2012 Air Quality Updating and Screening Assessment and 2013 Progress Report for *West Dorset District Council*

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

June 2013

Local Authority Officer	**Coralie McGown**
Department	**Public Health**
Address	**South Walks House, South Walks Road, Dorchester, Dorset DT1 1UZ**
Telephone	**01305 251010**
e-mail	**c.mcgown@westdorset-weymouth.gov.uk**
Report Reference number	**WDDC-USA-PR-2013**
Date	**June 2013**

Executive Summary

This Updating and Screening Assessment and combined Progress Report has been produced by West Dorset District Council (WDDC) to satisfy the requirements of Part IV of the Environment Act 1995. This Act requires local authorities to review and assess the air quality within their area and to take account of Government guidance when undertaking such work.

The Updating and Screening Report and combined Progress report shows that monitoring results for 2011 and 2012, continue to exceed the annual objective for nitrogen dioxide in High East Street, Dorchester; East Road, Bridport; and Main Street, Chideock. There are no other exceedences of the air quality objectives in any other area of West Dorset.

Areas that exceed the annual objective for nitrogen dioxide, (NO_2), in Dorchester and Chideock are already within air quality management areas (AQMA's) and action plans are in place to improve the air quality to comply with the objective. However, there is no AQMA in Bridport. Following a Detailed Assessment of nitrogen dioxide in Bridport in 2011, the Council resolved not to declare and AQMA but continue monitoring to check future levels of NO_2 here. There are no plans to review this decision at present.

Table of contents

1 Introduction 6

1.1 Description of Local Authority Area 6

1.2 Purpose of Report 6

1.3 Air Quality Objectives 7

1.4 Summary of Previous Review and Assessments 9

2 New Monitoring Data 13

2.1 Summary of Monitoring Undertaken 13

2.1.1 Automatic Monitoring Sites 13

2.1.2 Non-Automatic Monitoring Sites 16

2.2 Comparison of Monitoring Results with AQ Objectives 22

2.2.1 Nitrogen Dioxide 22

2.2.1 Discussion of Results for Nitrogen Dioxide 29

2.2.2 PM_{10} 34

2.2.3 Sulphur Dioxide 34

2.2.4 Benzene 34

2.2.5 Other pollutants monitored 34

2.2.6 Summary of Compliance with AQS Objectives 35

3 Road Traffic Sources 36

3.1 Narrow Congested Streets with Residential Properties Close to the Kerb 36

3.2 Busy Streets Where People May Spend 1-hour or More Close to Traffic 36

3.3 Roads with a High Flow of Buses and/or HGVs. 36

3.4 Junctions 37

3.5 New Roads Constructed or Proposed Since the Last Round of Review and Assessment. 37

3.6 Roads with Significantly Changed Traffic Flows 37

3.7 Bus and Coach Stations 37

4 Other Transport Sources 38

4.1 Airports 38

4.2 Railways (Diesel and Steam Trains) 38

4.2.1 Stationary Trains 38

4.2.2 Moving Trains 38

4.3 Ports (Shipping) 38

5 Industrial Sources 39

5.1 Industrial Installations 39

5.1.1 New or Proposed Installations for which an Air Quality Assessment has been Carried out 39

5.1.2 Existing Installations where Emissions have Increased Substantially or New Relevant Exposure has been Introduced 39

5.1.3 New or Significantly Changed Installations with No Previous Air Quality Assessment ... 39
5.2 Major Fuel (Petrol) Storage Depots ... 39
5.3 Petrol Stations ... 40
5.4 Poultry Farms ... 40
6 Commercial and Domestic Sources ... 41
6.1 Biomass Combustion – Individual Installations ... 41
6.2 Biomass Combustion – Combined Impacts ... 42
6.3 Domestic Solid-Fuel Burning ... 42
7 Fugitive or Uncontrolled Sources ... 43
8 Local / Regional Air Quality Strategy ... 43
9 Planning Applications ... 44
1 .Air Quality Planning Policies ... 45
2 Local Transport Plans and Strategies ... 46
2.1 Local Transport Plan 3 2011- 2026 ... 46
2.2 Travel Choice ... 47
2.3 Local Sustainable Transport Fund ... 47
3 Climate Change Strategies ... 48
3.1 West Dorset District Council Carbon Management Plan (CMP) ... 48
3.2 Nottingham Declaration ... 48
4 Implementation of Action Plans ... 49
4.1.1 Dorchester Air Quality Action Plan Progress Report 2013 ... 49
4.1.2 Chideock Air Quality Action Plan Progress Report 2013 ... 56
5 Conclusions and Proposed Actions ... 59
5.1 Conclusions from New Monitoring Data ... 59
5.2 Conclusions from Assessment of Sources ... 59
5.3 Proposed Actions ... 60
6 References ... 61
Glossary ... 62

List of Tables

Table 1.1	Air Quality Objectives included in Regulations for the purpose of LAQM in England	7
Table 2.1	Details of Automatic Monitoring Sites	15
Table 2.2	Details of Non-Automatic Monitoring Sites	19
Table 2.3a	Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with Annual Mean Objective	22
Table 2.3b	Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with 1-hourl Mean Objective	22

Table 2.4	Results of Nitrogen Dioxide Diffusion Tubes in 2011 and 2012	24
Table 2.5	Results of Nitrogen Dioxide Diffusion Tubes (2008 to 2012)	26
Table 6.1	Biomass Installations in West Dorset	41
Table 9.1	Dorchester Action Plan Progress Report	50
Table 9.2	Chideock Action Plan addendum Progress Report	58

List of Figures

Figure 1.1	Map of AQMA Boundaries	11
Figure 2.1	Map of Automatic Monitoring Site	13
Figure 2.2	Maps of Non-Automatic Monitoring Sites	17
Figure 2.3	Trends in Annual mean Nitrogen Dioxide Concentration measured at Diffusion Tube Monitoring Sites	31

Appendices

Appendix 1	QA : QC Data	63
Appendix 2	Long Term Monitoring in West Dorset	66

1 Introduction

1.1 Description of Local Authority Area

West Dorset is the largest District Council within the County of Dorset, covering 42% of the county area at 418 square miles. The District is predominately rural in character with small market towns, and has a relatively low population density, with a total population of just over 96000. Almost half of the population live in villages/rural areas.

71% of the district is designated as an area of outstanding natural beauty and the majority of the Coast in West Dorset is within the Jurassic Coast World Heritage site. The major role of tourism in the area results in significant peak seasonal increases in traffic and congestion, particularly on coastal routes.

The major roads in the District consist of the A35 & the A37. The A35 is a trunk road that runs east to west through the district and cuts through Bridport and Chideock. The A37 is also a major road in that runs through West Dorset from Dorchester through to Yeovil.

Air quality in West Dorset has been assessed and has been found to be broadly very good due to the predominantly rural environment. However, in certain locations - parts of Chideock, Dorchester and Bridport - air quality has been found to be close to, or exceeding the objective level for nitrogen dioxide, the main source of pollution being from road traffic. This is due to vehicle emissions and other factors including type and number of vehicles; their speed; congestion and local topographical circumstances. As a result of this, an Air Quality Management Area, (AQMA), was declared in Chideock in 2007 and High East Street, Dorchester in 2009.

1.2 Purpose of Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) 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 the Updating and Screening Assessment (USA) 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.

Progress Reports (PR) are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the Local Air Quality Management process.

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedence of an Air Quality Objective, the Local Authority (LA) should undertake a Detailed Assessment immediately, and not wait until the next round of Review and Assessment.

The USA was due to be completed in 2012, however it was decided to combine the 2012 USA and the 2013 PR into one and to report on 2 years worth of air quality data.

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 $\mu g/m^3$ (milligrams 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 $\mu g/m^3$	Running annual mean	31.12.2003
	5.00 $\mu g/m^3$	Running annual	31.12.2010

		mean	
1,3-Butadiene	2.25 $\mu g/m^3$	Running annual mean	31.12.2003
Carbon monoxide	10.0 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.5 $\mu g/m^3$	Annual mean	31.12.2004
	0.25 $\mu g/m^3$	Annual mean	31.12.2008
Nitrogen dioxide	200 $\mu g/m^3$ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 $\mu g/m^3$	Annual mean	31.12.2005
Particles (PM_{10}) (gravimetric)	50 $\mu g/m^3$, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 $\mu g/m^3$	Annual mean	31.12.2004
Sulphur dioxide	350 $\mu g/m^3$, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 $\mu g/m^3$, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 $\mu g/m^3$, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

West Dorset District Council completed its first round of Review and Assessment in 2001. The review of the local air quality concluded that the objectives for all the seven regulatory pollutants were met and a further assessment was not required.

The second round of Review and Assessment began with an Updating and Screening Assessment (USA) in 2003. The USA, completed in 2004, concluded that a Detailed Assessment (DA) was required for some areas in Chideock, Bridport and Dorchester having the potential to exceed the AQO for NO_2. This was completed in 2006. Based on the findings of the assessment and comments by DEFRA, it was concluded to declare an AQMA in Chideock and increase monitoring in Bridport and Dorchester to confirm if an AQMA was required in these areas.

In the third round of Review and Assessment the Council submitted a Progress Report in May 2007. Based on new monitoring data for NO_2, the report concluded that a Detailed Assessment was required for NO_2 due to road traffic emissions in Bridport and Dorchester.

A Detailed Assessment was produced in 2008 based on new monitoring data collected during 2007. From the conclusion of the Detailed Assessment and comments by Defra, it was concluded to declare an AQMA in High East Street, Dorchester and undertake modelling and further monitoring of NO_2 in East Road, Bridport.

In 2008 a Further Assessment was completed for Chideock. This concluded that based on future year projections the annual average AQO for NO_2 would be achieved in 2010 but that an Action Plan would be drafted and implemented should the projected future year annual predictions not be met. The predictions were not met and WDDC have produced and implemented an Action Plan. Progress on the actions taken is regularly reviewed at stakeholder meetings.

A fourth round of review and assessment commenced with an Updating & Screening Assessment in 2009. The USA concluded that two areas, High East Street in Dorchester and along the A35 in Chideock, exceeded the national objective for nitrogen dioxide and both are already designated Air Quality Management Areas. The report also concluded that new monitoring data showed that nitrogen dioxide targets had been exceeded in East Road,

Bridport, but that as the sites were not representative of relevant exposure, it was recommended additional diffusion tubes to be placed in more representative locations.

A Progress report was submitted in 2010. This report concluded that three areas, High East Street Dorchester (designated an AQMA in 2009), Main Street, Chideock (designated AQMA in 2007) and East Road Bridport, exceeded the national objective for nitrogen dioxide; A Detailed Assessment for nitrogen dioxide was recommended for East Road, Bridport as a result of Defras' recommendations to WDDC's Updating & Screening Assessment 2009.

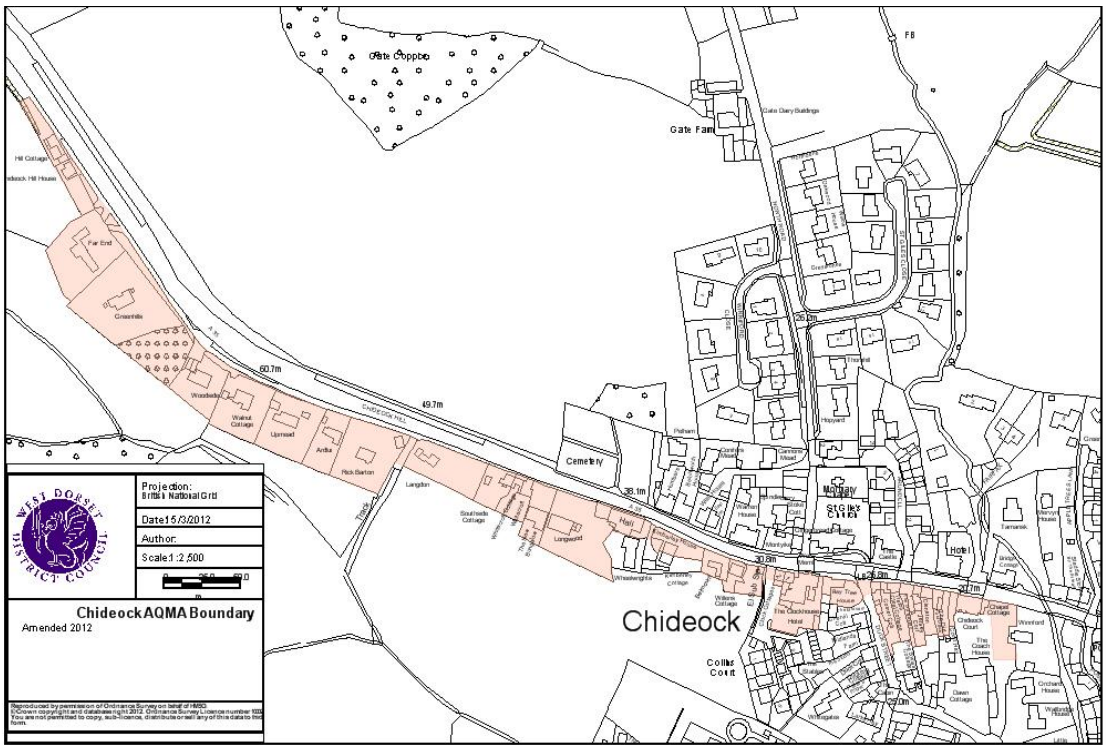
A Further Assessment was undertaken in 2010 for High East Street, Dorchester that confirmed the existing AQMA boundary .

A Progress Report, Detailed Assessment for Chideock and Bridport, and the Dorchester Air Quality action Plan were completed in 2011. The Progress report did not identify any other areas, other than those already identified as AQMA's and East Road Bridport, where there was a likely that the AQ Objectives would be met. A detailed assessment was undertaken for Chideock that recommended a reduction of the AQMA Boundary to the area where exceedences were recorded. The report also concluded that East Road, Bridport would not be declared as an AQMA as only one property is affected, limited staff resources, and that there is limited action that the council can take to resolve the problem as the Highways Agency is responsible for the A35 Trunk Road. The reduction of the AQMA boundary in Chideock was approved by Defra, however conclusions were not accepted for Bridport. Whilst Defra advised the Council to declare an AQMA at this location, the Council resolved to continue monitoring NO_2 to check levels here in the future.

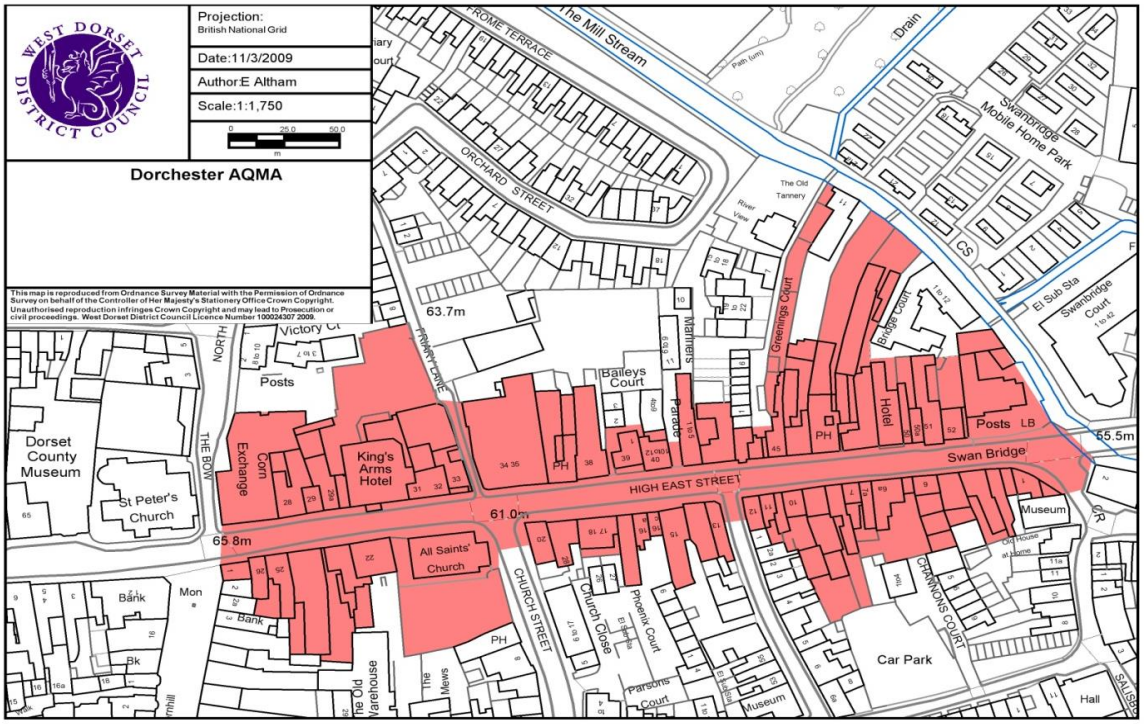
Figure 1.1 Map of AQMA Boundaries

2007 Chideock AQMA Boundary

2011 Amended Chideock Boundary



2009 Dorchester AQMA Boundary



2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

West Dorset District Council has a continuous air quality monitoring station located in Main Street, Chideock, next to the A35 trunk road, details of which are shown in Table 2.1. This station contains an oxide of nitrogen monitor. A map showing the location of this monitoring station can be seen in Figure 2.1. Monitoring commenced in January 2010.

The monitor is situated approximately 2m from the A35. Due to location restrictions in Chideock the monitor it is not situated in the worst case location, along the steep incline, westwards towards Lyme Regis. This is due to a lack of space and limited access to utilities. The monitor is still located at a representative location regarding the distance of the monitor to the road and the distance from the road and receptors. However as this site is in an open location; the readings here represent background levels of nitrogen dioxide and are way below the annual mean objective.

Figure 2.1 Map of Automatic Monitoring Site

The monitoring equipment is subjected to fortnightly calibrations undertaken by experienced and trained officers from Environmental Health, following guidelines used by Local Site Operators in Defra's Automatic Urban and Rural Network (AURN). The monitoring period runs from January 2011 until December 2011 and data validation and ratification procedures can be found in Appendix 1.

Table 2.1 Details of Automatic Monitoring Sites

Site Name	Site Type	X OS GridRef	Y OS Grid Ref	Pollutants Monitored	Monitoring Technique	In AQMA ?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Does this location represent worst-case exposure?
Post Office, Main Street, Chideock	Roadside	X 342,301	Y 92,817	NO_2	Chemoluminescent analyser	Y	Y (1m)	2m	N

2.1.2 Non-Automatic Monitoring Sites

Continuous monitoring is a very expensive way of assessing air quality. The main pollutant of concern in the district is nitrogen dioxide and there is a way of monitoring this at a low cost. Passive diffusion tubes are relatively inexpensive and provide a monthly average of NO_2 concentrations. Because of the low cost, they allow West Dorset to monitor NO_2 widely across the district.

Diffusion tubes are exposed for 4/5 week periods throughout the year at each monitoring site and are deployed using a holder and rubber collar method. They are located at a variety of sites, including kerbside sites, roadside sites or background sites and placed between 1.5m and 2m above ground level and positioned at locations representative of public exposure.

The tubes are supplied and analysed by Gradko International Ltd, and the preparation method used is 50% TEA in water.

Monitoring is currently undertaken in three areas of West Dorset where elevated levels of nitrogen dioxide had been identified. Monitoring was discontinued in Sherborne, Lyme Regis and Abbotsbury in 2010 as there had been no exceedences of the annual objective for the past 8 years. The tubes were relocated to sites in the three areas with known exceedences:

Chideock - *A* small village in West Dorset, dwellings are situated either side of the A35 (trunk road) going through the village with dwellings immediately adjacent to a steep incline leaving the village going west. An air quality management area for NO_2 has been declared along the A35 as annual average NO_2 concentrations here exceed the annual objective concentration; Tubes have been relocated along both sides of the trunk road in Chideock to assess the extent of the elevated levels within Chideock with a view to amending the size of the AQMA boundary to reflect previously monitored results.

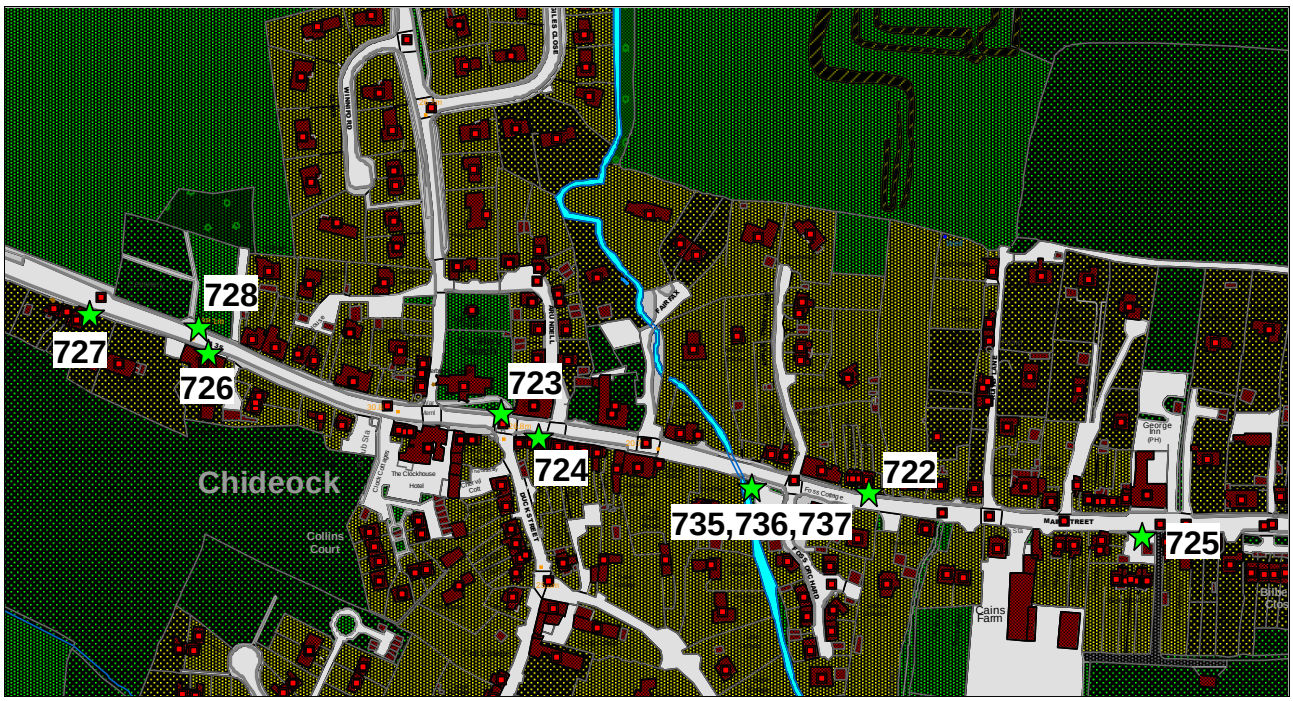
Dorchester –The County Town of Dorset, with a population of approximately 18,000. WDDC have been monitoring nitrogen dioxide within the town centre, predominantly along the B3150 High East and High West Street where some exceedences of the AQO have been observed. Due to these exceedences an AQMA was declared on the 5th May 2009 along High East Street. It was decided to undertake further monitoring in High East Street in 2010 to assess the extent of the NO_2 levels, to extend the monitoring along High East and High West Street and to relocate monitoring sites to the routes predicted to be effected by the proposed Dorchester Transport & Environment Plan (DTEP) transport improvements.

Bridport - A market town located approximately 1km from the coast and 20km west of Dorchester. Annual average NO_2 concentrations adjacent to the A35 (trunk road) along East Road are monitored by WDDC and have been found to exceed the annual objective concentration at one dwelling located very close to the kerbside. The study area in Bridport consists of the A35 along East Road on the eastern side of Bridport

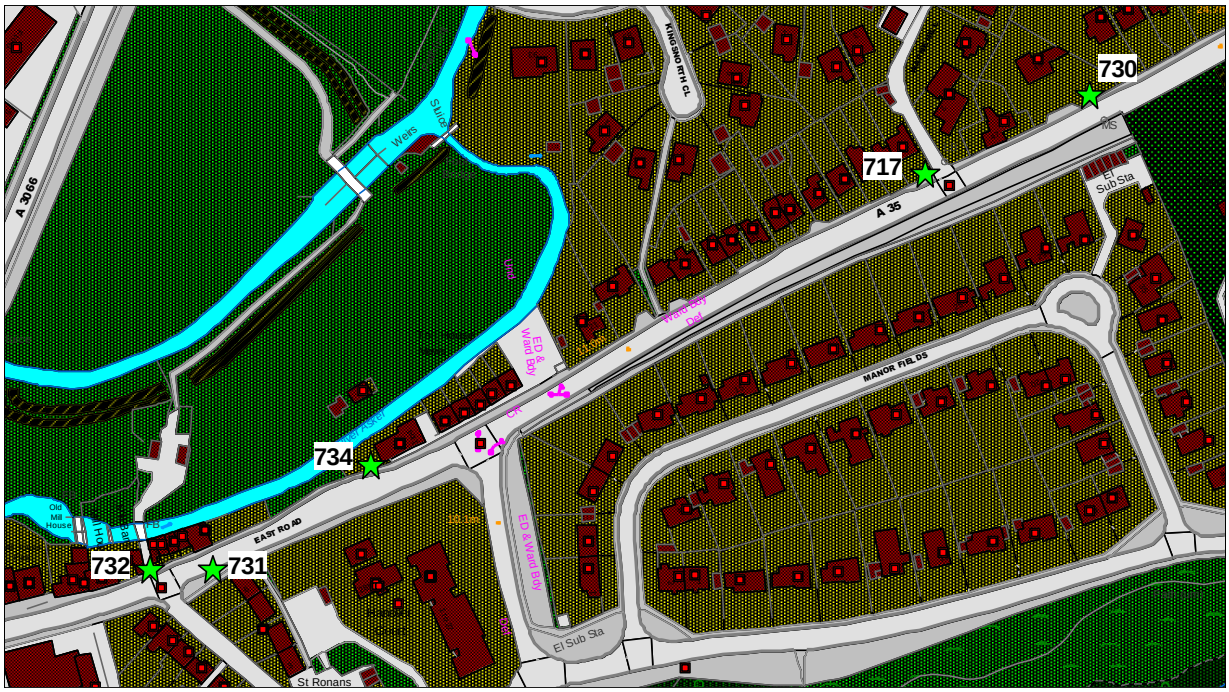
There are 27 diffusion tubes located at 22 sites within these three areas, details of these sites are shown in Table 2.3, and the locations of the monitoring sites are shown on the maps in figure 2.2 below.

Figure 2.2 Maps of Non-Automatic Monitoring Sites

Chideock



Bridport



Dorchester

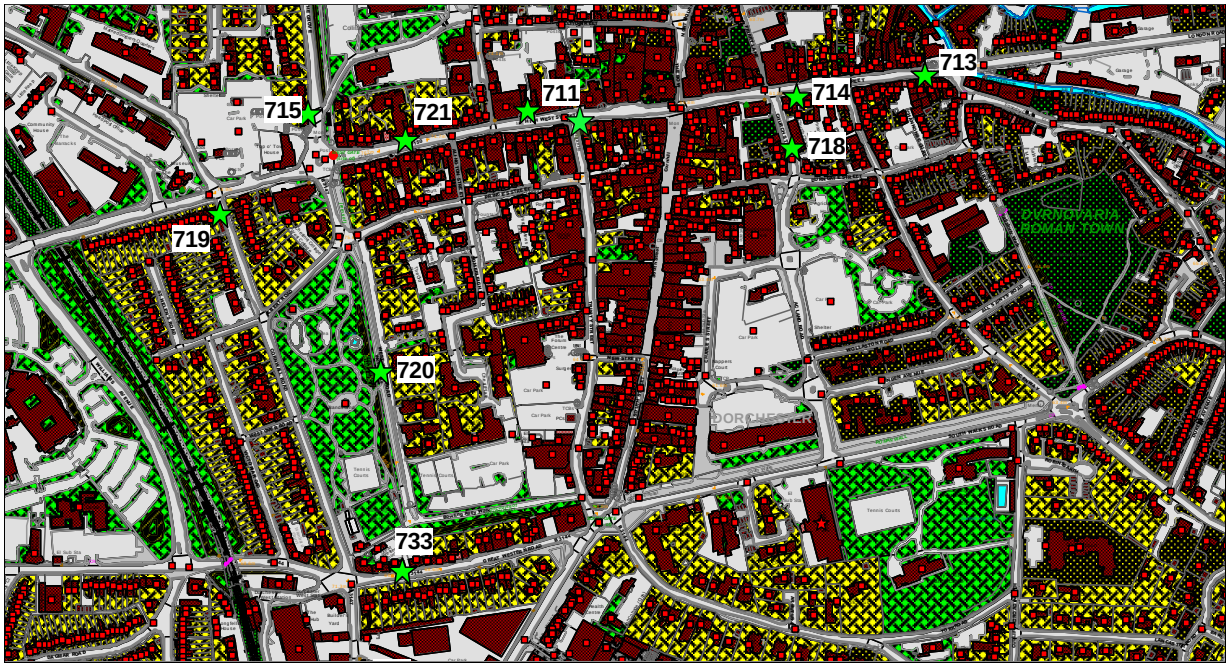


Table 2.2 Details of Non-Automatic Monitoring Sites

Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA ?	Is monitoring collocated with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Does this location represent worst-case exposure?
711 Dorchester High West St 1	Roadside	369121	90739	NO_2	N	N	N	2m	Y
712 Dorchester Trinity Street	Roadside	369171	90711	NO_2	Y	N	Y – on façade	2m	Y
713 Dorchester High East St 2	Roadside	369484	90759	NO_2	Y	N	Y – on facade	2m	Y
714 Dorchester High East St 1	Roadside	369387	90742	NO_2	Y	N	Y – on façade	2m	Y
715 Dorchester The Grove	Roadside	368907	90739	NO_2	N	N	Y (1m)	2m	Y
716 Dorchester Maumbury Road	Roadside	368948	90089	NO_2	N	N	Y – on façade	2m	Y
718 Dorchester Church Street	Roadside	369381	90698	NO_2	N	N	Y -on façade	2m	Y
719 Dorchester Bridport Road	Roadside	368815	90636	NO_2	N	N	Y (2m)	2m	Y
720	Background	368982	90453	NO_2	N	N	5m	N/A	N

Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA ?	Is monitoring collocated with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Does this location represent worst-case exposure?
Dorchester Borough Gardens									
721 Dorchester High West St 2	Roadside	368982	90706	NO_2	N	N	Y – on façade	3m	Y
717 Bridport East Road 1	Roadside	347557	93023	NO_2	N	N	N	2m	Y
730 Bridport East Road 2	Roadside	347612	93050	NO_2	N	N	N	2m	Y
733 Bridport East Road 3	Roadside	347508	93009	NO_2	N	N	Y – on façade	9m	Y
734 Bridport East Road 4	Roadside	347489	92989	NO_2	N	N	Y (1m)	2m	Y
722 Chideock Main Street	Roadside	342364	92814	NO_2	Y	N	Y (2m)	2m	Y
723 Chideock St Giles Church	Roadside	342151	92869	NO_2	Y	N	N	2m	Y
724 Chideock Duck Street	Roadside	342190	92840	NO_2	Y	N	Y – on façade	1m	Y
725 Chideock George Inn	Roadside	342486	92791	NO_2	Y	N	Y (1m)	1m	Y
726 Chideock Village Hall	Roadside	342015	92887	NO_2	Y	N	N	1m	N

Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA ?	Is monitoring collocated with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Does this location represent worst-case exposure?
727 Chideock Main Street	Roadside	341946	92908	NO_2	Y	N	Y (1m)	1m	Y
728 Chideock Main Street	Roadside	342025	92894	NO_2	Y	N	Y (1m)	1m	Y
735 Chideock Triplicate	Roadside	342301	Y2817	NO_2	Y	Y	N	2m	N
736 Chideock Triplicate	Roadside	342301	92817	NO_2	Y	Y	N	2m	N
737 Chideock Triplicate	Roadside	342301	92817	NO_2	Y	Y	N	2m	N

2.2 Comparison of Monitoring Results with AQ Objectives

2.2.1 Nitrogen Dioxide

The two air quality objectives that ambient concentrations of NO_2 need to be assessed against are as follows:

- An annual mean of 40µg/m^3; and
- The number of exceedences of the 1 hour mean of 200µg/m^3 (18 allowable exceedences in total).

It should be noted that it is only possible to directly assess against the 1 hour objective if hourly monitoring data is available. With regards to the hourly objective regarding diffusion tubes the approach suggested in LAQM. TG(09) has been adopted. The approach, based on empirical studies suggests that where the annual mean is less than 60µg/m^3, exceedences of the short term objective are unlikely.

Automatic Monitoring Data

The ratified monitoring results for 2011 are provided below in Table 2.3a and 2.3b

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

Site ID	Location	Within AQMA?	Relevant public exposure? Y/N	Data Capture for full calendar year 2011 [b] %	Annual mean concentrations (µg/m^3)
					2011[c]
Chideock	Post Office Chideock	Y	N	97	13.6

Table 2.3b Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with 1-hour Mean Objective

Site ID	Location	Within AQMA?	Relevant public exposure? Y/N	Data Capture for full calendar year 2010 %	Number of Exceedences of hourly mean (200 μg/m^3)		
					2008	2009	2011
Chideock	Post Office Chideock	Y	Y	97	n/a	n/a	0

The 2011 data shows that there have been no exceedences of the NO_2 objectives in at this location.

Diffusion Tube Monitoring Data

The NO_2 diffusion tube monitoring results for 2011 and 2012 are provided in Table 2.5 along with 2008-2010 data for comparison. A nationally derived bias adjustment factor of 1.01 was used in for all diffusion tubes in 2012 as there was poor data capture for the AQMS due to a fault and the results are not representative of roadside conditions in Chideock.

Table 2.4 Results of Nitrogen Dioxide Diffusion Tubes in 2011and 2012

Site ID	Location	Site Type	Within AQMA?	Data Capture 2011 (Number of Months or %)	Data Capture 2012 (Number of Months or %)	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 = 0.93) 2011 (µg/m^3)	Annual mean concentration (Bias Adjustment factor = 1.01) 2012 (µg/m^3)
711	**Dorchester** High West St 1	Roadside	N	12 months	12 months	N	N	38.73	38.4
712	**Dorchester** Trinity Street	Roadside	N	12 months	12 months	N	N	30.85	32.1
713	**Dorchester** High East St 2	Roadside	Y	12 months	12 months	N	N	32.91	34.4
714	**Dorchester** High East St 1	Roadside	Y	11 months	11 months	N	N	**42.06**	**42.3**
715	**Dorchester** The Grove	Roadside	N	12 months	12 months	N	N	32.93	36.1
716	**Dorchester** Maumbury Road	Roadside	N	9 months	9 months	N	N	32.7	30.7
718	**Dorchester** Church Street	Roadside	N	12 months	12 months	N	N	21.23	22.4
719	**Dorchester** Bridport Road	Roadside	N	9 months	9 months	N	N	25.99	22.7
720	**Dorchester** Borough Gardens	Background	N	9 months	9 months	N	N	12.58	13.0
721	**Dorchester** High West St 2	Roadside	N	12 months	12 months	N	N	30.84	31

Site ID	Location	Site Type	Within AQMA?	Data Capture 2011 (Number of Months or %)	Data Capture 2012 (Number of Months or %)	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 = 0.93) 2011 (µg/m^3)	Annual mean concentration (Bias Adjustment factor = 1.01) 2012 (µg/m^3)
717	**Bridport** East Road 1	Roadside	N	12 months	12 months	N	N	**43.11**	**43.7**
730	**Bridport** East Road 2	Roadside	N	11 months	11 months	N	N	**57.45**	**56.6**
731	**Bridport** East Road	Roadside	N	9 months	9 months	N	N	34.91	35.2
732	**Bridport** Askers Mead	Roadside	N	9 months	9 months	N	N	31.74	31.1
734	**Bridport** East Road 4	Roadside	N	9 months	9 months	N	N	28.52	32..5
722	**Chideock** Main Street	Roadside	N	12 months	12 months	N	N	20.21	24.3
723	**Chideock** St Giles	Roadside	N	12 months	12 months	N	N	24.47	25.1
724	**Chideock** Duck Street	Roadside	Y	12 months	12 months	N	N	**45.2**	**45.2**
725	**Chideock** George Inn	Roadside	N	10 months	10 months	N	N	28.77	28.5
726	**Chideock** Village Hall	Roadside	Y	12 months	12 months	N	N	**47.55**	**49.5**
727	**Chideock** Main Street	Roadside	Y	12 months	12 months	N	N	**48.61**	**53.3**
728	**Chideock** Main Street	Roadside	N	12 months	12 months	N	N	27.79	27.9
735	**Chideock** Triplicate	Roadside	N	11 months	11 months	N	N		14.1
736	**Chideock** Triplicate	Roadside	N	11 months	11 months	N	N		13.4

Site ID	Location	Site Type	Within AQMA?	Data Capture 2011 (Number of Months or %)	Data Capture 2012 (Number of Months or %)	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 = 0.93) 2011 (µg/m^3)	Annual mean concentration (Bias Adjustment factor = 1.01) 2012 (µg/m^3)
737	**Chideock** Triplicate	Roadside	N	11 months	11 months	N	N		13.9

Table 2.5 Results of Nitrogen Dioxide Diffusion Tubes (2008 to 2012)

Site ID	Site Type	Within AQMA?	Annual mean concentration (adjusted for bias) µg/m^3				
			2008* (Bias Adjustment Factor = 0.93)	2009* (Bias Adjustment Factor = 0.99)	2010* (Bias Adjustment Factor = 0.99 Chideock = 0.93))	2011 (Bias Adjustment Factor = 0.93) Chideock 0.99	2012 (Bias Adjustment Factor = 1.01)
711	**Dorchester** High West St 1	N	**41.9**	**44.6**	**41.8**	38.73	38.4
712	**Dorchester** Trinity Street	N		32.9	31.4	30.85	32.1
713	**Dorchester** High East St 2	Y	38.2	39.6	34.1	32.91	34.4
714	**Dorchester** High East St 1	Y	**43**	**46.2**	**40.6**	**42.06**	**42.3**
715	**Dorchester** The Grove	N			38.3	32.93	36.1
716	**Dorchester** Maumbury Road	N			33.4	32.7	30.7

Site ID	Site Type	Within AQMA?	Annual mean concentration (adjusted for bias) µg/m^3				
			2008* (Bias Adjustment Factor = 0.93)	2009* (Bias Adjustment Factor = 0.99)	2010* (Bias Adjustment Factor = 0.99 Chideock = 0.93))	2011 (Bias Adjustment Factor = 0.93) Chideock 0.99	2012 (Bias Adjustment Factor = 1.01)
718	**Dorchester** Church Street	N			25.9	21.23	22.4
719	**Dorchester** Bridport Road	N			28.2	25.99	22.7
720	**Dorchester** Borough Gardens	N			16.2	12.58	13.0
721	**Dorchester** High West St 2	N		32.8	34.7	30.84	31.0
717	**Bridport** East Road 1	N	**55.1**	**57.1**	**55.4**	**43.11**	**43.7**
730	**Bridport** East Road 2	N	**40**	**41**	**47.7**	**57.45**	**56.6**
731	**Bridport East Road**	N					35.2
732	**Bridport Askers Mead**	N					31.1
733	**Bridport** East Road 3	N			26.5		
734	**Bridport** East Road 4	N			31.33	28.58	32.5

Site ID	Site Type	Within AQMA?	Annual mean concentration (adjusted for bias) μg/m^3				
			2008* (Bias Adjustment Factor = 0.93)	2009* (Bias Adjustment Factor = 0.99)	2010* (Bias Adjustment Factor = 0.99 Chideock = 0.93))	2011 (Bias Adjustment Factor = 0.93) Chideock 0.99	2012 (Bias Adjustment Factor = 1.01)
722	**Chideock** Main Street	N			20	21.8	24.3
723	**Chideock** St Giles Church	N			26	25.7	25.1
724	**Chideock** Duck Street	Y	**44.3**	**50.9**	**43**	**45.8**	**45.2**
725	**Chideock** George Inn	N	31.5	33.5	31	30.7	28.5
726	**Chideock** Village Hall	Y	**41.6**	**47.5**	**43**	**50.5**	**49.5**
727	**Chideock** Main Street	Y			**50**	**51.5**	**53.3**
728	**Chideock** Main Street	n			28	29.7	27.9
735	**Chideock** Triplicate	N			15.3	13.8	14.1
736	**Chideock** Triplicate	N			15.4	13.7	13.4
737	**Chideock** Triplicate	N			15.5	13.7	13.9

The 2011and 2012 diffusion tube monitoring results show 6 sites exceeding the NO_2 annual mean objective. Four are within designated AQMA's and two are outside and located on East Road, Bridport. The 1-hour average objective for NO_2 was not exceeded at any locations in 2011 and 2012, although East Road is close to the exceedence, based on guidance contained within TG(09). The results are explained in more detail below.

2.2.1 Discussion of Results for Nitrogen Dioxide

Chideock

In 2010, further monitoring was undertaken in Chideock to further define the levels of NO_2 as previous monitoring was only undertaken on the south side of the village, sites 724, 725 and 726. Historical results have shown that exceedences were only found on the steep incline, south of the A35 going out of the village, west towards Lyme Regis (724 and 726). New sites 722, 723 and 728 are situated on the north side of the road, with the traffic here going downhill towards the centre of the village. Monitoring in 2011 and 2012 again did not show any exceedences in areas in Chideock other than those on the steep incline, confirming the conclusion of the detailed assessment to reduce the AQMA boundary in Chideock to this location only.

Site 727 (see Figure 2.2), is located on the steep incline going out of the village. This site has exceeded the objective for both years but is within the AQMA boundary and further confirms the localised exceedence caused by the traffic climbing uphill within the 30mph zone.

Site 725 is located on the façade of a property that is directly on the main road with no footpath. This area is in the middle of the village with flat topography. There have been no exceedences of the objective here for the past 10 years. The continuous monitor and the co-located tubes (735, 736 and 737), that are in a similar position to 725, in the middle of the village at the bottom of the hill, and were below the objective in 2011 and 2012.

Dorchester

Table 2.4 shows that the annual mean objective for NO_2 was exceeded in 1 location in Dorchester, site 714, in 2011 and 2012, showing a slight reduction in NO2 concentrations in these years. Site 714 is within the AQMA

Monitoring was extended in 2010 and a new site 733, in 2012 to include locations where traffic will be diverted when the Dorchester Transport & Environment Plan is implemented in 2014. This plan aims to improve environmental quality in Dorchester, primarily through a reduction in negative traffic impacts and is included in the Air Quality Action Plan for Dorchester. These sites are not showing exceedences and the results will inform the further modelling of DTEP that will be undertaken in June 2013. No other sites are above the annual objective in Dorchester.

Bridport

Sites, 717 and 730 are located either side of a property that is situated approximately 2m from the A35 trunk road. This location is again on a steep incline going eastbound out of Bridport towards Dorchester. Apart from this property, all other properties that front the road within this vicinity are approximately 10m back from the roadside. Tube 733 was located on the façade of one of these properties in 2010 and results showed that this was within the objective and has since been relocated to Dorchester.

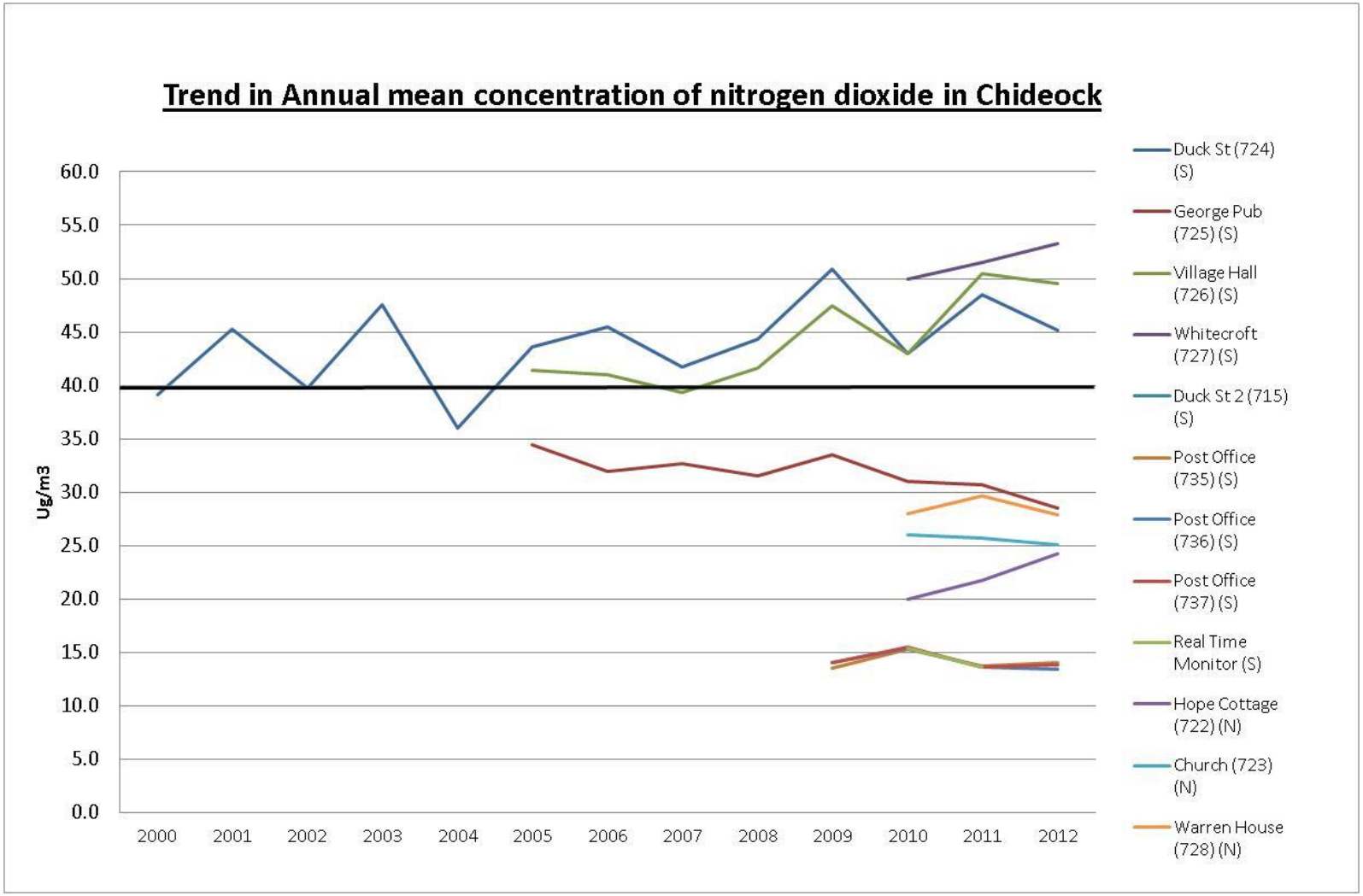
Site 734, 732 and 731 are located at the bottom of the hill, adjacent to relevant receptors; and have not shown exceedences in 2011 and 2012. Evidence shows that the objective is therefore only likely to exceed at one property. A Detailed Assessment was undertaken in 2011 and concluded that an AQMA was not to be declared here. This outcome was not accepted by Defra but the Council resolved to continue to monitor NO_2 to check levels here in the future.

Historical trends

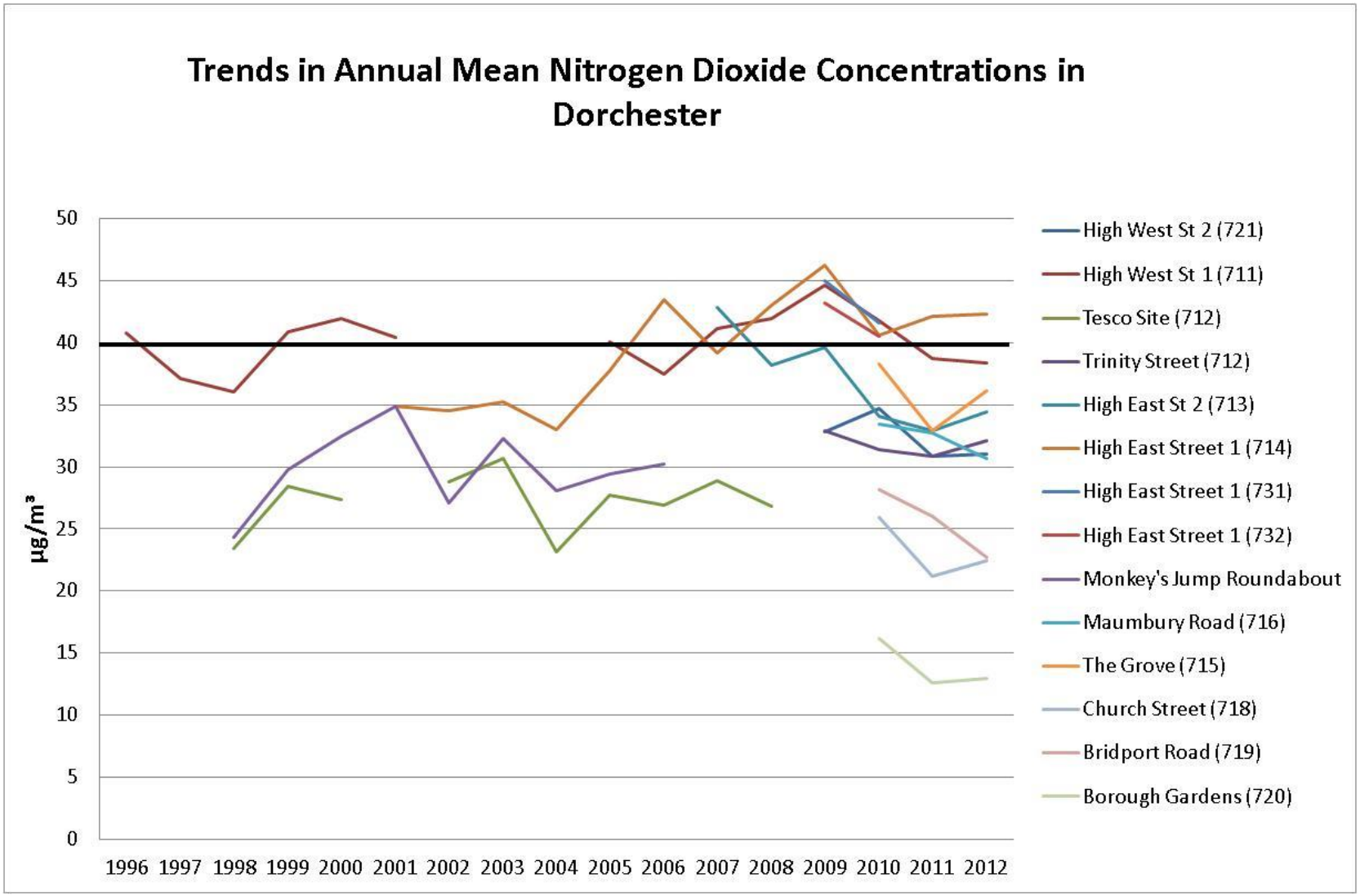
The graphs in Figure 2.4 show long term trends in Dorchester, Bridport and Chideock. A slight upward trend has continued since 2006, although this drops slightly at the majority of sites in 2011 and 2012. These results do not reflect the predicted improvements of air quality year on year due to improvements in fleet emissions.

Figure 2.3 Trends in Annual Mean Nitrogen Dioxide Concentrations measured at Diffusion Tube Monitoring Sites

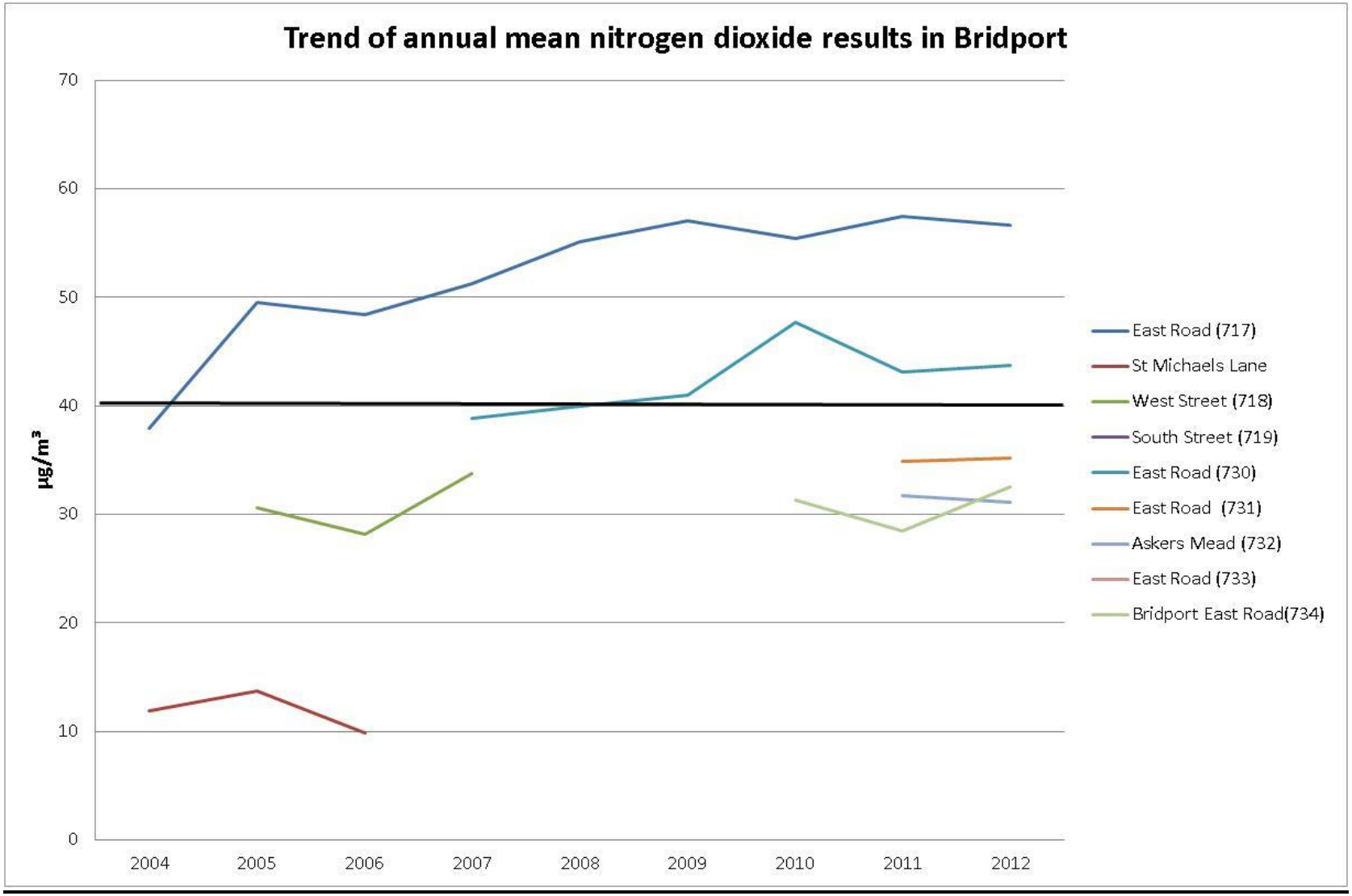
Chideock



Dorchester


Trends in Annual Mean Nitrogen Dioxide Concentrations in Dorchester
µg/m³
50
45
40
35
30
25
20
15
10
5
0
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
High West St 2 (721)
High West St 1 (711)
Tesco Site (712)
Trinity Street (712)
High East St 2 (713)
High East Street 1 (714)
High East Street 1 (731)
High East Street 1 (732)
Monkey's Jump Roundabout
Maumbury Road (716)
The Grove (715)
Church Street (718)
Bridport Road (719)
Borough Gardens (720)

Bridport


Trend of annual mean nitrogen dioxide results in Bridport
70
60
50
40
30
20
10
0
µg/m³
2004
2005
2006
2007
2008
2009
2010
2011
2012
East Road (717)
St Michaels Lane
West Street (718)
South Street (719)
East Road (730)
East Road (731)
Askers Mead (732)
East Road (733)
Bridport East Road(734)

2.2.2 PM_{10}

There were no areas identified in the last Updating and Screening Assessment within the district where PM_{10} could be a problem during the last Updating and Screening Assessment. This has not changed; therefore, no monitoring is currently undertaken for PM_{10}. However concerns have been raised by residents in Chideock regarding PM_{10} levels due to the unique topography of the area and the large percentage of HGV's that travel through the village.

Given these concerns, air quality modelling was undertaken for PM_{10} in Chideock in 2011. The results have shown that the annual average and 24 hour AQO for PM_{10} would not be exceeded at any locations within Chideock. There have been no further changes in West Dorset.

2.2.3 Sulphur Dioxide

No areas were identified within the district where sulphur dioxide could be a problem during the last Updating and Screening Assessment. This has not changed; therefore no monitoring is currently undertaken for sulphur dioxide.

2.2.4 Benzene

No areas were identified within the district where benzene could be a problem during the last Updating and Screening Assessment. This has not changed; therefore no monitoring is undertaken for benzene.

2.2.5 Other pollutants monitored

No other pollutants are monitored in West Dorset

2.2.6 Summary of Compliance with AQS Objectives

The NO_2 monitoring results for 2011 and 2012 have been examined.

Concentrations of nitrogen dioxide outside the AQMA's have exceeded the annual mean NO2 objective in two locations along East Road, Bridport, sites 717 and 730, the latter is also close to exceeding the hourly objective for this pollutant. A detailed assessment of East Road in Bridport was undertaken in 2011 and concluded that an AQMA would not be declared here. The Council has taken the decision to not declare at this site but to continue monitoring NO_2 to check levels here in the future.

Apart from the sites already within AQMA's, all other sites in West Dorset are below the objectives.

3 Road Traffic Sources

3.1 Narrow Congested Streets with Residential Properties Close to the Kerb

Two areas have been identified, one in Chideock and one in Dorchester, that fit the criteria and are included in air quality management areas. There are also a number of narrow rural roads in West Dorset's road network but these country roads are mainly bounded by hedges and fields and therefore do not meet the criteria of narrow congested streets with residential properties close to the kerb.

The council has not identified any West Dorset roads outside AQMA's that meet the criteria for this source description despite the changes in the traffic threshold limit from 10,000 to 5,000 daily vehicles.

West Dorset 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

West Dorset 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.

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

3.4 Junctions

West Dorset 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

This was reviewed in the 2009 Updating and screening Assessment and there have been no new roads constructed or proposed since this last assessment that fits the criteria in Section A.5 of Box 5.3 in TG(09).

West Dorset District Council confirms that there are no new/proposed roads.

3.6 Roads with Significantly Changed Traffic Flows

TG (09) states that significantly changed traffic flows are roads over 10000 vehicles per day that have experienced large increases in traffic, large meaning more than a 25% increase in traffic flows. This was assessed during the last updating and screening assessment and there have been no changes on any roads with West Dorset since the last assessment.

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

3.7 Bus and Coach Stations

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

4 Other Transport Sources

4.1 Airports

West Dorset District Council confirms that there are no airports in the Local Authority area.

4.2 Railways (Diesel and Steam Trains)

4.2.1 Stationary Trains

West Dorset District Council confirms that there are no 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

West Dorset 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)

West Dorset 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

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

West Dorset 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

West Dorset 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

West Dorset 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

West Dorset District Council confirms that there are no major fuel (petrol) storage depots within the Local Authority area.

5.3 Petrol Stations

According to the guidance TG(09) there is a possibility that the objective for benzene could be exceeded where there is a petrol station with an annual throughput of more than 2000m^3 of petrol, a busy road nearby (>30,000 vehicles per day) and relevant exposure within 10m. This was assessed during the previous updating & screening assessment and it was concluded that there were petrol stations within WDDC that fall into this category. However there were no residential dwellings within 10m of the pumps. There has been no change since this last assessment.

West Dorset District Council confirms that there are no petrol stations meeting the specified criteria**.**

5.4 Poultry Farms

Technical guidance TG(09) states that some local authorities have identified exceedences of the

PM_{10} objective associated with emissions from poultry farms. There are two poultry farms within West Dorset. The first is located in Holnest, Sherborne. From the details provided in the IPPC Public Register this farm has less than 200,000 birds and the nearest relevant exposure is 100m east of the farm.

The second poultry farm is located in Trent, Sherborne this farm has the capacity for 150,000 birds and is mechanically ventilated. Neither of the poultry farms in West Dorset meet the criteria set out in TG(09) and therefore no further assessment is required.

West Dorset District Council confirms that there are no poultry farms meeting the specified criteria.

6 Commercial and Domestic Sources

6.1 Biomass Combustion – Individual Installations

Biomass burning can lead to an increase in PM_{10} emissions due to the process of combustion and can also result in an increase of overall NOx emissions due to the fuel derived portion that is not present in gas combustion. Because of this, new guidance has been introduced for local authorities to assess Biomass installations in there area.

There are two individual biomass installations in West Dorset; Kingston Maurward College, Dorchester and St Osmunds Middle School in Dorchester.

Table 6.1 Biomass Installation in west Dorset

Site	Output (kw)	Stack Height (m)	Stack Diameter (mm)	Description of appliance	Maximum emission rates (g/sec)		Background Adjusted emission rates	
					PM_{10}	NO_2	PM_{10}	NO_2
Kingston Maurward College, Dorchester	500	8.9	300	Wood fuelled burner	0.041	0.052	0.0024	0.0017
St Osmunds Middle School, Dorchester	300	8.6	300	Heizomat RHK-AK 300 Wood fuelled burner-	0.038	0.045	0.0023	0.0016

Background emission rates for Kingston Maurward College are 10.14µg/m^3 and 15.37µg/m^3 for NO_2 & PM_{10} respectively. Background emission rates for St Osmunds Middle School are 12.2 µg/m^3 and 15.79 µg/m^3 for NO_2 & PM_{10} respectively.

Background measurements have been taken from the 2011 background maps from the local authority support website. Adjusted background calculations were undertaken by using the formulae in TG (09)

Calculations were taken from the nonograms in TG (09). Based on the results, neither of the biomass boilers identified will need to proceed to a detailed assessment.

West Dorset District Council has assessed the biomass combustion plant, and concluded that it will not be necessary to proceed to a Detailed Assessment.

6.2 Biomass Combustion – Combined Impacts

There is a concern that the effects of many small biomass combustion installations could combine and lead to unacceptably high PM_{10} concentrations. The average background level in West Dorset is 14.58 $\mu g/m^3$ so cumulative impacts seem unlikely. According to the report in the FAQ section of the Review & assessment helpdesk website, the nonogram shows that the minimum number of houses burning wood in a fireplace as their principle source of heat that may lead to an exceedence in the 2004 PM_{10} objective would be over 450 households in a 500m x 500m area. From local knowledge, it is highly unlikely that there are any such areas in West Dorset.

West Dorset District Council has assessed the combined impacts from biomass combustion, and concluded that it will not be necessary to proceed to a Detailed Assessment.

6.3 Domestic Solid-Fuel Burning

This was reviewed in the 2009 updating and screening assessment and it was found that there were no areas within West Dorset where there is a high density of domestic coal burning. There has been no change since this last assessment.

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

7 Fugitive or Uncontrolled Sources

In the previous round of Review & Assessment it was found that the two quarries in West Dorset do not significantly contribute to levels of PM_{10} and there are no relevant receptors nearby. There has been no change since the last review. During 2011, the council received only four complaints of dust emissions. All of these complaints related to separate one off incidents of dust from building sites that were quickly resolved.

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

8 Local / Regional Air Quality Strategy

West Dorset District Council does not have a Local Air Quality Strategy. However, its Air Quality Action Plans in Chideock and Dorchester include wider measures across the district.

9 Planning Applications

The Public Health Team review all validated planning applications for their air quality impact. Where there is a potential adverse impact, or the development introduces new sensitive receptors within the AQMA, an air quality impact assessment is required. Where this identifies a significant adverse impact on air quality or human health then mitigation measures are required.

During 2011 and 2012, no developments were granted planning permission that required mitigation for adverse air quality impacts.

1 .Air Quality Planning Policies

The current West Dorset District Local Plan contains policies covering air quality and was adopted by the council on 14 July 2006. However through Joint Working, West Dorset District Council and Weymouth & Portland Borough Council are working together to prepare a joint Local Plan. This Local Plan sets out a long term planning strategy for the area up to the year 2031 and includes detailed policies and site proposals for housing, employment, leisure and infrastructure. It is anticipated that the Local Plan could be adopted in early 2014.

The Council's policies that relate to air quality in the 2006 local plan are:

AH8a: DEVELOPMENT WITH POTENTIAL TO GENERATE POLLUTON, NOISE, VIBRATION, OR UNPLEASEANT EMISSIONS.
Planning permission will not be granted for development that has potential to generate pollution, noise, vibration or unpleasant emissions unless it can be demonstrated that the effects on health, amenity and the natural environment are or can be made acceptable.

TRAN12 TRAVEL PLANS
Development likely to have significant transport implications should provide a travel plan demonstrating practical measures for achieving sustainable transport objectives.

TRAN8 CYCLISTS AND PEDESTRIANS
All new development will be expected to take account of the needs of cyclists and pedestrians either by the direct provision or by contribution to new routes or links to existing routes within or adjoining a settlement. Such routes should provide a safe, convenient, direct and attractive environment to the cyclist or pedestrian. Where conditions allow, a choice of routes should be provided to increase the trip potential.

The local plan also aims to improve air quality through encouraging the management and planting of hedges (Chapter 11.2) and trees (Chapter 12.8)

Air quality is also a central topic of the Sustainable Construction Chapter (Chapter 12), where the reduction of emissions to air is discussed.

2 Local Transport Plans and Strategies

2.1 Local Transport Plan 3 2011- 2026

The Local Transport Plan 3 (LTP3) is a statutory document, which sets out a strategy for the management, maintenance and development of the County's transport system. It sets out a way forward to deliver transport needs through short, medium and long term transport solutions and how transport can improve safety and health, support the local economy, protect the environment and reduce carbon emissions and pollution. The LTP3 came into effect in April 2011 and has been produced for the whole of Bournemouth, Poole and Dorset. It covers the period from 2011 to 2026 and is based on a longer term strategy (2011 - 2026) and shorter term implementation plan(s) (3 yrs).

The key actions under the LTP3 that relate to air quality and the environment are:

- Minimise the need to travel by supporting the planning system to build sustainable communities where people live near services, employment, education and leisure opportunities;
- Leading by example in the Public Sector by instigating transport carbon reduction programmes and assisting major public services (Local Authority, schooling and health) to provide their services as close to the client group as possible;
- Strongly encourage people to choose low carbon travel modes by improving urban centres for walking, cycling and public transport complemented by effective demand management measures;
- Help individuals and businesses to consider and assess the carbon impacts of meeting their transport needs and change their travel behaviour accordingly through “Smarter Choices”3 measures;
- Facilitate walking and cycling especially for children and young people to ensure a significant increase in these modes for short trips;
- Significantly increase the proportion of journeys undertaken by public transport within the major urban centres and the hinterland of market towns;
- Promote the adoption of low carbon fuels and vehicle technologies in the domestic, business and HGV fleet;
- Identify and implement measures to reduce carbon emissions associated with leisure travel and tourism in Dorset;
- Encourage efficient and low carbon use of the car in areas of poor accessibility by walking and cycling & public transport;
- Maximise the efficiency of the existing Highways Network through the deployment of Intelligent Transport Systems (ITS)4;

- Manage and adapt the Highways network and Structures to reduce vulnerability to the direct physical impacts of climate change
- Monitor and report on carbon emissions from transport

2.2 Travel Choice

This is a County wide initiative to raise awareness about the impacts of travel behavior and to courage people to make an informed decision about journeys they make. For example promoting European Mobility Week, 'Get (back) on your bike!', a campaign to encourage people to cycle more, promoting cycling events and providing training for adults wanting to get back on their bikes. This initiative also promotes Car Share Dorset, an online tool to encourage and facilitate car sharing by matching journeys, run jointly by Dorset County Council and Bournemouth and Poole Borough Councils. More information can be found at: www.dorsetforyou.com/travelchoice

2.3 Local Sustainable Transport Fund

Dorset County Council received £2.409m in 2012 from the Department for Transport through its Local Sustainable Transport Fund to provide sustainable alternatives for people to travel in Weymouth and Dorchester. for the period 2012-2015. Measures which will be delivered by the package include:

- £1.12m investment in the Weymouth, Portland and Dorchester walking cycle network
- £300k for Personalised Travel Planning including practical travel information, maps and upgrade of the traveldorset.org web travel information resource including apps
- £200k towards Variable Messaging Signage and Car Parking Guidance in Dorchester
- £150k investment in Dorchester's public transport network including improving interchange at Dorchester South
- £150k for marketing of sustainable transport in the area
- £100k for a Bike It Officer working exclusively in schools within Weymouth, Portland and Dorchester
- £95k for tourist and visitor travel planning to encourage visitors to enjoy our area by public transport, walking and cycling when on holiday
- £78k towards working with Sustrans to deliver sustainable transport in the area
- £60k for a business commuter club to support businesses to manage their travel needs including grants for cycle parking and other sustainable modes
- £59k to upgrade Dorchester Car Club and expand into Weymouth
- £40k pump-priming funding to install 'fast' 32Amp Electric Vehicle Charging Points in Dorchester and Weymouth
- £32k for community led sustainable travel initiatives
- £25k to work with schools

3 Climate Change Strategies

WDDC launched their Climate Change Strategy in October 2009. This Strategy aims to help residents, businesses and other organisations to reduce their carbon emissions by 30% by 2020 from 2005 levels. This Strategy can be found at:
www.dorsetforyou.com/climatechange/west

3.1 West Dorset District Council Carbon Management Plan (CMP)

West Dorset District Council's CMP was approved in March 2010. This plan sets targets for the reduction of carbon dioxide emissions from WDDC activities and outlines the project structure enabling those targets to be achieved.

3.2 Nottingham Declaration

In 2007 West Dorset District Council signed up to the Nottingham Declaration. The Nottingham Declaration is a voluntary pledge for local authorities to address the issues of climate change. It represents a high-level, broad statement of commitment for a council to make to its community. It now has over 300 councils as signatories. Under the Nottingham Declaration the council is committed to producing a strategy to reduce carbon emissions and the impact of climate change.

4 Implementation of Action Plans

4.1.1 Dorchester Air Quality Action Plan Progress Report 2013

The AQAP sets out a strategic approach to improving air quality in Dorchester. It puts forward a range of measures aimed at reducing emissions in order to achieve the Air Quality objectives. These are prioritised into the following 3 categories or 'action headings':

- **Road Traffic Management**
- **Reduce Vehicle Emissions**
- **Statutory and other powers to limit impact of air pollution**

Table 9.1 summarises the AQAP measures and progress in implementation. The following highlights some of the key initiatives that have been progressed in the last year and sets out the timescale for implementation of the road infrastructure improvements that are likely to have a significant impact on air quality.

Table 9.1 Dorchester Action Plan Progress

No	Action	Lead agency	Linked strategies	Impacts	Planning Phase	Implementation Phase	Progress in the last 12 months	Cost/benefit
Road traffic management								
A1	To implement the Dorchester Transport & Environment Plan (DTEP)	DCC	LTP3 Local Plan	Reduce air pollution Reduce congestion, Reduce traffic noise Improve safety	May 2013-Nov 2014	Phase 1 – Nov 2014 Phase 2 – Nov 2015	DTEP was due to commence in 2013, however due to financial constraints at County level this has now been postponed until November 2014 for the implementation of Phase 1, the phase that applies to the AQMA. Funding has been approved for Planning, Phase 1 and Phase 2.	High/High
A2	To undertake an air quality assessment of the proposed DTEP scheme	WDDC DCC	LTP3	Quantify likely improvements on air quality	2012		Modelling of the scheme was undertaken by White Young Green in 2011. This showed that with the implementation of DTEP, air quality within High West Street and High East Street would reduce by 50% and 20% respectively. However further modelling will be required in 2013 to take into account of amendments in the scheme	Low/Low
A3	A35 Weymouth Road Roundabout and Stinsford Roundabout improvements The carriageway widths will be widened to 3 lanes on both A35 approaches and to	HA	Department of Transport Scheme	Reduce congestion and delay Improve the flow on the Dorchester bypass, Encourage use of the bypass instead of cutting through	Spring 2011	2012	Completed in May 2012 The roundabout has been increased from 50m to 56m and widened to provide traffic splitter islands for entry path curvature. A new additional lane has also been provided for left turn traffic from A35 to A354 Wey-mouth Road.	High/Low

No	Action	Lead agency	Linked strategies	Impacts	Planning Phase	Implementation Phase	Progress in the last 12 months	Cost/benefit
	2 lanes on the approach from Dorchester			the town Improve safety				
A4	To promote and expand, where feasible, the Park & Ride services and investigate the potential for a new site in Dorchester.	WDDC	Local Plan	Reduce traffic in the town centre	2012 2013	Temp park and ride July-Sept for the Olympic period. 2014 - Permanent site proposal through the Local Plan.	A new Park and Ride site south of Dorchester is being proposed through the emerging local plan will be linked to DTEP. This plan will be out for consultation in Oct13, with an aim to be adopted by Feb 2014.	Moderate/Moderate
A5	To investigate the improvement of signage to encourage the use of the Dorchester bypass rather than High West/East Street	HA	Department of Transport Scheme	Reduce traffic in the town centre Reduce congestion in the High Streets. Reduce pollution	2012		Improved signage new road scheme was undertaken with the improvements undertaken in action A3. HA have no further plans to increase road traffic signs here. However will be reviewed when DTEP is in place	Low/Moderate
Reduce Vehicle Emissions								
B1	Replace older bus fleets with cleaner more efficient buses.	DCC	LTP3	Reduction in emissions	Ongoing	2011-2026	In March 2011 the Department for Transport awarded a £166,600 Green Bus Fund grant to the WDDC, DCC and Duchy of Cornwall partnership to purchase two electric powered buses. The two Optare Solo electric buses are currently running from Poundbury to Dorchester every 30 minutes and will produce estimated diesel fuel savings of £25000 over five years compared to two diesel-powered buses. The buses will make carbon emission	High/High

No	Action	Lead agency	Linked strategies	Impacts	Planning Phase	Implementation Phase	Progress in the last 12 months	Cost/benefit
							savings of around 39 tons per year compared to diesel buses, producing a minimum impact on the environment.	
B2	Provision of Real Time Passenger Information on buses, at bus stops and other key locations, on the web and via text messaging along key routes, including Dorchester	DCC	Weymouth Transport Package LTP3	Encourage better use of buses Potentially fewer car journeys Reduced CO_2 emissions	2012	2012	This has been completed along the Dorchester/Weymouth corridor as part of the Weymouth Transport Package.	Moderate/Low
B3	The provision of real-time car park information in Dorchester	DCC WDDC	LTP3	Reduced journey time Reduced emissions and congestion	2012	2015	In July 2012 the Local Sustainable Transport Fund (LSTF), awarded DCC 200K for variable messaging signage and car parking guidance in Dorchester. This will be implemented from 2013.	Moderate/Low
B4	Ensure that air pollution from DCC's own activities is reduced .	DCC	DCC Carbon Management Plan DCC Driving to Work Policy	Reduced CO_2 emissions Potential financial savings	Ongoing	Ongoing	Expansion of the use of bio-diesel by County Council Fleet vehicles. Encouraging the uptake of clean, low carbon vehicles and fuels, including increasing the availability of low carbon fuels locally. Development of a safer driving policy for County Council staff, including fleet and lease drivers, that teaches and promotes safer eco-driving	Low/Low

No	Action	Lead agency	Linked strategies	Impacts	Planning Phase	Implementation Phase	Progress in the last 12 months	Cost/benefit
							techniques	
B4	Ensure that air pollution from WDDC's own activities is reduced by • Continuing drive to better fuel efficiency, engine emission standards and emission controls on council owned and leased vehicles • Monitoring the implementation of the Carbon Management Plan to reduce emissions resulting from both business travel and travel to work.	WDDC	WDDC Carbon Management Plan	Reduce pollution from WDDC vehicles. Additional travel time	Ongoing	Ongoing	Through the CMP a car share scheme between West Dorset and Weymouth Councils has been implemented and a minibus scheme between the two councils has also been introduced. Other actions include the use of pool cars and bicycles for staff and flexible working practices.	Low/Low
B5	Continue promoting Carsharedorset	DCC	LTP3	Potential for reduced car ownership Reduced CO_2 emissions Potential financial savings for	N/A	Ongoing	DCC are continuing to promote carsharedorset and currently have over 3000 members and will be integrated with TravelDorset. In July 2012 money was awarded from the LSTF to promote CSD on the Weymouth-Dorchester corridor.	Low/Low

No	Action	Lead agency	Linked strategies	Impacts	Planning Phase	Implementation Phase	Progress in the last 12 months	Cost/benefit
				users			Roadside boards currently being renewed and a radio campaign will be undertaken.	
B6	To explore working with larger vehicle operators in Dorchester to explore the feasibility of improving their own emissions and minimise vehicle movements.	DCC WDDC	LTP3 2011 Freight Strategy	Reduce traffic in the town centre Reduced CO_2 emissions	2013	2014	The Freight Strategy encompasses an overall but does not specifically target Dorchester. Due to the Olympics in 2012, work in this area has postponed. However, WDDC will be engaging with businesses that operate larger vehicles in 2013-14.	Medium/Low
Use Statutory and other powers to limit impact of Air Pollution								
C1	Take account of air quality issues in tendering process (where relevant)	DCC/WDDC		Protect air quality when letting contracts for goods and services	Ongoing	Ongoing	WDDC includes environmental performance in their procurement policy and practices	Low/Low
C2	Refer to AQMA as an issue in developing the Local Development Framework and in bringing forward Local Transport Plan improvement schemes	WDDC (DC)	Local Development Strategy Local Plan	Reduce the potential for increased air pollution from development	2012-2013	2014	The current West Dorset District Local Plan contains policies covering air quality was adopted by the council on 14 July 2006. However through Joint Working, West Dorset District Council and Weymouth & Portland Borough Council are working together to prepare a joint Local Plan. This Local Plan sets out a long term planning strategy for the area up to the year 2031 and includes detailed	Low/Low

No	Action	Lead agency	Linked strategies	Impacts	Planning Phase	Implementation Phase	Progress in the last 12 months	Cost/benefit
							policies and site proposals for housing, employment, leisure and infrastructure. It is anticipated that the Local Plan could be adopted in early 2014. DTEP is included in both plans.	
C3	Ensure that the AQMA is taken into account as a material consideration in development control.	WDDC (DC)	WDDC Local Plan	Reduce the potential for increased air pollution from development	Ongoing		Air Quality is a material planning consideration and is referred to in the current Local Plan under Policy AH8a.	Low/Low
C5	To continue to monitor for NO_2 in High East Street and Dorchester until the annual objective has been met and the AQMA revoked	WDDC (EH)		Provide good air quality information. Be able to target specific areas of concern	Ongoing	Ongoing	Monitoring has been increased in 2012 to review the potential hotspot locations with proposed DTEP scheme	Low/Low

Next Steps

The major activities taking place over the next 12 months will focus on the design and public consultation of DTEP and the adoption of the joint Weymouth BC and West Dorset DC Local Plan.

Conclusions

Good progress has been made in the implementation of a number of measures set out in the AQAP. Modelling undertaken in 2011 for the DTEP scheme showed that it will have a positive effect on air quality in High West and High East Street, however the Council will need to review this in line with proposed changes to the scheme. WDDC and DCC will continue to promote sustainable travel and raise awareness through the implementation of the AQAP, however greater consideration of major policies and potential infrastructure measures is required if compliance is to be achieved. It is also important air quality is considered along side other environmental policies and strategies such as climate change, energy efficiency and noise management to ensure that, where possible, policies are adopted that will benefit all areas of the environment

4.1.2 Chideock Air Quality Action Plan Progress Report 2013

The main progress on the Chideock Action Plan in 2011 and 2012 has been the formation of a working party between the Highways Agency (HA), Dorset County Council (DCC), west DForset District Council and Oliver Letwin MP, to obtain a voluntary agreement with the Freight Transport Association to use the M3/A303 as an alternative route to the southwest.

The original action plan has been completed, however through the stakeholder meetings that it lacked an action on to diverting HGV's away from the A35. An addendum of the action plan was produced that solely concentrated on this action, see table 9.2 for details.

Table 9.2 Chideock Action Plan Addendum Progress Report

No.	Action Required by Plan	Lead Agency	By…	Progress in the last 12 months	Cost/benefit
1	Detailed modelling of HGVs going through Chideock, including various HGV reduction scenarios.	DCC/WDDC	Completed June 11	Detailed air quality modelling concluded that removal the larger HGVs (A5 and A6) would reduce NO_2 concentrations by approx 18%	Low/Low
2	Seek to secure voluntary agreement with Freight Transport Association (FTA) to encourage HGVs from using A35.	HA	2013	In 2011 the HA undertook a reliability study of using the alternative route – M3/A303. The findings have been sent to the FTA. Meetings are ongoing with all parties to secure this voluntary agreement.	Low/High
3	Questionnaire to all members of the FTA to find out who uses the A35 and what would encourage them not to use the A35	HA	2012 Completed	Questionnaire sent out. 73% responded out of these use the A35 for local deliveries, cost and time were the major factors to encourage using the alternative route.	Low/Low
4	Check routes taken by continental HGVs,	HA	2011 completed	Study undertaken by WDDC showed 27% HGV traffic not local, to target this group.	Low/Low
5	Review reliability of M3 / A303 and A31 / A35 routes between Southampton and Honiton (Issues: distance, journey times, fuel costs, carbon emissions).	HA	2013 Completed	Review has been completed. The results of the study concluded that:the A303 route is approximately 27 miles longer, the average journey times are very similar, ranging from 120 minutes to 127 minutes (this is an average for all vehicles). Over the 12 month period April 10 – March 11, the A303 route has shown to be more reliable, with 82-83% of journeys 'on time', compared with 77-79% of journeys via the A31/A35.	Low/Low

No.	Action Required by Plan	Lead Agency	By…	Progress in the last 12 months	Cost/benefit
				The alternative route could be approximately £20 cheaper for a freight vehicle on a return trip Although the M3/A34/A303 is longer, the differences in the nature of the two routes mean that the M3/A34/A303 may have lower fuel consumption, which impacts upon the cost.	
6	Publicity campaign to encourage HGVs from using the A35	HA	2013	The review in Action 5 has been provided to the Road Hauliers Association (RHA) and reported in their Journal. Further publicity will be provided once all stakeholders have been consulted, including those authorities with AQMA's in or near to the alternative route.	Low/Low
7	Voluntary HGV Survey to be undertaken in Chideock	HA	2011	Undertaken by WDDC. Identified the majority of HGV's driving through the village were local, however 27% were trans-regional.	Low/Low

5 Conclusions and Proposed Actions

5.1 Conclusions from New Monitoring Data

Monitoring data for 2011 and 2012 continues to show exceedences of the nitrogen dioxide annual mean in areas of Dorchester, Chideock and Bridport. The areas in Chideock and Dorchester have been declared AQMA's and have ongoing action plans in place to reduce the nitrogen dioxide levels here. The area of East Road, Bridport also exceeds this objective and there is one residential property within the exceeded area. However, the Council resolved in 2011 not to declare here but to continue monitoring to check future levels of NO_2 here.

5.2 Conclusions from Assessment of Sources

This Updating and Screening Assessment and Progress Report has concluded the following:

- There are no road transport sources of concern in West Dorset that have been identified since the last Updating and Screening Assessment in 2009, and therefore a Detailed Assessment is not required.

- There are no other transport sources of concern in West Dorset that have been identified since the last Updating and Screening Assessment in 2009, and therefore a Detailed Assessment is not required.

- This assessment has indicated that there are no industrial sources of concern West Dorset that have been identified since the last Updating and Screening Assessment in 2009, and therefore a Detailed Assessment is not required.

- There are no commercial and domestic sources of concern in West Dorset that have been identified since the last Updating and Screening Assessment in 2009, and therefore a Detailed Assessment is not required.

- There are no fugitive or uncontrolled sources of concern in West Dorset that have been identified since the last Updating and Screening Assessment in 2009, and therefore a Detailed Assessment is not required.

5.3 Proposed Actions

The Updating and Screening Assessment has not identified any need to proceed to any Detailed Assessments. Monitoring for nitrogen dioxide will continue in 2013 and new monitoring data will be reported on in the 2014 Progress Report

6 References

- Local Air Quality Management Policy Guidance LAQM.PG (09). February 2009. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Technical Guidance LAQM.TG (09). February 2009. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- The Local Transport Plan 3 2011- 2026, Dorset County Council
- Travel Choice – www.dorsetforyou.com/travelchoice
- West Dorset Climate Change Strategy
- West Dorset District Council Carbon Management Plan (CMP)
- West Dorset District Council Updating and Screening Assessment 2009.
- West Dorset District Council Chideock Air Quality Action Plan 2009
- West Dorset District Council Progress Report 2010.
- West Dorset District Council Dorchester Air Quality Action Plan 2011
- West Dorset District Council Progress report and Detailed Assessment 2011
- West Dorset in Profile – Key facts & figures about the community – Dorset County Council
- West Dorset Local Plan 2006

Glossary

AQMA	Air Quality Management Area
AQO	Air Quality Objective
AURN	Automatic Urban and Rural Network
CPC	Chideock Parish Council
DCC	Dorset County Council
Defra	Department of environment, food & rural affairs
DfT	Department of Transport
DTEP	Dorchester Transport & Environment Plan
HA	Highways Agency
LA	Local Authority
LAQM	Local Air Quality Management
LPT3	Local Transport Plan 3
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
PG(09)	Policy Guidance 2009
PM_{10}	Particulate Matter <=10 µm
$PM_{2.5}$	Particulate Matter <=2.5 µm
TG09	Technical Guidance 2009
USA	Updating and Screening Assessment
WDDC	West Dorset District Council
$\mu g/m^3$	Microgrammes per cubic metre

Appendices

Appendix A: QA:QC Data

Diffusion Tube Bias Adjustment Factors

Gradko International Limited supply and analyse the diffusion tubes, which are a preparation of 50% TEA (triethanolamine) / Acetone. To improve the accuracy of the diffusion tube results and to minimise any potential errors, West Dorset co-locate three diffusion tubes (coded 735, 736, 737) with the inlet of the continuous monitoring equipment at the A35 Roadside site in Chideock. The results of these tubes can be assessed against the ratified data from the continuous NO_X analyser and a local bias-adjustment factor calculated which is then applied to the annual diffusion tube results. The calculation is summarised in Table A.1.

Table A.1 – Summary of Bias Adjustment – Roadside

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	07/01/2011	02/02/2011	12.3	18.3	18.4	16	3.5	21	8.7	18.9	100	Poor Precision	Good
2	02/02/2011	01/03/2011	14.7	15.6	15.5	15	0.5	3	1.2	16	82	Good	Good
3	01/03/2011	31/03/2011	17.4	17.0	17.3	17	0.2	1	0.5	17.7	80.6	Good	Good
4	31/03/2011	28/04/2011	22.7	22.1	19.6	21	1.6	8	4.1	16.9	100	Good	Good
5	28/04/2011	01/06/2011	8.2	8.1	7.9	8	0.2	2	0.4	13	100	Good	Good
6	01/06/2011	29/06/2011	8.9	8.1	8.5	9	0.4	5	1.0	10	57	Good	or Data Captu
7	29/06/2011	05/08/2011	13.0	10.3	12.9	12	1.5	13	3.8	11	100	Good	Good
8	05/08/2011	30/08/2011	15.1	14.8	15.3	15	0.3	2	0.6	14	100	Good	Good
9	30/08/2011	30/09/2011	13.6	11.6	10.7	12	1.5	12	3.7	8	76.7	Good	Good
10	30/09/2011	04/11/2011									0		or Data Captu
11	04/11/2011	02/12/2011	16.7	15.6	15.2	16	0.8	5	1.9		0	Good	or Data Captu
12	02/12/2011	05/01/2012	10.5	10.0	11.1	11	0.6	5	1.4	11.5	83.9	Good	Good
13													
											Overall survey -->	Good	Poor

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

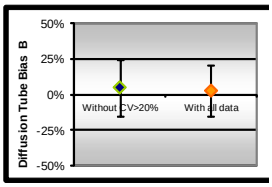
Site Name/ ID:	Chideock

Precision	10 out of 11 periods have a CV smaller than 20%

(Check average CV & DC from Accuracy calculations)

Accuracy (with 95% confidence interval) without periods with CV larger than 20%	
Bias calculated using 8 periods of data	
Bias factor A	0.97 (0.81 - 1.19)
Bias B	4% (-16% - 23%)
Diffusion Tubes Mean:	14 μgm^{-3}
Mean CV (Precision):	6
Automatic Mean:	13 μgm^{-3}
Data Capture for periods used:	90%
Adjusted Tubes Mean:	14 (11 - 17) μgm^{-3}

Accuracy (with 95% confidence interval) WITH ALL DATA	
Bias calculated using 9 periods of data	
Bias factor A	0.99 (0.84 - 1.2)
Bias B	1% (-17% - 19%)
Diffusion Tubes Mean:	14 μgm^{-3}
Mean CV (Precision):	7
Automatic Mean:	14 μgm^{-3}
Data Capture for periods used:	91%
Adjusted Tubes Mean:	14 (12 - 17) μgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

The default national bias adjustment factor (version April 2012) taken from the LAQM Helpdesk website, was 0.93

Discussion of Choice of Factor to Use in 2011

The national correction factor of 0.93 was used for this monitoring period for 2011 for areas other than Chideock, where a local co-location study gave a correction factor of 0.99.

Although this is slightly more conservative than the national adjustment factor it was considered to be more representative due to the unique location and topography of Chideock.

It was decided to use the national bias adjustment of 1.01 in 2012 as due to a fault with the analyser, it recorded poor accuracy and was therefore not representative data.

QA/QC of automatic monitoring

The analyser is maintained by the local authority, by way of fortnightly manual calibrations, in accordance with the manufacturer's instructions. Additionally, a service contract ensures that full calibration and reference checks are carried out on a six monthly basis.

Data collected by the analyser is downloaded three times a day. Daily checks are made to ensure that the analyser is not showing any faults. These are dealt with straight away, and logged for the engineer's information when a full calibration is undertaken.

Once the manual calibrations are carried out, the calibration factors are applied to the previous two weeks worth of data. At this time, the data are screened to ensure that any spurious data are accounted for, or excluded. This provides a method to establish whether the analyser is working correctly, or high pollution episodes can be identified.

Once this validation is carried out the data are ratified, at approximately six months intervals. Any possible drift in the analyser's daily calibration can be identified and adjusted and correction factors applied if they are needed.

QA/QC of diffusion tube monitoring

The diffusion tube monitoring programme follows the NETCEN methodology. Diffusion Tubes are supplied and analysed by Gradko International Limited, who are UKAS accredited. Gradko International Limited, supply and analyse the diffusion tubes, which are a preparation of 50% TEA (triethanolamine) / Acetone. The tubes are handled in accordance with the instructions within Technical Guidance LAQM.TG (09) Box A1.7.

Gradko International demonstrated a satisfactory performance, rating good, in the Workplace Analysis Scheme for Proficiency (WASP) for analysis of NO_2 diffusion tubes in 2011 and 2012.

Appendix B: Long Tem Monitoring in West Dorset

Site	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
DORCHESTER																	
High West Street 2 (721)														32.8	34.7	30.84	31.0
High West Street 1 (711)	**40.8**	37.1	36.0	**40.9**	**41.9**	**40.4**		**42.0**		**40.1**	37.5	**41.1**	**41.9**	**44.6**	**41.8**	38.73	38.4
Tesco (712)			23.4	28.4	27.4		28.8	30.7	23.2	27.7	26.9	28.9	26.8				
Trinity Street (712)														32.9	31.4	30.85	32.1
High East Street 2 (713)												**42.9**	38.2	39.6	34.1	32.91	34.4
High East Street 1 (714)						34.9	34.5	35.2	33.0	37.7	**43.5**	39.2	**43.0**	**46.2**	**40.6**	**42.06**	**42.3**
High East Street 1 (731)														**44.9**	**41.6**		
High East Street 1 (732)														**43.2**	**40.5**		
Monkey's Jump Roundabout			24.3	29.8	32.5	34.9	27.1	32.3	28.1	29.4	30.2						
Maumbury Road (716)															33.4	32.7	30.7
The Grove (715)															38.3	32.93	36.1
Church Street (718)															25.9	21.23	22.4
Bridport Road (719)															28.2	25.99	22.7
Borough Gardens (720)															16.2	12.58	13.0
CHIDEOCK																	
Duck St (724)					39.1	**45.3**	39.8	**47.6**	36.0	**43.6**	**45.5**	**41.7**	**44.3**	**50.9**	**43.0**	**45.8**	**45.2**
George Pub (725)										34.5	32.0	32.7	31.5	33.5	31.0	30.7	28.5
Village Hall (726)										**41.4**	**41.0**	39.3	**41.6**	**47.5**	**43.0**	**50.5**	**49.5**
Duck St 2 (715)														13.9			
Post Office (735)														13.6	15.3	13.8	14.1
Post Office (736)														14.1	15.4	13.7	13.4
Post Office (737)														14.1	15.5	13.7	13.9
Hope Cottage (722)															20.0	21.8	24.3
Church (723)															26.0	25.7	25.1

Site	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Whitecroft (727)															**50.0**	**51.5**	**53.3**
Warren House (728)															28.0	29.7	27.9
Real Time Monitor															15.4	13.6	
BRIDPORT																	
East Road 1 (717)	34.2	35.8	28.5	37.4	34.5	37.9	34.1	**47.4**	37.9	**49.6**	**48.4**	**51.3**	**55.1**	**57.1**	**55.4**	**43.11**	**43.7**
Bridport 2		12.9	11.8	12.4	11.8	18.1	12.3	12.5	11.9	13.7	10.9						
West St (718)												33.8	28.6	28.7			
South St (719)										30.7	28.2	31.1	29.5	30.1			
East Road 2 (730)												38.8	**40.0**	**41.0**	**47.65**	**57.45**	**56.6**
East Road (731)																34.91	35.2
Askers Mead (732)																31.74	31.1
East Road 3 (733)														**43.3**	26.45		
East Road 4 (734)														**51.4**	31.33	28.52	32.5
LYME REGIS																	
Lyme Regis 1	19.4	20.5	12.9	14.6	14.4	18.1	12.6	14.7	10.8								
Church St (722)												27.7	25.9	27.2			
Broad St (723)										28.0	31.6	36.1	27.6	29.8			
Lyme 2			8.3	14.5	11.3	16.3	10.3	12.4	8.7								
BEAMINSTER																	
Beaminster/Beam 1	24.3	22.7	19.7	18.7	18.5	28.4	22.5	28.3	19.3	26.7	24.1	24.1	24.5	24.9			
Beaminster 2			10.6	10.7	11.3	14.5	9.9	10.7	8.3								
SHERBOURNE																	
Green Hill (727)	**43.5**	**45.7**	36.0	36.5	37.1	38.3	30.5	35.2	26.6	31.6	31.8	31.2	30.0	33.0			
Westbury (728)			19.3	19.6	19.7	23.0	18.0	19.4	15.4	19.5	16.6	22.4	17.1	21.4			
OTHER																	
Chickerell				19.2	21.1	25.2	18.5	21.0	14.8	17.4	13.8	14.0					
Abbotsbury			8.9	10.9	10.4	13.5	9.4	16.1	12.3	20.2	21.1	21.6	18.9	19.6			

Site	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cerne Abbas			8.8	12.8	11.2	15.3	12.3	11.7	9.1								
Maiden Newton			12.6	17.9	15.2	19.1	16.2	22.0	15.4	19.6	19.0	16.4	17.0				
Puddletown	37.1	34.5	30.8	14.2	18.7												
Broadmayne			12.7	15.6	15.8	18.4	17.1	16.6	11.8								