	Roadside	479707, 135438	2	N	N	Yes (0m)	10	No
BR2	Bordon, Chalet Court	Roadside	479695, 135356	1.5	N	N	Yes (0m)	6	No

Site Ref	Site Name	Site Type	OS Grid Reference	Tube Height (m)	In AQMA?	Is monitoring collocated with a continuous analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure	Distance to kerb of nearest road (m)	Does this location represent worst-case exposure?
BR3	Bordon, 10 Chalet Hill	Roadside	479711, 135321	2	N	N	No Representative of relevant exposure (1.5m)	2.4	Yes
BR5	BR5 Bordon, High Street (1)	Roadside	479654, 135312	2.26	N	N	No Relevant exposure at 1st floor level (2m)	1.9	Yes
BR8	BR8 Bordon, High Street (2)	Roadside	479654, 135312	3.17	N	N	Yes (0.5m)	1.9	Yes
BR6	BR6 Bordon, Air Quality Cabin (3 tubes co-located)	Roadside	479646, 135341	2	N	Y	No Representative of relevant exposure at 4m	4.8	No
BU1	Bordon, Bassenthwaite Gdns	Urban background	479795, 136267	1.7	N	N	Yes (0m)	N/A	N/A

Site Ref	Site Name	Site Type	OS Grid Reference	Tube Height (m)	In AQMA?	Is monitoring collocated with a continuous analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure	Distance to kerb of nearest road (m)	Does this location represent worst-case exposure?
WR1	Whitehill, Petersfield Rd	Roadside	479314, 134307	3.25	N	N	No (18m)	1	Yes
PB1	Petersfield, Town Hall	Urban background	474989, 123241	2	N	N	No (N/A)	N/A	N/A
HR1	Horndean, London Road	Roadside	470554, 113582	2.6	N	N	Yes (2.3m)	2	Yes
HR7	Horndean Post Office	Roadside	474396, 133401	2.65	N	N	No	3.5	Yes

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide

The Government and the Devolved Administrations have adopted two air quality objectives for nitrogen dioxide (NO_2); an annual mean concentration of 40 µg/m^3, and a 1-hour mean concentration of 200 µg/m^3 not to be exceeded more than 18 times per year.

Automatic Monitoring Data

The measured annual mean concentration of nitrogen dioxide at the Bordon air quality station for 2014 falls below the air quality objective of 40µg/m^3 and there were no exceedances of the hourly mean objective of 200µg/m^3. This is shown in Tables 2.3 and 2.4 and Figure 2.3. Figure 2.3 suggests that there has been an overall decline in levels of nitrogen dioxide at this location since monitoring began.

Table 2.3 Results of Automatic Monitoring of Nitrogen Dioxide: Comparison with Annual Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for period of monitoring %	Valid Data Capture 2014 %	Annual Mean Concentration (µg/m^3)				
					2010	2011	2012	2013	2014
Bordon	Roadside	N	99.8	99.8	25.6	23.2	22	23.5	22.6

Figure 2.3 Trends in Annual Mean NO_2 Concentrations Measured at Automatic Monitoring Sites

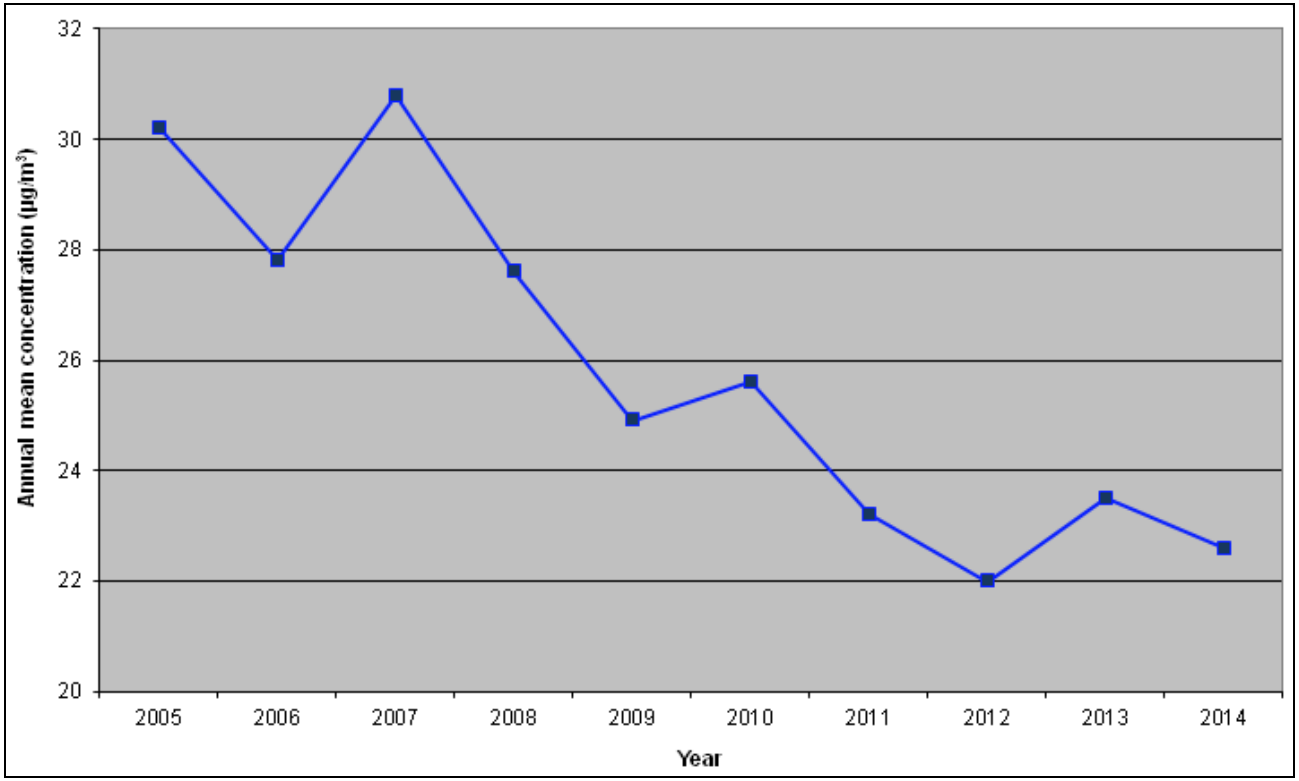


Table 2.4 Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with 1-hour mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for period of monitoring %	Valid Data Capture 2014 %	Annual Mean Concentration (µg/m^3)				
					2010	2011	2012	2013	2014
Bordon	Roadside	N	99.8	99.8	0	0	0	0	0

Diffusion Tube Monitoring Data

Annual means of nitrogen dioxide measured using diffusion tubes are shown in Table 2.5. A full dataset showing monthly mean values for 2014 is provided in Appendix 4. All data has been reviewed and the most suitable bias-adjustment factor available has been applied. In deciding which bias adjustment factor to apply, consideration has been given to guidance in Box 3.3 of TG(09)[16] and the advice of the air quality helpdesks' websites. Further information on the choice of the bias adjustment factor used for 2014 data is provided in Appendix 2. Further information on bias adjustment factors used for earlier years' data can be found in previous review and assessment reports.

Local bias adjustment factors have been calculated using the AEA Group's spreadsheet "Checking Precision and Accuracy of Triplicate Tubes"[17]. A copy of the spreadsheet completed for 2014 data is available in Appendix 5. National bias adjustment factors were obtained from the Review and Assessment Helpdesk's database (v09/15)[18].

Most of the nitrogen dioxide concentrations are measured at roadside locations. Concentrations of nitrogen dioxide at the location of nearest relevant exposure may be lower as they are further away from the road. Results for BR3 have been annualised using the methodology in Box 3.2 of TG(09)[16] before being compared to the annual mean objective. This is because data capture at this location during 2014 was less than 75% of the full calendar year. Further details of this can be found in Appendix 2.

The results show that measured annual mean concentrations of nitrogen dioxide for 2014 fall below the air quality objective at 40$\mu g/m^3$.

Table 2.5 Results of Nitrogen Dioxide Diffusion Tubes in 2014

Site ID	Location	Site type	Within AQMA?	Triplicate or collocated tube	Data capture 2014 (%)	Data with less than 9 months has been annualised (Y/N)	Confirm if data has been distance corrected (Y/N)	Annual mean concentration (Bias Adjustment factor = 0.9) 2014 (μg/m^3)
AB1	Alton, Orchard House	Urban background	N	N	100	N	N	12.7
BR4	Bordon, Corals (1) Chalet Hill	Roadside	N	N	100	N	N	39.0
BR7*	Bordon, Corals (2) Chalet Hill	Roadside	N	N	100	N	N	37.8
BR1	Bordon, Ashmead	Roadside	N	N	83	N	N	19.8
BR2	Bordon, Chalet Court	Roadside	N	N	100	N	N	23.0
BR3	Bordon, 10 Chalet Hill	Roadside	N	N	42	Y	N	28.4 [a]
BR5	BR5 Bordon, High Street (1)	Roadside	N	N	75	N	N	36.9
BR8*	BR8 Bordon, High Street (2)	Roadside	N	N	92	N	N	32.0

Site ID	Location	Site type	Within AQMA?	Triplicate or collocated tube	Data capture 2014 (%)	Data with less than 9 months has been annualised (Y/N)	Confirm if data has been distance corrected (Y/N)	Annual mean concentration (Bias Adjustment factor = 0.9) 2014 (μg/m^3)
BR6	BR6 Bordon, Air Quality Cabin (3 tubes co-located)	Roadside	N	Triplicate and collocated	92	N	N	22.8
					100			22.2
					100			22.8
BU1	Bordon, Bassenthwaite Gdns	Urban background	N	N	100	N	N	10.8
WR1	Whitehill, Petersfield Rd	Roadside	N	N	100	N	N	32.5
PB1	Petersfield, Town Hall	Urban background	N	N	100	N	N	13.7
HR1	Horndean, London Road	Roadside	N	N	92	N	N	33.3
HR7	Horndean Post Office	Roadside	N	N	100	N	N	25.9

*Green cells indicate monitoring that has taken place at first floor height
a – Mean has been annualised following guidance in Box 3.2 of TG(09) as calendar year data capture is less than 75%

Table 2.6 Results of Nitrogen Dioxide Diffusion Tubes (2010 to 2014)

Site ID	Location	Site Type	Within AQMA?	Annual mean concentration (adjusted for bias) μg/m^3				
				2010 (Bias Adjustment Factor = 0.94)	2011 (Bias Adjustment Factor = 0.92)	2012 (Bias Adjustment Factor = 0.94)	2013 (Bias Adjustment Factor = 0.96)	2014 (Bias Adjustment Factor = 0.9)
AB1	Alton, Orchard House	Urban background	N	15.3	14.6	14.1	14.1	12.7
BR4	Bordon, Corals (1) Chalet Hill	Roadside	N	**41.5**	**42.3**	38.0	37.4	39.0
BR7*	Bordon, Corals (2) Chalet Hill	Roadside	N	39.7	40.7	36.6	37.6	37.8
BR1	Bordon, Ashmead	Roadside	N	21.1	20.2	20.5	19.6	19.8
BR2	Bordon, Chalet Court	Roadside	N	25.2	25.6	22.8	23.5	23.0
BR3	Bordon, 10 Chalet Hill	Roadside	N	27.3	27.2	27.6	27.8	28.4[a]
BR5	BR5 Bordon, High Street (1)	Roadside	N	**42.2**	39.1	35.0	37.0	36.9

Site ID	Location	Site Type	Within AQMA?	Annual mean concentration (adjusted for bias) μg/m^3				
				2010 (Bias Adjustment Factor = 0.94)	2011 (Bias Adjustment Factor = 0.92)	2012 (Bias Adjustment Factor = 0.94)	2013 (Bias Adjustment Factor = 0.96)	2014 (Bias Adjustment Factor = 0.9)
BR8*	BR8 Bordon, High Street (2)	Roadside	N	38.3	34.1	32.9	34.6	32.0
BR6	BR6 Bordon, Air Quality Cabin (3 tubes co-located)	Roadside	N	24.6	22.4	21.1	23.5	22.6
BU1	Bordon, Bassenthwaite Gdns	Urban background	N	14.9	12.2	10.9	11.9	10.8
WR1	Whitehill, Petersfield Rd	Roadside	N	34.5	31.2	31.0	33.2	32.5
PB1	Petersfield, Town Hall	Urban background	N	16.2	13.5	13.7	14.3	13.7
HR1	Horndean, London Road	Roadside	N	33.3	31.5	32.4	32.2	33.3

Site ID	Location	Site Type	Within AQMA?	Annual mean concentration (adjusted for bias) μg/m^3				
				2010 (Bias Adjustment Factor = 0.94)	2011 (Bias Adjustment Factor = 0.92)	2012 (Bias Adjustment Factor = 0.94)	2013 (Bias Adjustment Factor = 0.96)	2014 (Bias Adjustment Factor = 0.9)
HR7	Horndean Post Office	Roadside	N					25.9

a – Mean has been annualised following guidance in Box 3.2 of TG(09) as calendar year data capture is less than 75%
Exceedance of the NO_2 annual mean AQS objective of 40μg/m^3 is shown in bold.
All results adjusted with locally derived bias adjustment factors. Details available in previous LAQM reports.
Green cells indicate monitoring that has taken place at first floor height.

Table 2.6 shows annual nitrogen dioxide levels at all the diffusion tube sites in East Hampshire over the last five years. Results in bold indicate an exceedance of the annual mean objective for nitrogen dioxide of 40μg/m^3.

Figure 2.4a Trends in Annual Mean Nitrogen Dioxide Concentration Measured using Diffusion Tubes in East Hampshire (excluding Bordon)

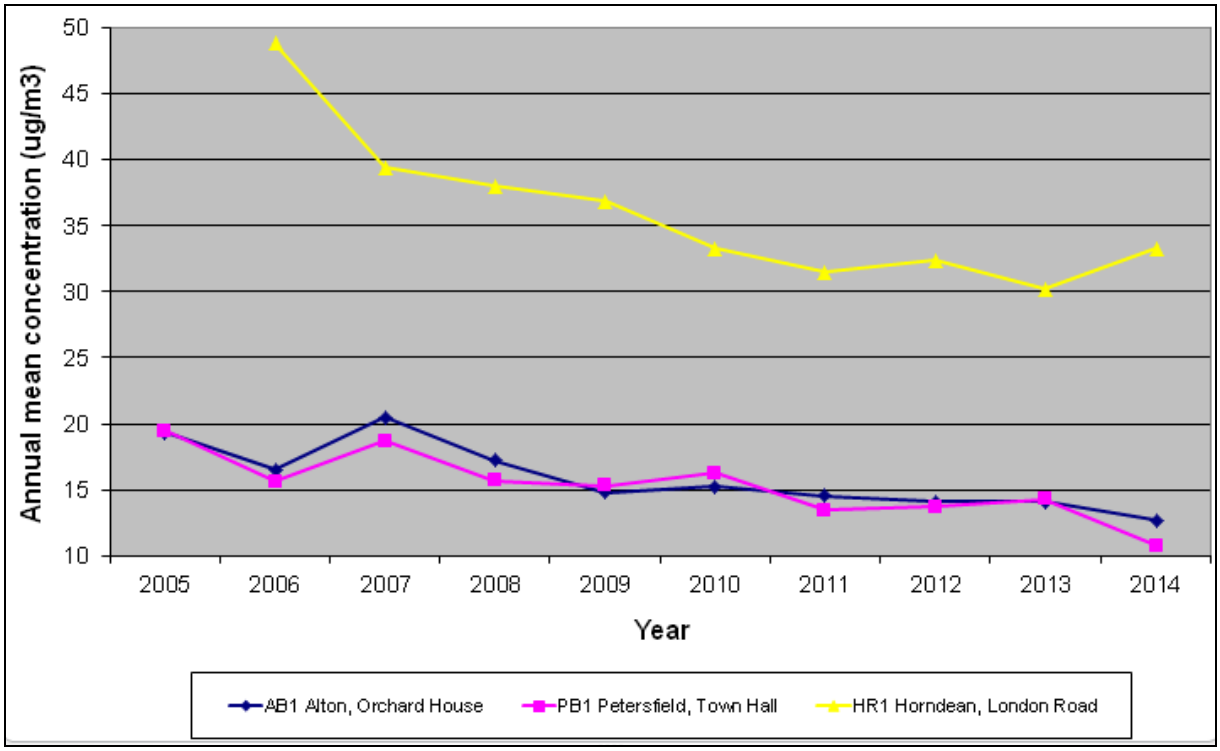
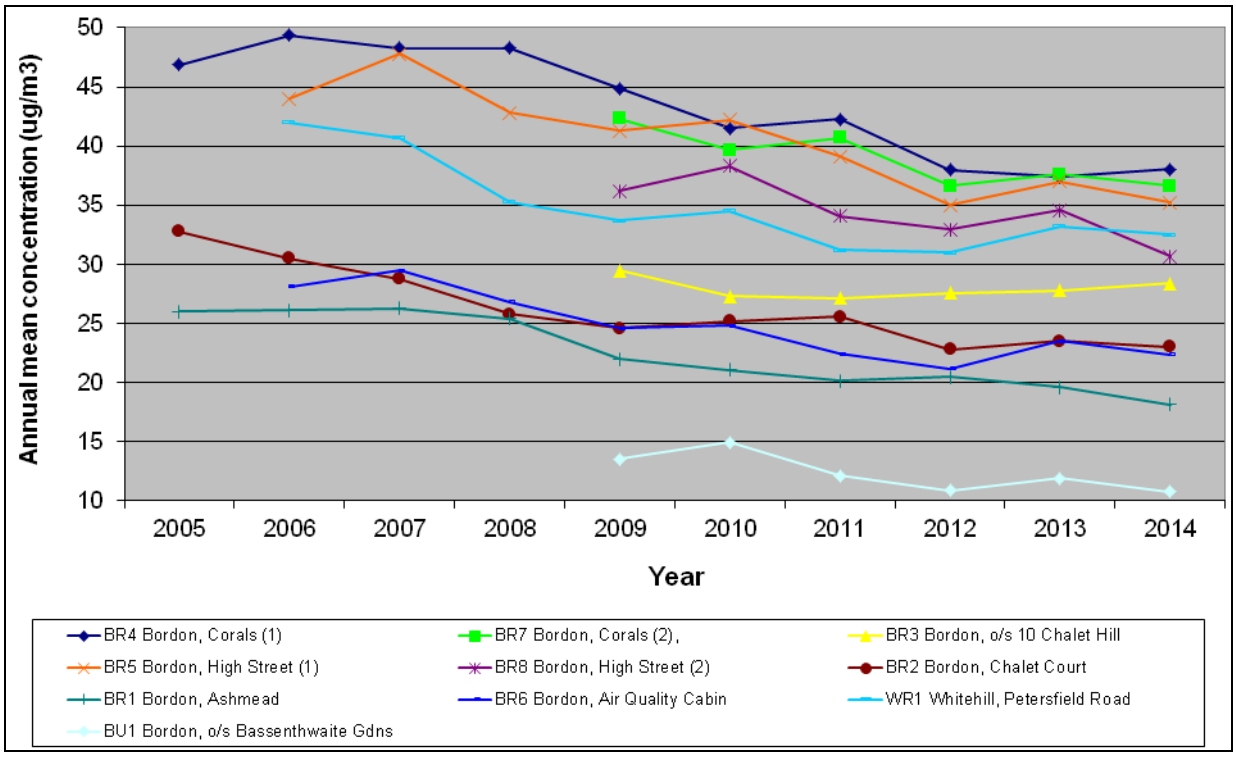


Figure 2.4b Trends in Annual Mean Nitrogen Dioxide Concentration Measured using Diffusion Tubes in Bordon



Figures 2.4a and 2.4b show that there has been a steady overall decline in levels of nitrogen dioxide in East Hampshire over recent years.

2.2.2 Summary of Compliance with AQS Objectives

East Hampshire District Council has examined the results from monitoring in the district. Concentrations are all below the objectives, therefore there is no need to proceed to a Detailed Assessment.

3 Road Traffic Sources

TG(09)[16] requires the focus for the assessment of road traffic sources to be on relevant locations close to busy roads, especially in congested areas and near to junctions where emissions will be higher, and in built up areas where the road is canyon like with buildings on either side of the road which restricts the dispersion and dilution of emissions.

The criteria for assessing road traffic sources remain unchanged from previous rounds of Review and Assessment. There are a number of new developments that have received planning approval during 2014 which have introduced residential properties near to existing roads. These have included air quality assessments and none of these assessments resulted in exceedences of the nitrogen dioxide or PM_{10} objectives being predicted at relevant locations. In addition, at the majority of the new developments, relevant exposure is not within 10m of the nearby road (as detailed in TG(09) Box 5.3).

3.1 Narrow Congested Streets with Residential Properties Close to the Kerb

East Hampshire District Council confirms that there are no new/newly identified congested streets with a flow above 5,000 vehicles per day and residential properties close to the kerb, that have not been adequately considered in previous rounds of Review and Assessment.

3.2 Busy Streets Where People May Spend 1-hour or More Close to Traffic

East Hampshire District Council confirms that there are no new/newly identified busy streets where people may spend 1 hour or more close to traffic.

3.3 Roads with a High Flow of Buses and/or HGVs.

East Hampshire District Council confirms that there are no new/newly identified roads with high flows of buses/HDVs.

3.4 Junctions

East Hampshire District Council confirms that there are no new/newly identified busy junctions/busy
roads.

3.5 New Roads Constructed or Proposed Since the Last Round of Review and Assessment

A relief road has been proposed as part of a wider scheme to redevelop Whitehill Bordon when the MOD leaves the area during 2015 and land becomes available for reuse and redevelopment. The intention is to regenerate the area by providing a new town centre, new employment uses and up to 2400 new homes[19].

The proposed relief road intends to relieve congestion on the A325 by diverting traffic around the outskirts of Whitehill Bordon and is expected to be delivered during phase 1 of the development (2016-2022). It is anticipated that construction of the proposed relief road will take approximately one year, with the construction phase expected to begin in Autumn 2016 with completion by Autumn 2017[19].

A plan showing the location of the proposed relief road highlighted in red can be seen in Figure 3.1.

The relief road is covered by three separate planning applications. Further details of these applications are provided in Table 3.1. Planning approval has not yet been granted for the majority of the proposed relief road, the exception being a northern section which forms part of the planning application to redevelop the site known as Louisburg Barracks. Planning approval for Louisburg Barracks was granted in November 2014 and includes approval for a 970m section of highway incorporating three roundabout junctions.

Figure 3.1 "Illustrative masterplan" from Bordon Garrison Redevelopment Design and Access Statement[19]

Table 3.1 Details of Planning Applications including Proposed Relief Road

Planning reference	Site address	Summary of application	Approved?	Web address
55369/001	Site of Louisburg Barracks, Station Road, Bordon	Hybrid application: 1) Outline application for a mixed-use development comprising: at least 2.94 hectares of employment land with up to 15,288m2 of business (Class B1), general industry (Class B2) and training (Class D1) floorspace (GEA) of which no more than 3,000m2 is to be within Class D1; up to 13.08 hectares net developable residential land comprising up to 500 residential units (Class C3) including the retention of Amherst House; laying out of at least 3.38 hectares of public open space including provision of play facilities and landscaping; and associated works including demolition of existing structures and hardstanding, earthworks, remediation, construction of means of access, utilities service diversions, connections and ancillary structures, means of enclosure, car parking, street lighting, sustainable drainage systems, tree removal and tree protection areas; and 2) **Full application for the development of a 970 metre section of highway incorporating three roundabout type junctions** and associated earthworks, lighting, soft landscaping, surface water drainage and utilities conduits.	Yes	**Application available at: http://tinyurl.com/o59r2nk** **Air quality assessment available at: http://tinyurl.com/q5qlxbg**
55587/001	Land at and adjoining Bordon Garrison, Bordon	Hybrid Application - (1) Outline (with some matters reserved) for the demolition of MoD buildings and redevelopment of Bordon Garrison and adjoining Land for: Up to 2400 dwellings, Town centre 23000 sq meters (Gross) commercial floor space to incorporate a range of uses including shops/offices, cafes/restaurants,Care/nursing home, Transport interchange, Food store up to 5000 sq metres, Swimming pool/gym of up to 3000 sq metres gross, Secondary and Primary schools with sports pitches and parking areas. Replacement sports changing/pavilion facility, provision of roads, car parking cycleway and footpaths. Public Open Space, informal/incidental open space, children's play areas and multi-use games areas, BMX or Skate park, Allotments, landscaping/buffer areas, means of enclosure/boundary treatments . Sustainable Urban Drainage Systems, Creation of new access points at Budds Lane A325 and Station Road. (2) FULL PERMISSION for Sustainable Alternative Natural Green Space (SANGS) at Hogmoor inclosure including car parking areas, paths and cycle-walkways, fencing Bat bunkers and associated landscaping/earthworks. **Southern section of new relief road linking to the A325** including crossings, fencing, lighting, drainage and utilities	Decision pending	**Application available at: http://tinyurl.com/lh3jcpl** **Air quality assessment available at: http://tinyurl.com/p2jr3jq**
SDNP/14/06604/FUL	Land At South East Junction With Liphook Road Petersfield Road Whitehill, Bordon	Hybrid Application - Full permission - **Southern section of new relief road (including associated pedestrian/cycle ways) linking the A325** including associated earthworks, fencing, lighting, drainage and utilities, crossings and surface water attenuation drainage measures	Decision pending	**Application available at: http://tinyurl.com/pq4kzue** **Air quality assessment the same as for application 55587/001**

Two air quality assessments are included in the planning applications for the proposed relief road and these are considered sufficient for review and assessment purposes. Both assessments predict that the air quality objectives for nitrogen dioxide and PM_{10} will be achieved at relevant existing and proposed residential locations both in the base year and 'with development' scenarios.

Modelling predicts that the proposed relief road will benefit the majority of existing residential receptors along the A325 with concentrations of nitrogen dioxide being lower with the development going ahead than in the 'without development' scenario. The relief road is expected to benefit air quality in the revoked Bordon AQMA by further reducing concentrations of nitrogen dioxide. Diffusion tube monitoring will continue in this area to demonstrate the reduction in nitrogen dioxide to be achieved over the next few years.

East Hampshire District Council has assessed new/proposed roads meeting the criteria in Section A.5 of Box 5.3 in TG(09), and concluded that it will not be necessary to proceed to a Detailed Assessment.

3.6 Roads with Significantly Changed Traffic Flows

East Hampshire District Council confirms that there are no new/newly identified roads with significantly changed traffic flows.

3.7 Bus and Coach Stations

East Hampshire District Council confirms that there are no relevant bus stations in the Local Authority area.

4 Other Transport Sources

4.1 Airports

East Hampshire District Council confirms that there are no airports in the Local Authority area.

4.2 Railways (Diesel and Steam Trains)

There have been no changes to railways in East Hampshire since the 2012 USA[12.]

4.2.1 Stationary Trains

East Hampshire District Council confirms that there are no new locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.

4.2.2 Moving Trains

East Hampshire District Council confirms that there are no locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.

4.3 Ports (Shipping)

East Hampshire has no coastline and therefore no shipping to consider.

East Hampshire District Council confirms that there are no ports or shipping that meet the specified criteria within the Local Authority area.

5 Industrial Sources

5.1 Industrial Installations

Industrial sources are unlikely to make a significant local contribution to annual mean concentrations, but could be significant in terms of the short-term objectives. A list of local authority regulated industrial installations in East Hampshire can be seen in Appendix 7.

5.1.1 New or Proposed Installations for which an Air Quality Assessment has been Carried Out

East Hampshire District Council confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

5.1.2 Existing Installations where Emissions have Increased Substantially or New Relevant Exposure has been Introduced

East Hampshire District Council confirms that there are no industrial installations with substantially increased emissions or new relevant exposure in their vicinity within its area or nearby in a neighbouring authority.

5.1.3 New or Significantly Changed Installations with No Previous Air Quality Assessment

East Hampshire District Council confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

5.2 Major Fuel (Petrol) Storage Depots

There are no major fuel (petrol) storage depots within East Hampshire District Council.

5.3 Petrol Stations

The criteria for assessing petrol stations remain unchanged from previous rounds of review and assessment. All petrol filling stations were considered in the previous USAs and were found not to be relevant.

East Hampshire District Council confirms that there are no petrol stations meeting the specified criteria**.**

5.4 Poultry Farms

The criteria for assessing poultry farms remain unchanged from previous rounds of review and assessment. No further large poultry farms have come to Environmental Health's attention since the 2012 USA[12]. There have been no changes to the stocking capacities of the poultry farms considered in the previous report.

East Hampshire District Council confirms that there are no poultry farms meeting the specified criteria.

6 Commercial and Domestic Sources

6.1 Biomass Combustion – Individual Installations

East Hampshire District Council confirms that there are no biomass combustion plant in the Local Authority area.

6.2 Biomass Combustion – Combined Impacts

There is no data for domestic biomass combustion installations available, but based on local knowledge it is unlikely that areas with a high density of houses and service sector biomass combustion appliances exist within the District that may give rise to unacceptably high PM_{10} concentrations.

East Hampshire District Council confirms that there is no significant biomass combustion plant in the Local Authority area.

6.3 Domestic Solid-Fuel Burning

Based on Environmental Health records relating to smoke and odour problems from domestic properties, few of the recent issues relate to coal burning. It is likely that only a very small percentage of properties within East Hampshire regularly use coal.

East Hampshire District Council confirms that there are no areas of significant domestic fuel use in the Local Authority area.

7 Fugitive or Uncontrolled Sources

Dust emissions from a range of fugitive and uncontrolled sources can give rise to elevated PM_{10}. Environmental Health records indicate very few incidents of dust problems within East Hampshire and those which have occurred have been resolved through negotiation with site owners or their contractors.

TG(09)[16] requires locations that have not been covered by previous rounds of review and assessment, or where there is new relevant exposure to be included in this section.

East Hampshire District Council confirms that there are no potential sources of fugitive particulate matter emissions in the Local Authority area.

8 Conclusions and Proposed Actions

8.1 Conclusions from New Monitoring Data

No exceedances of the national air quality objectives have been identified at any locations within the district. Monitoring in Whitehill Bordon shows that concentrations of nitrogen dioxide remain below the air quality objective within the area previously included in revoked AQMA Bordon no1.

8.2 Conclusions from Assessment of Sources

Based on the assessment of likely impacts of local developments it has been concluded that there have been no new or significantly changed sources of pollutants within East Hampshire that might result in any of the air quality objective limits being exceeded.

8.3 Proposed Actions

The Updating and Screening Assessment has not identified the need to proceed to a Detailed Assessment for any pollutant or the need to carry out any additional monitoring/make changes to the existing monitoring programme.

Proposed further action:

1) East Hampshire District Council will submit a Progress Report by the end of April 2016 in accordance with the national timetable.

9 References

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20. LAQM Helpdesk (2015) Summary of Laboratory Performance in AIR/WASP NO2 Proficiency Testing (April 2013 – February 2015). Accessed on 02/10/2015 at:

http://laqm.defra.gov.uk/documents/LAQM-WASP-Rounds-121--124-and-AIR-PT-Rounds-1-3-4-6-(April-2013--February-2015)-NO2-report.pdf

Appendices

Appendix 1: Map of East Hampshire

Appendix 2: QA/QC Data (including bias adjustment factors and short-term to long-term data adjustment).

Appendix 3: Maps showing the Location of Nitrogen Dioxide Diffusion Tubes in East Hampshire

Appendix 4: Full Raw Dataset for Diffusion Tubes 2014 (monthly)

Appendix 5: Precision and Accuracy of Triplicate Tubes

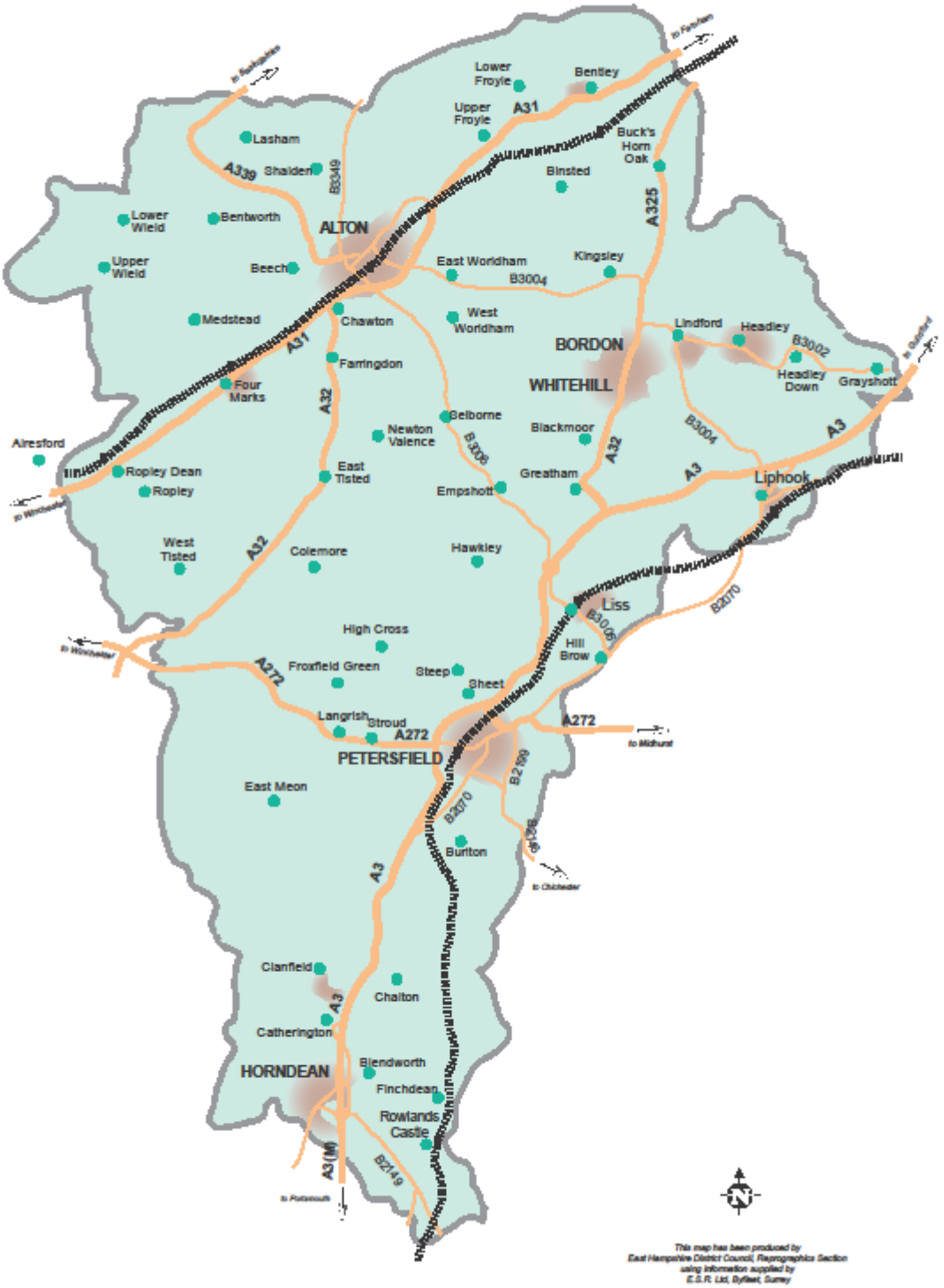
Appendix 6: 2014 Diffusion Tube Data with Local and National Bias Adjustment Factors Applied

Appendix 7: List of Local Authority Regulated Industrial Installations

Appendix 8: Plan showing Boundary of the Bordon AQMA, and Revocation Order

Appendix 1

Appendix 1: Map of East Hampshire



Appendix 2: QA/QC Data

Diffusion Tube Bias Adjustment Factors

The diffusion tubes used by East Hampshire District Council are supplied and analysed by Gradko International Ltd and prepared by using 50% v/v TEA in acetone methodology. Gradko International Ltd is a UKAS accredited laboratory.

The bias adjustment factor for 2014 available from the R&A Helpdesk Database (version 09/15)[18] at the time of writing this report was 0.98. This was based on 10 studies.

Factor from Local Co-location Studies

East Hampshire District Council carries out its own investigation of diffusion tube accuracy each year by carrying out a co-location study of nitrogen dioxide at the Bordon air quality station. The local bias adjustment factor is calculated using the spreadsheet available on the LAQM website at http://laqm.defra.gov.uk/bias-adjustment-factors/local-bias.html[17]. The precision and accuracy of the co-located tubes is also calculated. For 2014 the spreadsheet provided a bias adjustment factor of 0.9 with a 95% confidence interval and this was used to adjust the annual means of single tubes.

A copy of the spreadsheet used can be seen in Appendix 5.

Annual means for each site can be seen in Table 2.4 of the report.

Discussion of Choice of Factor to Use

For 2014 both local and national bias adjustment factors are available. The locally obtained bias adjustment factor has been applied to the 2014 data as the co-location study was conducted at a site typical of all of the tubes' positions.

In the review of diffusion tube data for 2014 both bias adjustment factors have been considered because it is recognised that the application of the national bias factor results in higher final annual mean concentrations.

A summary of the annual mean concentrations of nitrogen dioxide for 2014 with the different bias adjustment factors applied to them is provided in Appendix 6.

Short-term to Long-term Data adjustment

Where less than 9 months data was available for a monitoring location, the results have been annualised following the guidance contained in Box 3.2 of TG(09)[16]. The monitoring results detailed in the table below have been annualised in this report:

Site ID	Monitoring location	Pollutant	Data capture of calendar year %	Dates for short term means	Reason for poor data capture
BR3	10 Chalet Hill, Bordon	NO_2	41.7	28/05/14-01/10/14, 03/12/14-07/01/15	Vandalism and tube theft

The long term AURN urban background sites chosen for the calculations were Oxford St Ebbes and Reading New Town due to their proximity to the monitoring locations and high data capture rates (over 90%). Other sites were discounted due to low data capture rates and data not being fully ratified. Data included here has been ratified.

Table A.1 Short-Term to Long-Term Monitoring Data Adjustment

BR3 Bordon, 10 Chalet Hill – nitrogen dioxide

Site	Site Type	Annual Mean	Period Mean	Ratio
Oxford	Background	16.42	14.68	1.12
Reading	Background	26.51	24.84	1.07
			Average	**1.093**

QA/QC of automatic monitoring

The Bordon air quality station is serviced every 6 months. During 2014 services were carried out by SupportingU and ESU1. QA/QC audits are also carried by Ricardo-AEA through its calibration club. These audits involve checking the analyser linearity, NO_x converter efficiency and comparing the site cylinders with audit cylinders. Ricardo-AEA follow procedures adopted within the quality programme of the UK national Automatic Urban and Rural Monitoring Network (AURN).

The analysers were also checked and calibrated using gases by the Council every 4 weeks in accordance with the Council's written procedure and the results are recorded in the site log.

Using the spreadsheet available on the LAQM website at http://laqm.defra.gov.uk/bias-adjustment-factors/local-bias.html[17] automatic monitoring was found to show overall good precision. This spreadsheet can be seen in Appendix 6.

QA/QC of diffusion tube monitoring

The most recent summary of laboratories' performance in the Workplace Analysis Scheme for Proficiency (WASP)[20] prepared by HSL for BV/NPL on behalf of Defra and the Devolved Administrations published in March 2015 shows that Gradko continues to demonstrate satisfactory performance in the analysis of NO_2 diffusion tubes. Gradko follows the procedures set out in the Practical Guidance document.

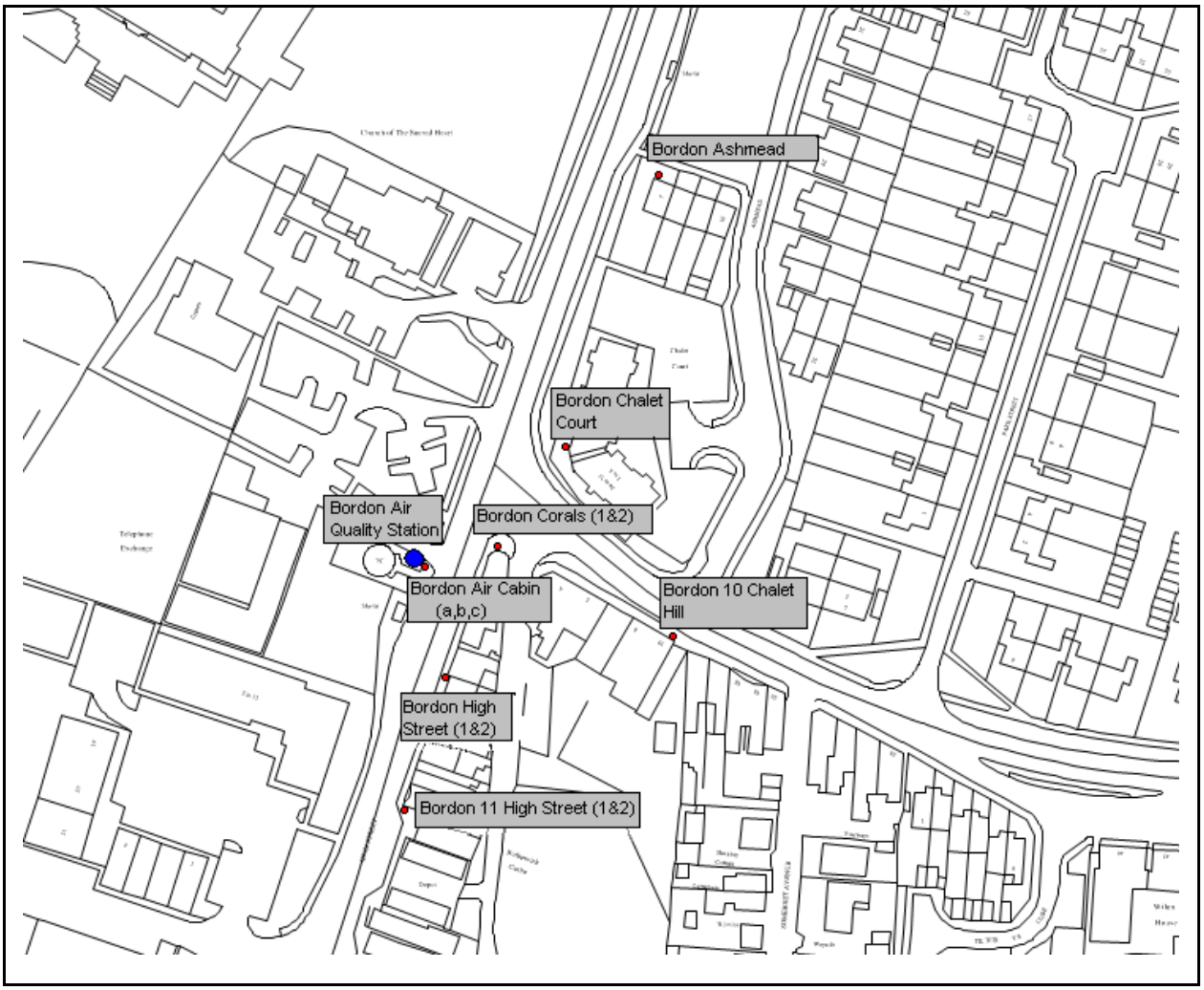
East Hampshire District Council has compared the diffusion tubes with the reference method in a co-location study. Using the spreadsheet available on the LAQM website at http://laqm.defra.gov.uk/bias-adjustment-factors/local-bias.html diffusion tube monitoring was

found to show overall good precision during 2014. This spreadsheet can be seen in Appendix 5.

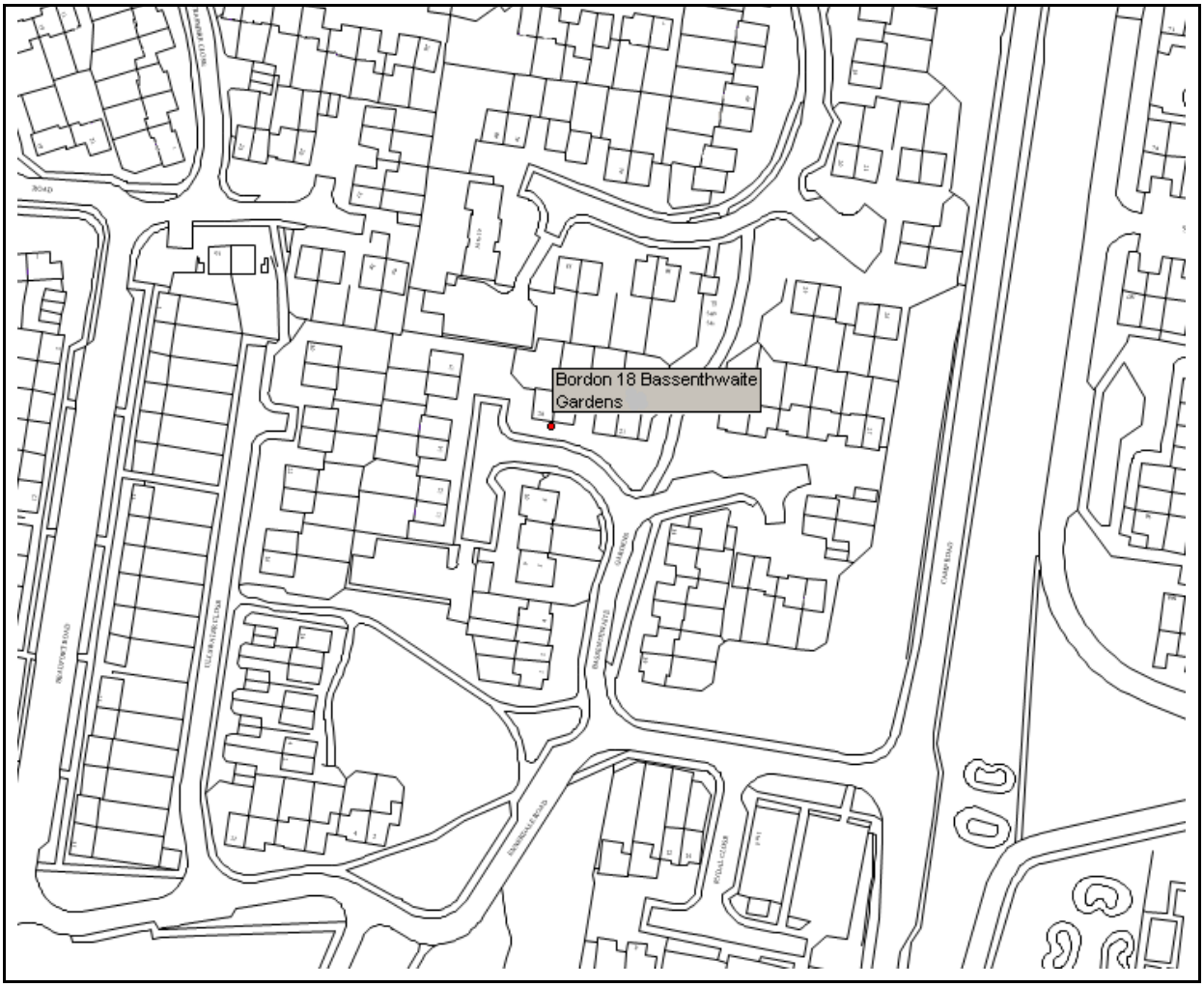
Appendix 3: Maps showing the location of nitrogen dioxide diffusion tubes in East Hampshire

Alton, Orchard House

Bordon, A325/Chalet Hill



Bordon, Bassenthwaite Gardens

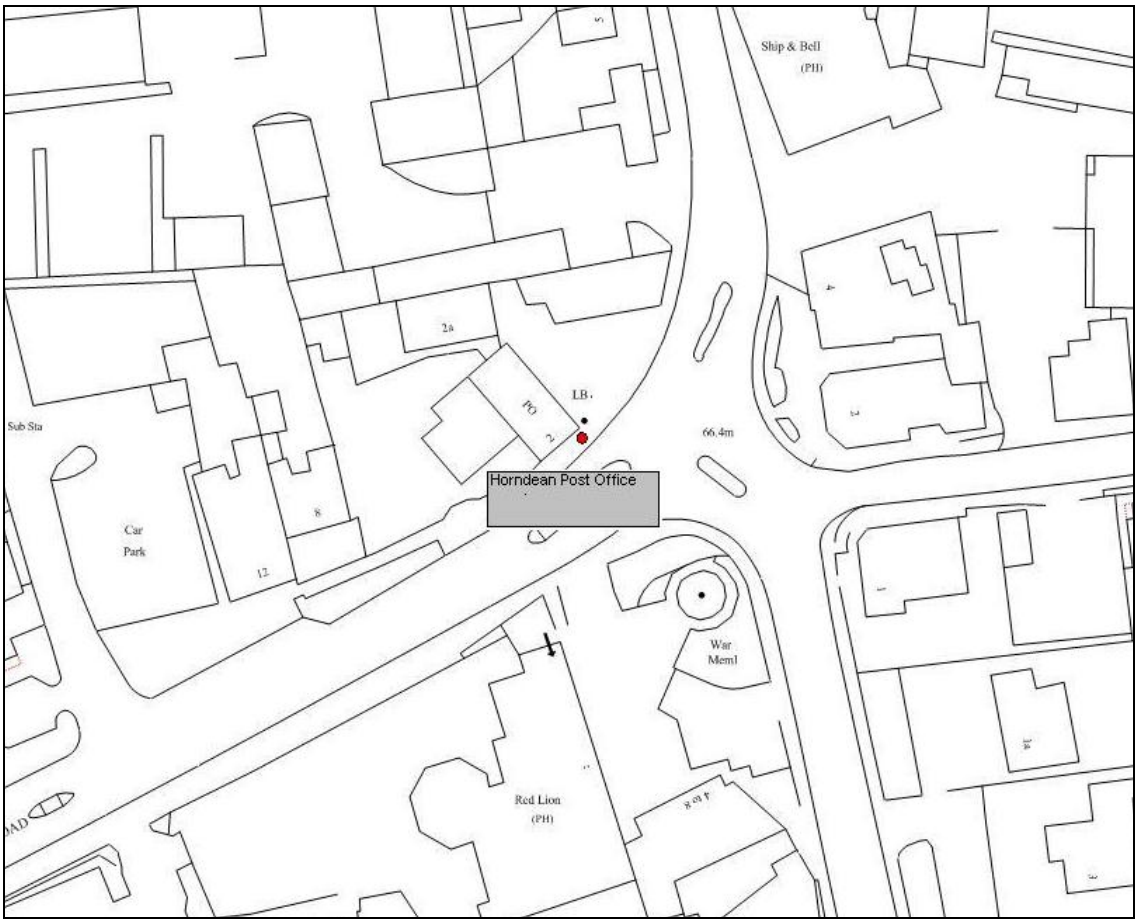


Whitehill, Petersfield Road

PB1 – Petersfield, Town Hall

HR1 - Horndean, London Road

HR7 - Horndean, Post Office



Appendix 4: Full Raw Dataset for Diffusion Tubes 2014 (monthly)

Site ref	Site	January	February	March	April	May	June	July	August	September	October	November	December
AB1	Alton, Orchard House	17.11	9.41	18.72	14.04	10.84	10.55	11.03	10.4	14.98	15.23	20.56	16.75
BR4	Bordon, o/s Corals (1), Chalet Hill	49.40	45.97	42.40	40.30	40.21	38.29	42.73	39.1	43.34	44.17	54.65	40.05
BR7	Bordon, o/s Corals (2), Chalet Hill	46.92	41.63	43.26	35.53	42.35	39.82	44.08	42.9	38.66	44.81	48.59	35.92
BR1	Bordon, Ashmead	26.15	25.96	25.85			14.42	16.97	17.4	19.22	21.62	25.10	26.90
BR2	Bordon, Chalet Court	25.54	24.72	31.25	22.60	21.00	24.49	27.07	21.0	30.69	24.85	29.05	25.05
BR3	Bordon, o/s 10 Chalet Hill						27.52	29.50	24.3	31.84			31.01
BR5	Bordon, High Street (1)	38.10	36.52		43.68	41.02	42.98	44.81	29.8	49.08	42.71		
BR8	Bordon, High Street (2)		30.91	42.20	41.59	32.56	40.92	36.98	26.7	42.39	33.07	49.04	14.28
BU1	Bordon, o/s Bassenthwaite Gdns		12.18	13.65	12.79	8.54	11.23	12.12	6.8	13.76	9.95	19.23	11.99
BR6	Bordon, Air Quality Cabin (1)	27.11	21.35	32.08	23.95	21.98	26.39	25.09	14.9	30.76	26.56	32.70	20.79
BR6	Bordon, Air Quality Cabin (2)	26.68	24.28	26.55	22.32	22.36	25.48	25.92	15.8	29.68	27.65	27.30	22.37
BR6	Bordon, Air Quality Cabin (3)	26.53	24.49	26.99	22.02	19.70	27.30	25.82	16.1	30.43	26.88	35.83	21.41
WR1	Whitehill, Petersfield Road	35.20	32.48	39.43	34.68	31.76	33.97	40.56	31.0	40.79	36.35	42.73	34.18
PB1	Petersfield, Town Hall	12.31	12.8	19.20	14.45	12.23	11.83	16.29	11.9	18.03	16.41	21.33	16.11
HR1	Horndean, London Road	42.27	36.96	43.80	32.13	31.28	29.77	34.34	32.8		40.23	44.41	39.53
HR7	Horndean, Post Office	35.02	29.56	31.00	26.69	26.01	25.25	27.85	23.3	25.16	33.51	32.86	29.21

Appendix 5: Precision and Accuracy of Triplicate Tubes

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements										Automatic Method		Data Quality Check	
Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 μgm^{-3}	Tube 2 μgm^{-3}	Tube 3 μgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean	Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
1	08/01/2014	05/02/2014	27.1	26.7	26.5	27	0.3	1	0.7	24.1	99.4	Good	Good
2	05/02/2014	05/03/2014	21.4	24.3	24.5	23	1.8	8	4.4	20.4	99.9	Good	Good
3	05/03/2014	01/04/2014	32.8	26.6	27.0	29	3.5	12	8.7	29.7	99.4	Good	Good
4	01/04/2014	29/04/2015	24.0	22.3	22.0	23	1.0	5	2.6	21.8	99.7	Good	Good
5	29/04/2014	28/05/2014	22.0	22.4	19.7	21	1.4	7	3.6	18	99.7	Good	Good
6	28/05/2014	02/07/2014	26.4	25.5	27.3	26	0.9	3	2.3	19	99.9	Good	Good
7	02/07/2014	30/07/2014	25.1	25.9	25.8	26	0.5	2	1.1	19	99.9	Good	Good
8	30/07/2014	27/08/2014	14.9	15.8	16.1	16	0.6	4	1.6	14	99.6	Good	Good
9	27/08/2014	01/10/2014	30.8	29.7	30.4	30	0.6	2	1.4	27	99.4	Good	Good
10	01/10/2014	30/10/2014	26.6	27.7	26.9	27	0.6	2	1.4	23	99.6	Good	Good
11	30/10/2014	03/12/2014	32.7	27.3	35.8	32	4.3	14	10.7	31.8	99.8	Good	Good
12	03/12/2014	07/01/2014	20.8	22.4	21.4	22	0.8	4	2.0	23.9	99.3	Good	Good
13													
											Overall survey -->	Good precision	Good Overall

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

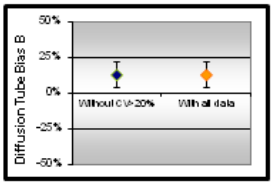
(Check average CV & DC from Accuracy calculations)

Site Name/ ID:	Bordon

Precision 12 out of 12 periods have a CV smaller than 20%

Accuracy (with 95% confidence interval)	
without periods with CV larger than 20%	
Bias calculated using 12 periods of data	
Bias factor A	0.9 (0.83 - 0.98)
Bias B	11% (2% - 20%)
Diffusion Tubes Mean:	25 μgm^{-3}
Mean CV (Precision):	5
Automatic Mean:	23 μgm^{-3}
Data Capture for periods used:	100%
Adjusted Tubes Mean:	23 (21 - 25) μgm^{-3}

Accuracy (with 95% confidence interval)	
WITH ALL DATA	
Bias calculated using 12 periods of data	
Bias factor A	0.9 (0.83 - 0.98)
Bias B	11% (2% - 20%)
Diffusion Tubes Mean:	25 μgm^{-3}
Mean CV (Precision):	5
Automatic Mean:	23 μgm^{-3}
Data Capture for periods used:	100%
Adjusted Tubes Mean:	23 (21 - 25) μgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

Appendix 6: 2012 Diffusion Tube Data with Local and National Bias Adjustment Factors Applied

Site ID	Site name	Annual mean concentrations of nitrogen dioxide **2014** (µg/m^3)		
		Raw data	**Corrected using local bias adjustment factor 0.9**	**Corrected using national bias adjustment factor 0.98**
AB1	Alton, Orchard House	14.1	12.7	13.9
BR4	Bordon, o/s Corals (1), Chalet Hill	43.4	39.0	**42.5**
BR7	Bordon, o/s Corals (2), Chalet Hill	42.0	37.8	**41.2**
BR1	Bordon, Ashmead	22.0	19.8	21.5
BR2	Bordon, Chalet Court	25.6	23.0	25.1
BR3	Bordon, o/s 10 Chalet Hill	28.8	28.4*	30.9*
BR5	Bordon, High Street (1)	41.0	36.9	**40.1**
BR8	Bordon, High Street (2)	35.5	32.0	34.8
BR6	Bordon, Air Quality Cabin (1)	25.3	22.8	24.8
BR6	Bordon, Air Quality Cabin (2)	24.7	22.2	24.2
BR6	Bordon, Air Quality Cabin (3)	25.3	22.8	24.8
BU1	Bordon, o/s Bassenthwaite Gdns	12.0	10.8	11.8
WR1	Whitehill, Petersfield Road	36.1	32.5	35.4
PB1	Petersfield, Town Hall	15.2	13.7	14.9
HR1	Horndean, London Road	37.0	33.3	36.3
HR7	Horndean, Post Office	28.8	25.9	28.2

* Results have been annualised due to data capture rate under 75%
Results in bold indicate exceedance of national air quality objective

Appendix 7: List of Local Authority Regulated Industrial Installations

Description of process	Name of site operator	Site Address	Date of Issue
Dry cleaning	Morrison Supermarkets Plc	Wm Morrison Supermarkets Plc, Lakesmere Road, Waterlooville, Po8 9FB	05/12/2006
Dry cleaning	Solent Cleaners Ltd	71a High Street, Alton, GU34 1AB	25/10/2006
Dry cleaning	Liphook Valet Service	5b Chapel Street,Petersfield, GU32 3DT	25/10/2006
Dry cleaning	Liphook Valet Service	1 Crossways Road, Grayshott, Hindhead, GU26 6HJ	25/10/2006
Dry cleaning	Hampshire Dry Cleaners	19 Lavant Street, Petersfield,GU32 3EL	25/10/2006
Dry cleaning	Alton Dry Cleaning Centre and Laundrette	92 High Street, Alton, GU34 1EN	01/03/2007
Dry cleaning	Blue Bell Laundry	Unit 12, Caker Stream Road, Alton, GU34 2QA.	30/01/2009
Blending, packing, loading, unloading and use of bulk cement	KRM Concrete Ltd	Waterbrook Estate,Alton, GU34 2QH	30/01/2009
Blending, packing, loading, unloading and use of bulk cement	Hanson Aggregates UK	Hanson Premix, Sleaford Sand Pit, Sleaford, Bordon, GU35 8TF	07/04/2005
Mobile crusher & screen process	Williams of Bordon Ltd	Mobile unit	05/06/2006
Waste oil and recovered oil burners less than 0.4MW	H E Hall Rowland's Ltd	8 The Green, Rowlands Castle, PO9 6EF	29/07/2004
Unloading of petrol into storage at a petrol station	Wm Morrison Supermarkets Plc	Wm Morrison Supermarkets Plc, Lakesmere Road, Waterlooville, PO8 9FB	08/03/1999

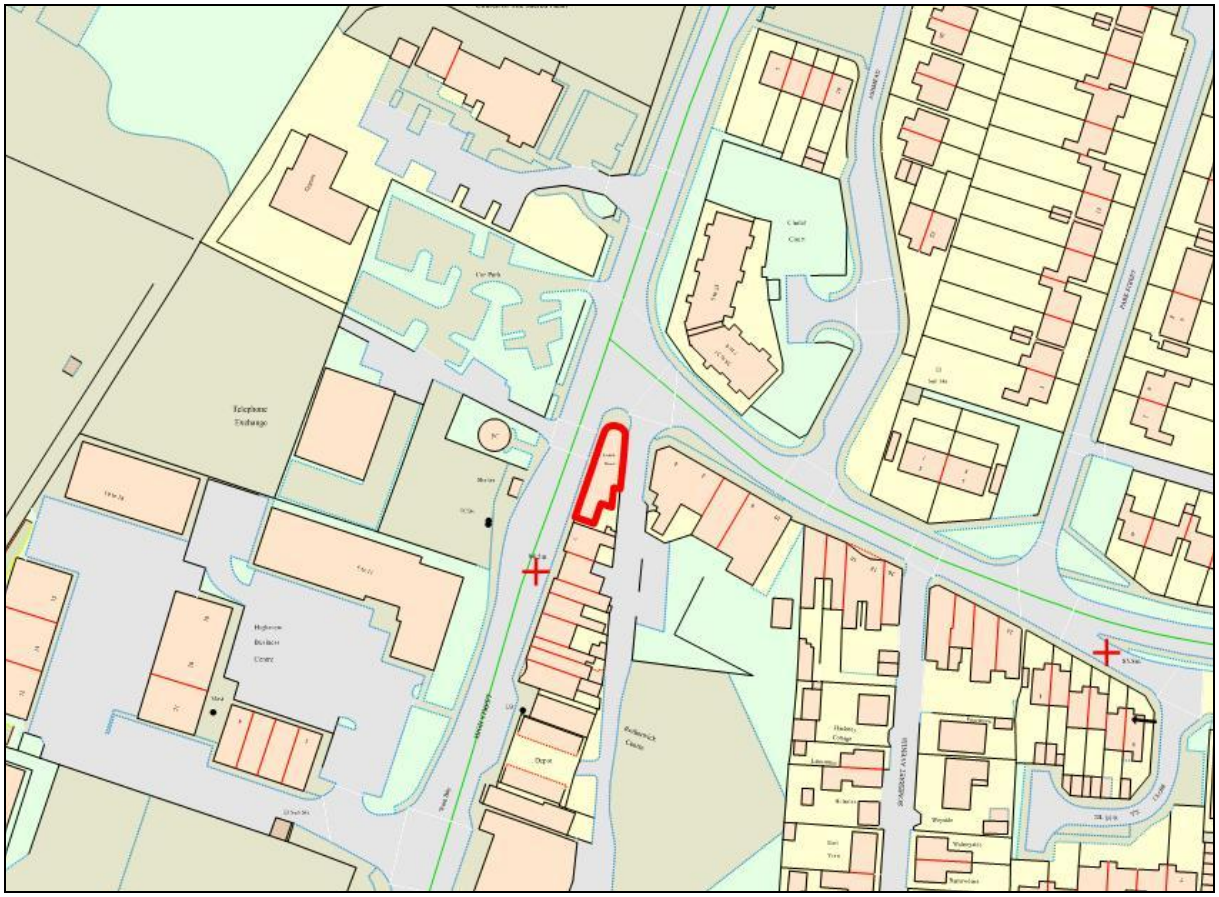
Description of process	Name of site operator	Site Address	Date of Issue
Unloading of petrol into storage at a petrol station	Motor Fuel Ltd	Jet, Hen & Chicken Service Station, Froyle, Alton, GU34 4JH	29/03/2006
Unloading of petrol into storage at a petrol station	Motor Fuel Ltd	Alton Service Station, service Station, 5-15 Butts Road, Alton, GU34 1LH	29/03/2006
Unloading of petrol into storage at a petrol station	Sainsbury plc	Draymans Way, Alton, GU34 1SS	21/12/2005
Unloading of petrol into storage at a petrol station	Ramshill Service Station	London Road, Petersfield, , GU31 4AT	10/11/2005
Unloading of petrol into storage at a petrol station	Sainsbury plc	Midhurst Road,Liphook, Hants, GU30 7TW	06/12/2005
Unloading of petrol into storage at a petrol station	FW Kerridge Ltd	Farnham Road, Kingsley, GU35 9NJ	29/03/2006
Unloading of petrol into storage at a petrol station	Total UK Ltd	57 Winchester Road, Four Marks, Alton, GU34 5HR	:29/03/06
Unloading of petrol into storage at a petrol station	Shell UK Ltd	Whichers Gate, Rowlands Castle, PO9 6BB	29/03/2006
Unloading of petrol into storage at a petrol station	Shell UK Ltd	Dean Self Serve, Winchester Road, Ropley, SO24 ODP	29/03/2006
Unloading of petrol into storage at a petrol station	Shell UK Ltd	Liphook Services South, A3 By-pass, Liphook, GU30 7TT	29/03/2006
Unloading of petrol into storage at a petrol station	Shell UK Ltd	Liphook Services North, A3 By Pass, Liphook, GU30 7TT	29/03/2006
Unloading of petrol into storage at a petrol station	TotalfinaElf UK Ltd	Coach House Service Station,4- 44 Dragon Street, Petersfield, GU31 4JJ	29/03/2006
Unloading of petrol into storage at a petrol station	Bordon Service Station Ltd	High Street, Bordon, GU35 0AN	29/03/2006
Unloading of petrol into storage at a petrol station	Woolmer Service Station Ltd	1 Woolmer Way, Bordon, GU35 9QF	29/03/2006

Description of process	Name of site operator	Site Address	Date of Issue
Unloading of petrol into storage at a petrol station	BP	Winchester Road, Petersfield, GU31 4AT	29/03/2006
Unloading of petrol into storage at a petrol station	Bucks Horn Oak Service	Bucks Horn Oak, GU10 4LT	06/06/2006
Crematorium	South of England Funeral Partners Ltd	The Oaks Havant Crematorium, Bartons Road, Rowlands Castle, PO9 5NA	10/12/2013

Part A2 Processes

Process of brick and tile manufacture	Selborne Brickworks Ltd	Selborne Brickworks, Honey Lane, Selborne, Alton, GU34 3BT	24/01/2006

Appendix 8: AQMA no 1 Bordon: Plan showing boundary and Revocation Order



Environment Act 1995 Part IV Section 83(2)(b)

East Hampshire District Council

ORDER REVOKING AN AIR QUALITY MANAGEMENT AREA

East Hampshire District Council in exercise of the powers conferred upon it by Section 83(2)(b) of the Environment Act 1995 hereby makes the following Order:

1. This Order shall revoke the area known as the East Hampshire **Air Quality Management Area No 1** for nitrogen dioxide as shown on the attached map.
2. This Order shall come into force on 27th February 2013.

Dated the 27th February 2013

The COMMON SEAL of EAST HAMPSHIRE DISTRICT COUNCIL was hereunto affixed in the presence of:-

Solicitor to the Council

218335