



West Dorset District Council
Progress Report
May 2007

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1. EXECUTIVE SUMMARY

1.1 Outline

The Environment Act 1995, Part IV places a statutory obligation on all Local Authorities to review and assess the air quality within their area. This review and assessment is undertaken in a staged process that assesses monitoring results against the Air Quality Objectives (AQO). (Please refer to the 2006 Updating and Screening Assessment for a table of pollutants and Air Quality Objectives).

A Progress Report is produced to show West Dorset District Council's continued commitment to Local Air Quality Management (LAQM) and, importantly, to ensure that air quality is continually assessed and reviewed in the interim years between statutory Updating and Screening Assessments or Detailed Assessments.

The overall aims of this Progress Report are to update progress in implementing LAQM and to report progress on achieving or maintaining the AQO. Briefly, since submission of the Updating and Screening Assessment (USA) in September 2006, West Dorset District Council has declared an Air Quality Management Area (AQMA) with respect to exceedances of the Nitrogen Dioxide (NO₂) AQO in part of the district. This was reported to the Council's Executive Committee in March 2007, and submitted to Defra. Following this declaration, the next step is to formulate an Air Quality Action Plan (AQAP) in partnership with the Highways Agency, Dorset County Council, and other stakeholders. This matter is discussed further within this Report. (Chapter 5)

1.2 Methodology

In order to satisfy the Department of Environment, Food and Rural Affairs (Defra's) requirements for this Progress Report, the website <http://www.uwe.ac.uk/aqm/review> was referred to for the appraisal checklist, along with the most recent Updating and Screening Assessment produced by West Dorset District Council (WDDC).

1.3 Results

In 2006, NO₂ monitoring has established a decrease in the pollutant generally, with only three monitoring areas exceeding the AQO. Passive monitoring will continue at existing sites, with the possibility of two long-term sites being moved to the AQMA for co-location alongside a Chemiluminescent analyser should a bid to Defra for funding be successful.

No other pollutants are monitored. Please refer to the USA 2006 for further details.

1.4 Recommendations

The key recommendations from the Progress Report are as follows:

- Continue publicising the AQMA in Chideock and liaising with parish councillors and residents;
- Form a steering group to develop an Air Quality Action Plan in relation to the AQMA;
- Decide how to undertake further monitoring if the bid to Defra for a Chemiluminescent analyser is unsuccessful;
- To note that our areas of concern, namely Bridport, Dorchester and Chideock, are still exceeding the AQO, although there is a small reduction from the 2005 levels.

2. INTRODUCTION

2.1 Purpose of Report

This report aims to give information on West Dorset District Council's continued air quality monitoring and, also, the declaration of the AQMA. The Report will also serve as a means to update Councillors and residents about air quality over the past twelve months and form a good basis for decisions relating to other policy areas such as transport and land use, planning, and also developers carrying out environmental assessments.

2.1 Review of the Updating & Screening Assessment 2006

This was submitted to and approved by Defra in September 2006, with the following key outcomes:

- Declare an Air Quality Management Area in relation to nitrogen dioxide within Chideock;
- Review existing nitrogen dioxide monitoring sites;
- Apply for a grant to assist with the purchase of real time monitoring equipment; and
- Improve the quality of the information available to the public on our website.

The main issue highlighted was the continued high levels of nitrogen dioxide within three areas of the District – Chideock (site of the AQMA), Bridport and Dorchester. No other aspects had altered since the previous round of Review and Assessment.

3. NEW MONITORING DATA (Nitrogen dioxide only)

3.1 Monitoring Locations

There are 20 diffusion tubes located throughout the District. As a result of the Updating and Screening Assessment (September 2006) and Defra's subsequent guidance, the existing diffusion tube monitoring locations throughout the District were evaluated. A number of changes were made:

(a) Lyme Regis 1

The existing monitoring location was felt to be dangerous. The tube was placed on a lamppost directly on the roadside. There was no relevant exposure in this area. The new location is safer for officers to change the tubes and, with a dwelling located fronting the pavement, represents relevant exposure.

(b) Bridport 2

This was chosen to be a background monitoring location a number of years ago. With consistently low levels of nitrogen dioxide, the tube has now been moved to West Street in Bridport. This again is representative of relevant exposure due to street markets held twice a week and pavement seating outside a fish and chip shop.

(c) Dorchester 3

Again, a long-term background monitoring site with relatively low levels recorded. This tube is now being used to support Dorchester 4 in High East Street. The tube is located at the façade of a residential dwelling at the beginning of a street canyon.

(d) Chideock 2

Moved slightly due to safety issues when changing tubes.

The review of monitoring locations has also identified two other long-term sites (Abbotsbury and Sherborne 2) that could be moved for co-location should a Chemiluminescent analyser be installed at Chideock.

3.2 Monitoring Results

2006 found below:

Table 1 - 2006 Nitrogen Dioxide Results

Monitoring Location	Annual Mean (unless otherwise stated)	Bias adjusted Mean (x1.04)
Dorchester 1 Council Offices	37.12	38.60
Dorchester 2 Tesco	26.59	27.65
Dorchester 3 (Monkeys Jump)	29.88 (11 month Mean)	31.07
Dorchester 4 High East St Traffic Lights	43.09	44.81
Dorchester 5 Bottom of High East St	46.39 (1 month only)	48.25
Abbotsbury	20.93	21.77
Bridport 1 East Road	47.91	49.83
Bridport 2 Gundry Lane	10.83 (11 month Mean)	11.26
Bridport 3 South Street	27.95	29.07
Bridport 4 East Road Layby	39.68 (6 month Mean)	41.27
Bridport 5 West Street Crossing	26.94 (1 month only)	28.02
Chideock 1 Duck Street	45.07	46.87
Chideock 2 The George Inn	31.66	32.93
Chideock 3 Village Hall	40.63	42.23
Lyme Regis 1 Broad St Car Park	13.23 (3 month mean)	13.76
Lyme Regis 1A Church Street	26.76 (1 month only)	27.83
Lyme Regis 2 Broad Street	31.27	32.52
Maiden Newton	18.81	19.56
Beaminster	23.85	24.80
Sherborne 1 Greenhill	31.52	32.78
Sherborne 2 Newlands	16.42	17.08
Chickerell	13.71	14.26

Note: Number of monitoring locations in Table 1 is 22, this accounts for locations where diffusion tubes have been removed partway through the year.

3.3 Discussion of Results

Bridport Monitoring Results

2006 has shown a reduction in three areas within Bridport – East Street (Bridport 1), South Street (Bridport 3) and Gundry Lane (Bridport 2). East Street (Bridport 1) continues to exceed the AQO. An additional tube at East Street has now been present for six months and supports this monitoring locations data.

Dorchester Monitoring Results

All sites have shown a reduction from the 2005 results except High East Street Traffic Lights (Dorchester 4), which has risen. Only High East Street (canyon effect) now exceeds the AQO. A supporting tube is now in place further down High East Street (Dorchester 5).

Chideock Monitoring Results

The George Inn (Chideock 2) and Village Hall (Chideock 3) results have fallen in 2006, while Duck Street (Chideock 1) remains much the same. Duck Street and the Village Hall locations continue to exceed the AQO.

Remainder of Monitoring Locations

These data are all below the AQO.

3.4 Trends

Graphs identifying monitoring results from 2002 - 2006 can be seen in Appendix 1. NO₂ levels have reduced throughout the District over time (especially since 2003), but this is a slow reduction. This pattern can be seen continuing with the 2007 and 2010 predictions.

For comparison of our areas of concern, the following table identifies slight improvement over the past twelve months:

Table 2 - 2006 & 2005 Compared Results

Location	2005 Annual Mean ($\mu\text{g}/\text{m}^3$)	2006 Annual Mean ($\mu\text{g}/\text{m}^3$)
Dorchester 1 Council Offices	43.01	38.60
Dorchester 2 Tesco	29.7	27.65
Dorchester 3 Monkeys Jump	31.58	29.88 11 Month
Dorchester 4 High East Street Traffic Lights	40.47	44.81
Dorchester 5 Bottom of High East Street	*	48.25 1 Month
Brid 1 East Road	53.18	49.83
Brid 2 Gundry Lane	14.69	11.26 11 Month
Brid 3 South Street	32.9	29.07
Brid 4 East Road Layby	*	41.27 6 Month
Brid 5 West Street Crossing	*	28.02 1 Month
Chid 1 Duck Street	46.79	46.87
Chid 2 The George Inn	37.05	32.93
Chid 3 Village Hall	44.46	42.23

*Monitoring not undertaken at these locations during 2005

3.5 Projections

The predictions for 2007 and 2010 have been calculated using Netcen's year adjustment calendar. Only locations with actual annual means have been considered:

Table 3 - Predicted 2007 Results

Monitoring Location	Annual Mean
Dorchester 1 Council Offices	37.35
Dorchester 2 Tescos	26.65
Dorchester 4 High East Street Traffic Lights	43.36
Abbotsbury	21.07
Bridport 1 East Road	48.22
Bridport 3 South Street	28.13
Chideock 1 Duck Street	45.35
Chideock 2 The George Inn	31.87
Chideock 3 Village Hall	40.86
Lyme Regis 2 Broad Street	31.47
Maiden Newton	18.93
Beaminster	24.00
Sherborne 1 Greenhill	31.72
Sherborne 2 Newlands	16.53
Chickerell	13.80

Our present sites of concern are expected to continue to exceed the AQO in 2007.

Concentrating on the areas of concern, and using the 2006 data to predict levels in 2010, it is clear that the present AQO will continue to be exceeded, but the slow reduction will continue:

Table 4 - Predicted 2010 Results

Monitoring Location	Predicted Annual Mean 2010
Dorchester 1 Council Officer	33.42
Dorchester 4 High East St Traffic Lights	38.80
Dorchester 5 Bottom of High East St	41.77
Bridport 1 East Road	43.14
Bridport 4 East Road Layby	35.73
Chideock1 Duck St	40.58
Chideock 3 Village Hall	35.38

4. NEW LOCAL DEVELOPMENTS

There are no new or planned industrial processes within the District that will adversely impact upon air quality. Under the Integrated Pollution Prevention and Control (IPPC) regime, all known permitted processes have been assessed and an inspection programme is undertaken by Environmental Health.

There are no new mineral or landfill developments started or planned.

With respect to retail and mixed use developments, planning applications are discussed further on in this Report.

The Weymouth Relief Road has now been determined and draft orders submitted to Government Office. There are no set dates as to when building works will commence. From an evaluation within the USA, it is considered that there will be no adverse affect on Air Quality within WDDC once it is constructed and in use. This will of course be reviewed.

5. AQMA UPDATE

The AQMA within Chideock will be declared in May 2007. The Air Quality Management Order was agreed by the Executive Committee in March 2007. Appendix 3 has a copy of the Order which also identifies the geographical extent.

Taking advice from Air Quality Consultants, modelling using the Design Manual for Roads and Bridges (DMRB) estimated how far from the source of NO₂ compliance with the Objective would be achieved. This was found to be 15 meters from the centre of the A35 within the village. It was decided that, instead of drawing a line of exactly 15 meters, in order to consider relevant exposure, the entire curtilage of all dwellings within the 15-meter line would be included.

Consultation was undertaken between December 2006 and January 2007. As well as the statutory consultees, residents and businesses were asked for their views. A copy of the questionnaire and responses can be found in Appendix X.

West Dorset District Council will set up a Steering Group to include the Highways Agency, Dorset County Council, and other stakeholders. This group will examine the content of and formulate the Air Quality Action Plan.

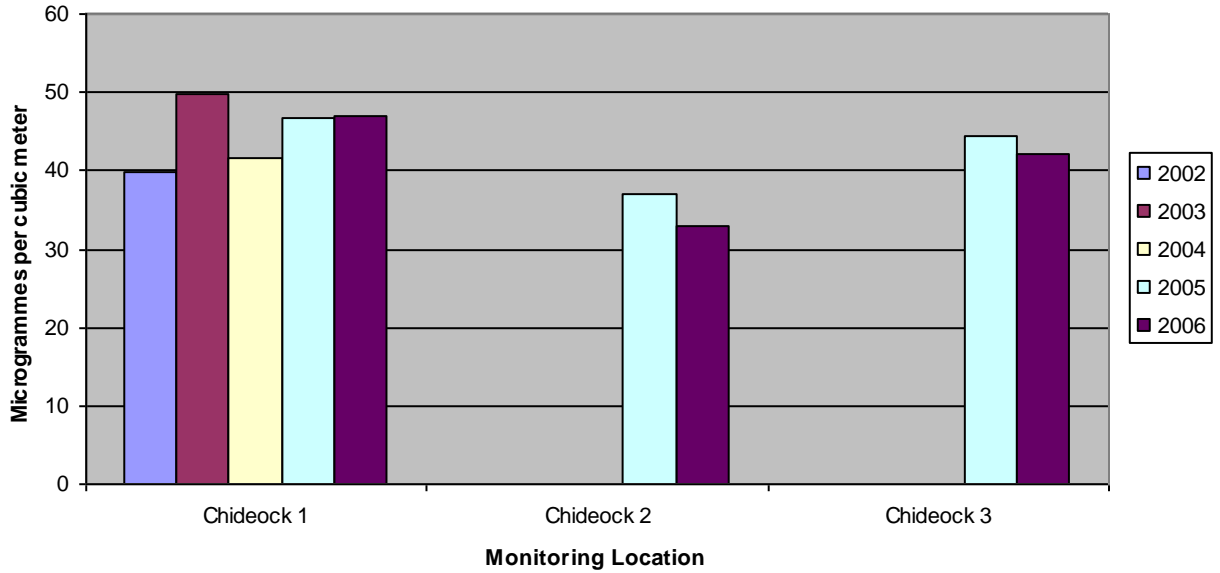
Further monitoring within the AQMA has not yet commenced. WDDC has applied to Defra for a grant to purchase a Chemiluminescent analyser for installation in the area along with additional diffusion tubes for co-location. If the bid is not successful, it is likely that supplementary diffusion tubes will need to be placed in the area.

6. PLANNING APPLICATIONS

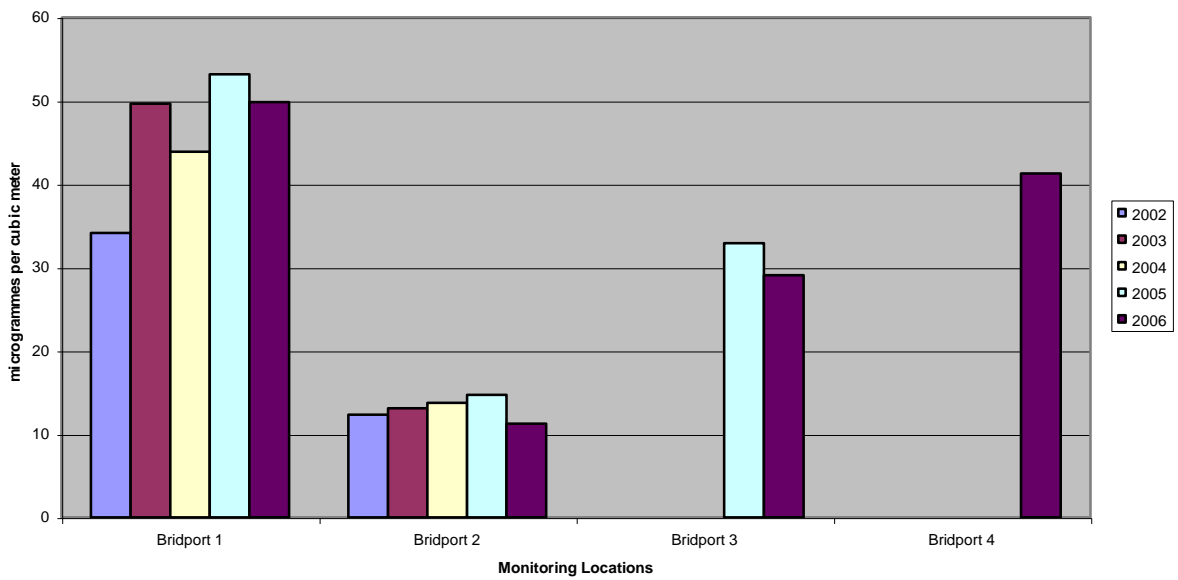
One major application has been submitted for consideration. This is to provide mixed usage on the former Eldridge Pope Brewery Site in Dorchester. This site will introduce relevant public exposure into an area of Dorchester not previously considered for monitoring. Using the NSCA guidance, "Development Control: Planning for Air Quality", an air quality assessment is being requested. In addition, the last phases of development within Poundbury, Dorchester, are expected to be submitted shortly. The developers have been informed that an air quality assessment is required for the same reason as above.

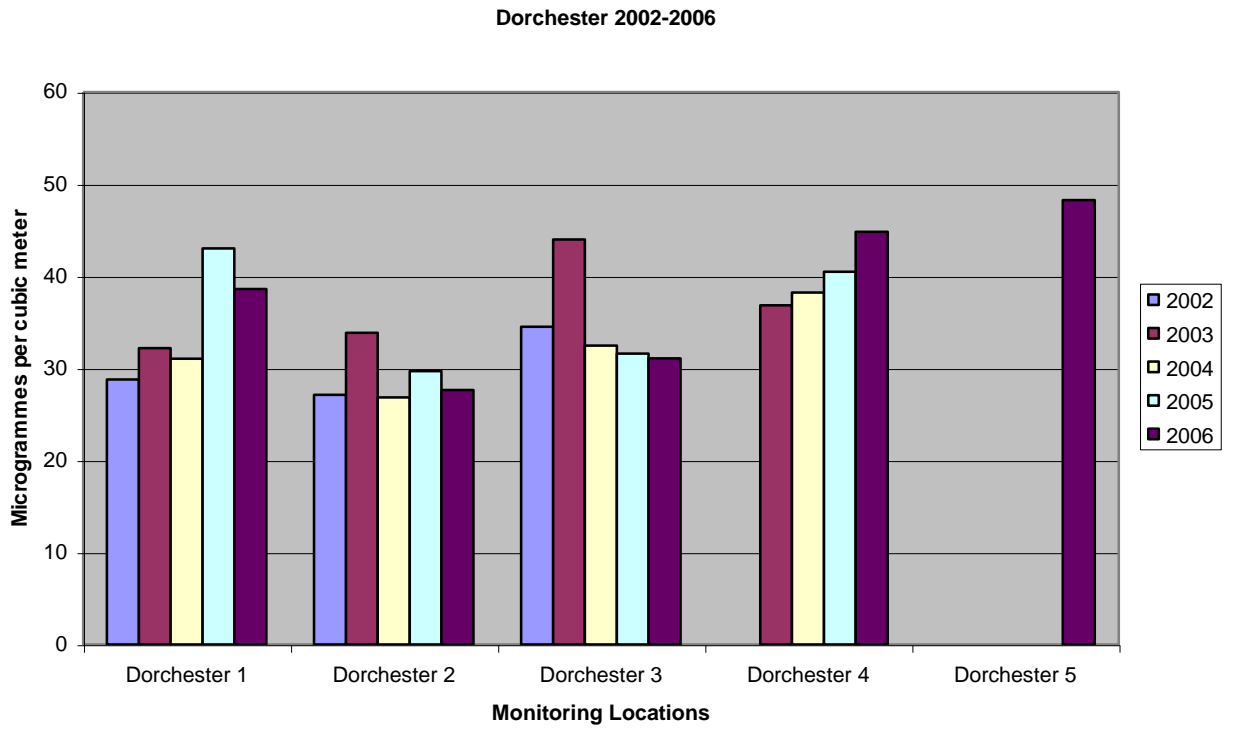
Appendix 1 - Nitrogen Dioxide Monitoring Results 2002 - 2006

Chideock 2002-2006

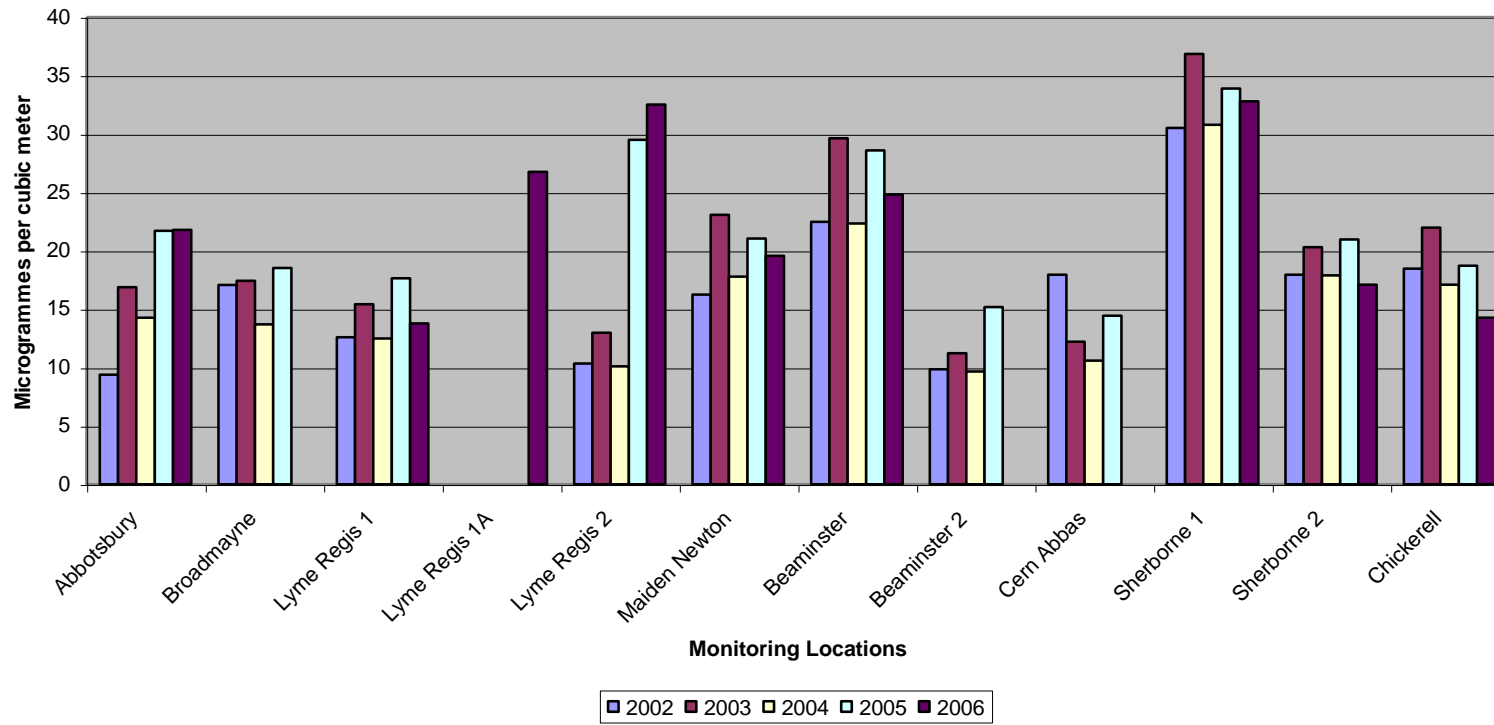


Bridport 2002-2006





Remainder of Sites. Nitrogen Dioxide (Bias adjusted) Results 2002-2006



Appendix 2 - Copy of Air Quality Order & Map of Geographical Extent

AIR QUALITY MANAGEMENT AREA ORDER

West Dorset District Council

Environment Act 1995 Part IV Section 83 (1)

Air Quality Management Order 2007

West Dorset District Council (“the Council” is satisfied that as a result of its air quality review and assessment dated September 2006, the air quality objective for nitrogen dioxide (NO₂ annual mean) as prescribed by the Air Quality (England) Regulations 2000 and (Amendment) Regulations 2002 has not been achieved by the relevant period (31st December 2005) in the area described below for reasons of the current and projected levels of nitrogen dioxide which exceed the objective levels set by the Regulations for that period.

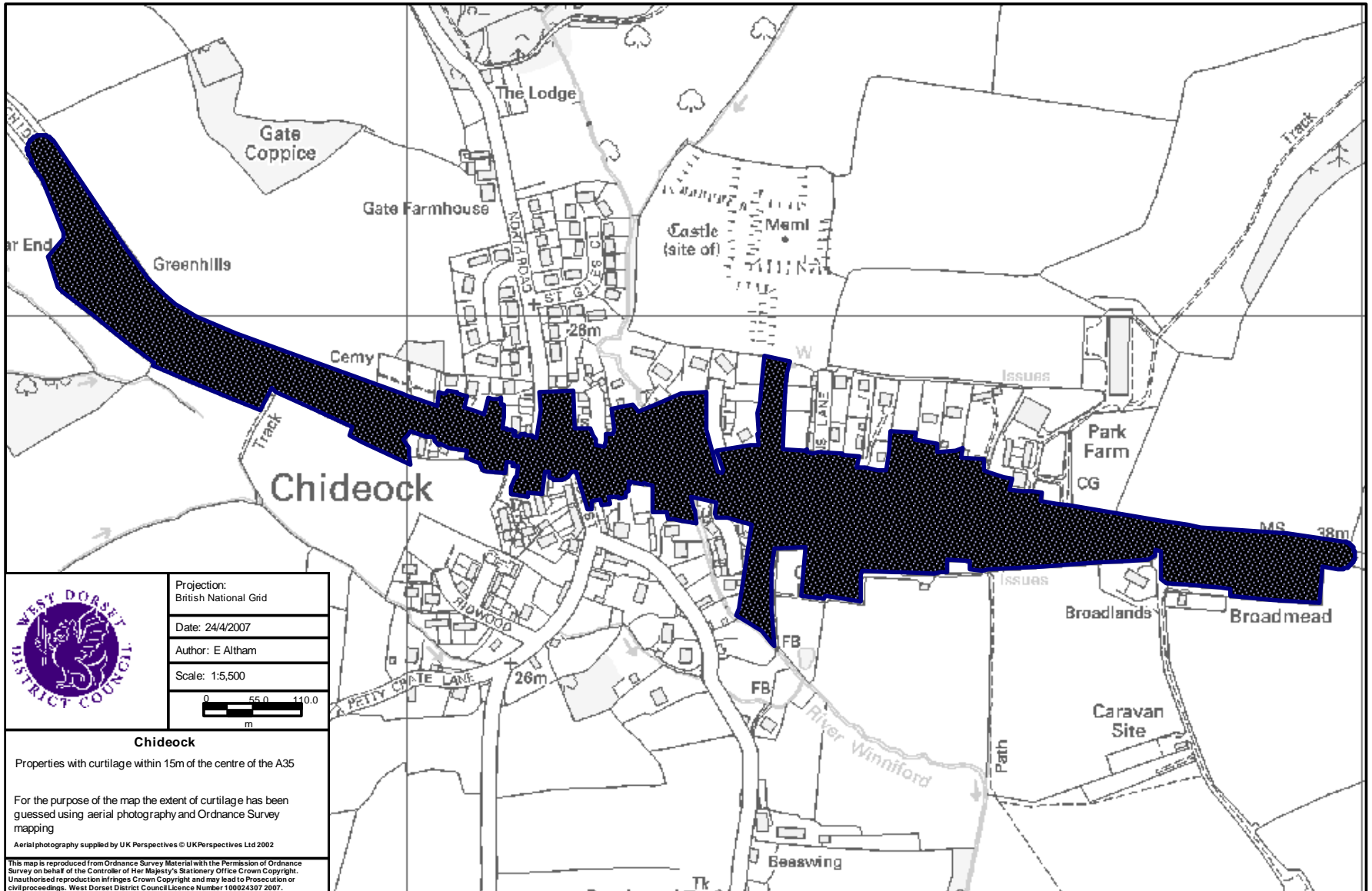
The Council, in exercise of their powers conferred upon it by Section 83 (1) of the Environment Act 1995 hereby makes the following Order.

1. This Order may be referred to as the West Dorset District Council Air Quality Management Order 2007 and shall come into effect on 02.05.07.
2. The area shown on the attached map highlighted in yellow is designated as an Air Quality Management Area (hereinafter referred to as “the Designated Area”. The Designated Area incorporates the A35 within Chideock and any dwellings and their associated curtilage within a 15-meter distance from the centreline of the A35 carriageway.
3. This Order shall remain in force until it is varied or revoked by a subsequent Order.

Given under the Common Seal of the West Dorset District Council dated 02.05.07

The Common Seal of West Dorset District Council was hereunto affixed in the presence of:

Authorised Signatory.....



Appendix 3 - Consultation Questionnaire & Responses

CONSULTATION ON CHIDEOCK AIR QUALITY MANAGEMENT AREA (RESIDENTS' RESPONSES)

12 DECEMBER 2006 – 26 JANUARY 2007
357 SENT – 184 RETURNED (52%)

Q1. Were you previously aware that there could be an issue relating to air quality within Chideock?

Very aware	39%
Fairly aware	28%
Neither aware nor unaware	11%
Fairly unaware	7%
Very unaware	15%

Q2. How well informed about air quality do you feel?

Very informed	17%
Fairly informed	28%
Neither informed nor uninformed	21%
Fairly uninformed	19%
Very uninformed	25%

Q3. Do you feel that West Dorset District Council has provided you with enough information about the mandatory Air Quality Management Area?

Yes	49%
No	51%

Q4. The proposed Air Quality Management Area is identified on the enclosed map of Chideock. Do you agree with the extent?

Strongly agree	14%
Agree	45%
Neither agree nor disagree	24%
Disagree	13%
Strongly disagree	4%

Q5. If you have access to the internet, would you look at a website designed to provide information about air quality in your area?

(77% indicated that they have access)

Yes.....69%
No31%

Q6. What is your age?

Under 18.....0%
18 to 24.....0%
25 to 44.....10%
45 to 60.....26%
Over 60.....60%
(No response).....4%

Q7. Are you male or female?

Male.....48%
Female.....43%
(No response).....9%