West Dorset District Council

Air Quality Strategy

Progress Report

Produced By
The Environmental Health Team

May 2005

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1. Aims and objectives

The assessment is a consideration of whether estimated levels for the relevant future period are likely to be exceeded and specifically to:
-Investigate the present air quality within the district of West Dorset.

-Assess air quality in relation to the requirements of the National Air Quality Strategy.

-Identify new significant sources of pollution within the district.

-Identify the pollutants, if any, for which a more detailed investigation is necessary.

2. Introduction

This report is submitted by West Dorset District Council in response to the requirements of Part IV of the Environment Act 1995 to periodically review and assess air quality against the UK's stated air quality objectives.

Statutory Background

Part IV of the Environment Act 1995 sets out the framework for Local Authorities within the UK to review and assess their local air quality. The National Air Quality Strategy, adopted by Government, is a statement of policy regarding the monitoring, assessment and management of air quality within the UK. During the early 1990's, in response to concerns about air quality, a framework for air quality control was proposed to reduce the incidence of pollution events within the UK, particularly in urban areas.

The Environment Act 1995 (Part IV) sets out the legislative framework for this strategy. It makes an important distinction between the national outlook and local perspective where other factors such as congestion, geography and topography may greatly affect air quality. The legislation requires Local Authorities to periodically review air quality within their districts and to assess whether the Air Quality Objectives are likely to be met. The air quality objectives, originally published in 1997, were amended by the Air Quality Regulations 2000 as our knowledge of the potential health effects and behaviour of pollutants improved. The Government published the National Air Quality Strategy in January 2000, which established a framework for achieving improvements in air quality from 2003 and beyond.

The pollutants with in the Air Quality Regulations 2000 and Air Quality (Amendment) Regulations 2002 are:

Carbon monoxide
Benzene
1,3 Butadiene

Lead
Nitrogen dioxide
Sulphur dioxide
PM10 (particulates)
Ozone

The review and assessment process has to be undertaken for each of these pollutants, except ozone. This is a transboundary pollutant meaning local control measures will be inappropriate. Ozone is a secondary pollutant, which tends to form away form its sources.

All these pollutants are known to have adverse health effects at high levels:

Nitrogen dioxide, Sulphur dioxide, and Ozone

Gases, which irritate the airways of the lungs increasing the symptoms of those suffering from lung disease.

Particulates

Fine particles can be carried deep into the lungs where they can cause inflammation and a worsening of the condition of people with heart and lung diseases.

Carbon monoxide

Prevents the normal transportation of oxygen by the blood. This can lead to a significant reduction in the supply of oxygen to the heart, especially in people suffering from heart disease.

Lead

Has a toxic biochemical effect which may cause problems in the synthesis of haemoglobin and have effects on the kidneys, gastrointestinal tract etc. However, the greatest concern is with the intellectual development of children.

Benzene 1,3,butadiene

Genotoxic carcinogens known to induce cancer.

Review and assessment relates to:

(1) consideration of the levels of air pollutants for which objectives have been set and the estimation of likely future levels;
(2) consideration of whether the objectives are likely to be exceeded by 2005, and if so, where and over what geographic area.

Where it is clear that an air quality objective will not be met, the local authority is obliged to declare an Air Quality Management Area (AQMA) and then develop and work towards achieving the objectives within the AQMA.

The basis of Local Air Quality Management is formed within the general Guidance and Technical Guidance notes LAQM.TG (03) and LAQM. PG (03) have been followed while producing this report.

Table 1 – Objectives included in the Air Quality Regulations 2000 and Air Quality (Amendment) Regulations 2002 for the purpose of Local Air Quality Management.

Air Quality Strategy Objectives:

Pollutant	**Objective**	**Concentration**	**Date to be achieved**
Benzene	16.25 ug/m^3 5 ug/m^3	Running annual mean Annual mean	31 December 2003 31 December 2010
1,3 Butadiene	2.25 ug/m^3	Running annual mean	31 December 2003
Carbon Monoxide	10 mg/m^3	Maximum daily running 8 hour mean	31st December 2003
Lead	0.5 ug/m^3 0.25 ug/m^3	Annual mean Annual mean	31st December 2004 31st December 2008
Nitrogen Dioxide	200 ug/m^3 not to be exceeded more than 18 times per year 40 ug/m^3	1 hour mean Annual mean	31st December 2005 31st December 2005
Sulphur Dioxide	350 ug/m^3 not to be exceeded more than 24 times per year 125 ug/m^3 not to be exceeded more than 3 times per year 266 ug/m^3 not to be exceeded more than 35 times per year	1 hour mean 24 hear mean 15 minute mean	31st December 2004 31st December 2004 31st December 2005
PM10 (Particles)	50 ug/m^3 not to be exceeded more than 35 times per year 40 ug/m^3	24 hour mean Annual mean	31st December 2004 31st December 2004

3.The Local Environment

West Dorset is predominately rural covering a geographical area of 417 square miles. Three quarters of the district is defined as an Area of Outstanding Natural Beauty and its primary industries are agriculture and tourism. The residential population is approximately 94,000, which rises substantially in the summer period due to tourism.

Transport Links

The road net work in West Dorset is comprised of the following; Principal Roads 153 Km, 'B' class 140.6 km, 'C' class 487 km, Unclassified 746.1 km.

Traffic Flows for several A roads was assessed in July 2003 by Dorset County Council

A35 Raymonds Hill (Devon/Dorset boarder)	10 400 vehicle movements per day
A35 Miles Cross London Inn (West of Bridport)	14 200 vehicle movements per day
A3052 Lyme Regis- West	3160 vehicle movements per day
-East	4 220 vehicle movements per day
A3066 Gore Cross	6500 vehicle movements per day
B3162 Salwash Ash	1 750 vehicle movements per day
B3163 Tollerdown Gate	1 210 vehicle movements per day
B3157 East of Bridport	6 740 vehicle movements per day

The main line railway runs north – south between Weymouth and Bristol and East west Dorchester to Poole.

Dorset County Council's local transport plan details the road priorities for the district. There are no proposed road schemes in the next 12-month which will increase the traffic flow in the area

Recent EC Directives have been successful in reducing the emissions from new motor vehicles. Legislation on fuel standards has also produced major improvements in air quality, illustrated by the large reduction in lead now seen in the atmosphere. More recently, reducing sulphur content in fuels has had a marked effect on emissions. Reduced sulphur in petrol improves the performance of catalytic converters and in diesel reduces particle emissions.

Industry

Certain industrial processes require authorisation under The Environmental Protection Act 1990, these processes are described as Part A or B depending on their type and character. There are 33 Part B processes within the district 16 are Petrol Filling Stations the remainder are listed in Appendix 1. There are no identified significant point sources currently located within the district.

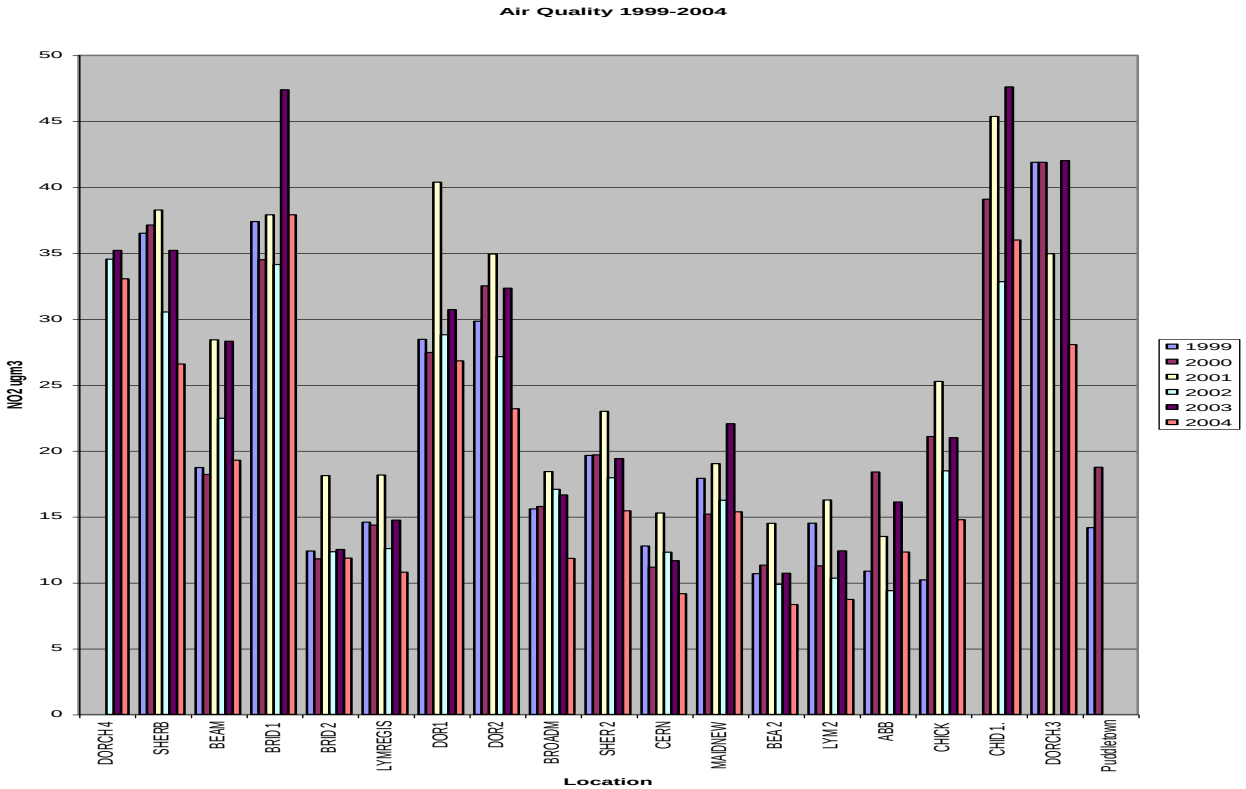
4.Monitoring Results and Evaluation

The previous report “Air Quality in West Dorset” identified the findings for each pollutant. It was found that the air quality objectives would not be exceeded for any pollutants, however the NO2 results for two areas (Bridport and Chideock) exceeded the 2005 target of 40 ugm3 in 2003. Results for 2004 were all below the 2005 target, however additional monitoring for NO2 is being carried out at both Bridport and Chideock, provisional results should be available by September 2005.

Nitrogen dioxide Results

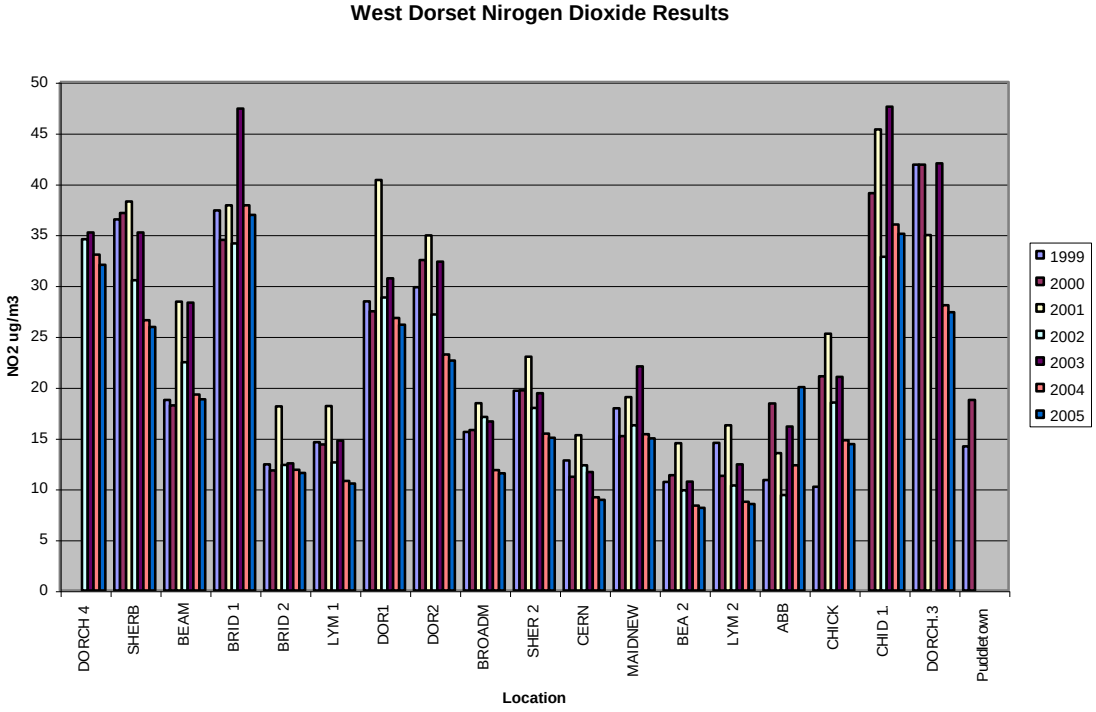
Nitrogen dioxide results have been obtained using diffusion tubes placed in 18 sites across West Dorset, for locations see appendix 2. The following Table shows the results obtained between 1999 and 2004 with predicted levels for 2005 based on results obtained in 2004.

	DORCH 4	SHERB 1	BEAM	BRID 1	BRID 2	LYM 1	DOR1	DOR2	BROADM	SHER 2	CERN	MAIDNEW	BEA 2	LYM 2	ABB	CHICK	CHID 1	DORCH.3
1999		36.49	18.72	37.38	12.39	14.58	28.44	29.82	15.58	19.64	12.77	17.90	10.67	14.50	10.86	10.20		41.87
2000		37.12	18.2	34.48	11.8	14.36	27.45	32.5	15.77	19.68	11.17	15.19	11.32	11.26	18.4	21.07	39.07	41.87
2001		38.26	28.41	37.89	18.11	18.15	40.36	34.92	18.42	22.99	15.28	19.02	14.49	16.26	13.5	25.25	45.35	34.94
2002	34.53	30.52	22.46	34.12	12.34	12.58	28.80	27.13	17.07	17.95	12.30	16.24	9.86	10.33	9.38	18.47	32.82	
2003	35.19	35.19	28.3	47.38	12.51	14.73	30.7	32.33	16.64	19.4	11.66	22.05	10.71	12.4	16.1	20.99	47.59	42.01
2004	33.04	26.57	19.28	37.89	11.86	10.78	26.81	23.19	11.83	15.44	9.15	15.36	8.33	8.72	12.3	14.76	35.98	28.05
2005	32.03	25.9	18.8	36.94	11.56	10.51	26.14	22.61	11.53	15.02	8.92	14.97	8.12	8.5	20	14.39	35.08	27.37



Evaluation of Nitrogen dioxide trends from the last 5 years.

The table and graph shows that the annual mean for 16 out of the 18 sites increase in 2003 and that the 2005 target was exceeded at three sites (Chideock, Bridport and Dorchester). The results for 2004 show the 2005 target was not exceed at any site, and the mean average was below that of 2002 in all but 2 sites (Bridport and Abbotsbury). Predictions using the 2004 results indicate the objective of 40ugm3 for 2005 will be met.



It is likely that the increased levels of 2003 were due to the weather conditions of the summer period. The temperatures in the summer of 2003 were high.

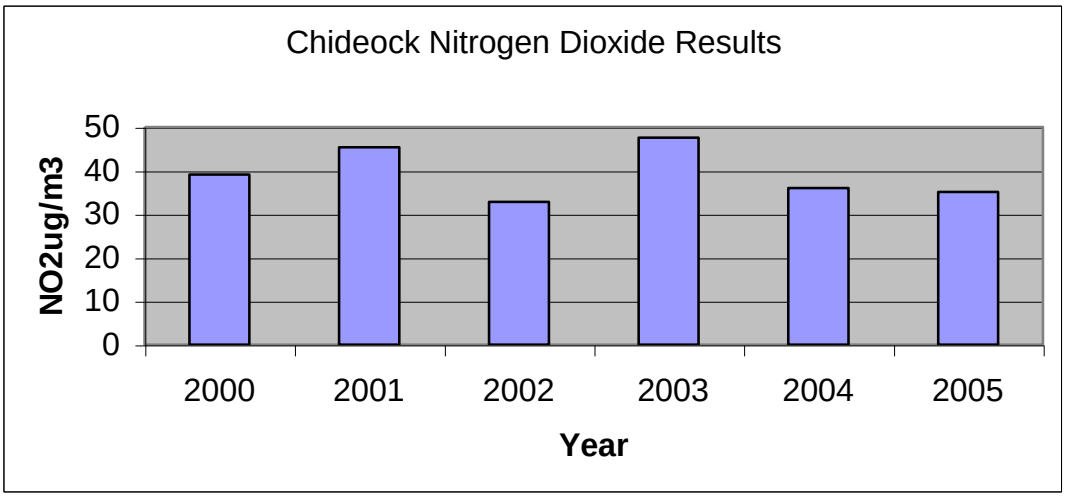
Whist the results obtained from the Dorchester sites show the level Nitrogen dioxide was lower in 2004 that 2002, the results obtained for Chideock and Bridport show levels in 2004 were higher than in 2002.

In order to carry out a more detailed study two additional monitoring points have been introduced in Chideock and one additional site in Bridport town centre.

NO2 levels at Chideock, Bridport, and Dorchester were found to be the highest within the district . The results from these areas will be looked at in more detail.

Chideock

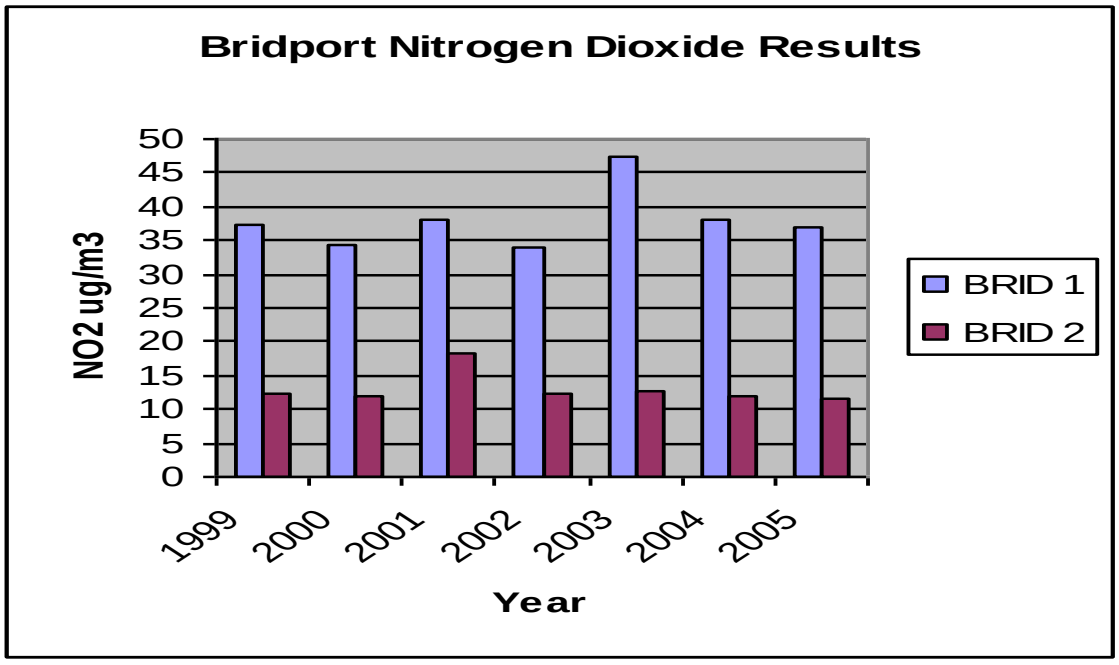
Chideock is a small village located in a valley and has a population of 625. The A35 Trunk Road, which is used by a wide variety of vehicles, runs through the village, this road is particularly busy in the summer months as this is a major route to Devon and Cornwall. The village is situated in a valley, which may account for the higher results on this stretch of the A35.



Results 1999-2004 with predicted result for 2005 using 2004 results

Bridport

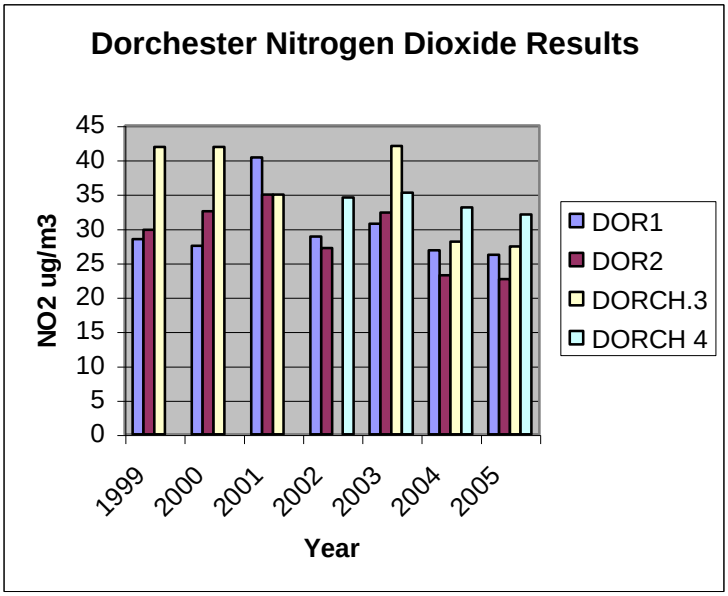
Bridport is a small market town with a population of 7 270. The town is located on the A35 South Coast Trunk Road. The main streets are lined with historic building, which may cause a canyon affect.



Results 1999-2004 with predicted result for 2005 using 2004 results

Dorchester

Dorchester is the County Town of Dorset it lies at the junction of the A35 South Trunk Road and the A37 to Yeovil in the north. The head office of Dorset County Council and West Dorset District Council are located in Dorchester. The Town has a population of 15 041.



Results 1999-2004 with predicted result for 2005 using 2004 results

5.New Local Developments

There were no new processes or installations granted authorisation or permits to operate under the relevant legislation in 2004. There have been no other industrial developments which will impact the air quality in the area.

Planning permission was granted for one new landfill site in Piddletrentide which is currently not in use. Time extensions were granted to the following landfill sites; Black hill Farm, Cern Abbas; Dickley Down Farm, Cern Abbas and Southern Shooting Ground, Evershot in 2004. One quarry at Coombe farm Mapperton commenced operation in West Dorset in 2004.

There have been three large housing developments within the district in 2005. Tinney Lane site on the outskirts of Sherborne, Poundbury on the outskirts of Dorchester and Charlton Down which is approximately three miles from Dorchester. These developments are unlikely to impact on the traffic flow within the town centres and so will not impact air quality.

6. Implementation of Local transport plan

The Local Transport Plan was completed in 2000 (LTP) as a response to the Road Traffic Reduction (National Target) Act 1998. It stated, "significant increases in traffic in the future will harm our environment and the health of people that live in Dorset. We need to strike a balance to safeguard and improve the quality of life for people now and for the future. This involves care and protection for a sustainable Dorset with community involvement."

The Third Annual Progress Report produced by Dorset County Council indicates how the County Council is performing in its delivery of the LTP. It contains a table reporting progress towards local objectives and targets. The objectives applicable to air quality are found in the Table below. These apply to the Dorset County.

Objective found within LTP	**Local Targets or outcomes in LTP**	**On track/not on track to meet targets**
Improve local bus services with a programme of annual review and increased subsidy	Increase local bus use by 10% from 200 levels by 2010	Unlikely to meet long term growth at current funding levels
Improve bus services to rural areas for market towns	Increase the % of Households within a 10 min walk of an hourly bus service by 1/3 by 2010	On track
Increase cycle use	Increase cycle use threefold from 2000 levels by 2010 in line with government targets	Not on track
Meet government air quality targets	To meet National Air Quality targets for nitrogen dioxide at all sites by 2005	On track
Reduce greenhouse gas emissions	Reduce greenhouse gas by 12.5% and a 20% reduction in CO2 by 2010	Assessments for the Weymouth Relief road suggest a neutral impact
Reduce traffic Flows	10% reduction in traffic growth in all areas of rural Dorset by 2006, and 20-30% by 20016	On track

7. Other Local Issues

It is predicted the proposed Weymouth Relief Road will increase the traffic flow on the A35 by 15%-19%. The A35 in on the outskirt of Dorchester, the additional traffic should not impact on the air quality in the Town Centre and residential area.

8. Conclusions

This report has evaluated the past years results for Nitrogen Dioxide. The evaluation of the results has resulted in additional sampling in area's where the 2005 target were exceeded in 2003.

There are no local developments that have an adverse affect on the air quality of the locations of concern within the district.

Appendix 1 Environmental Protection Act 1990 Part B Processes

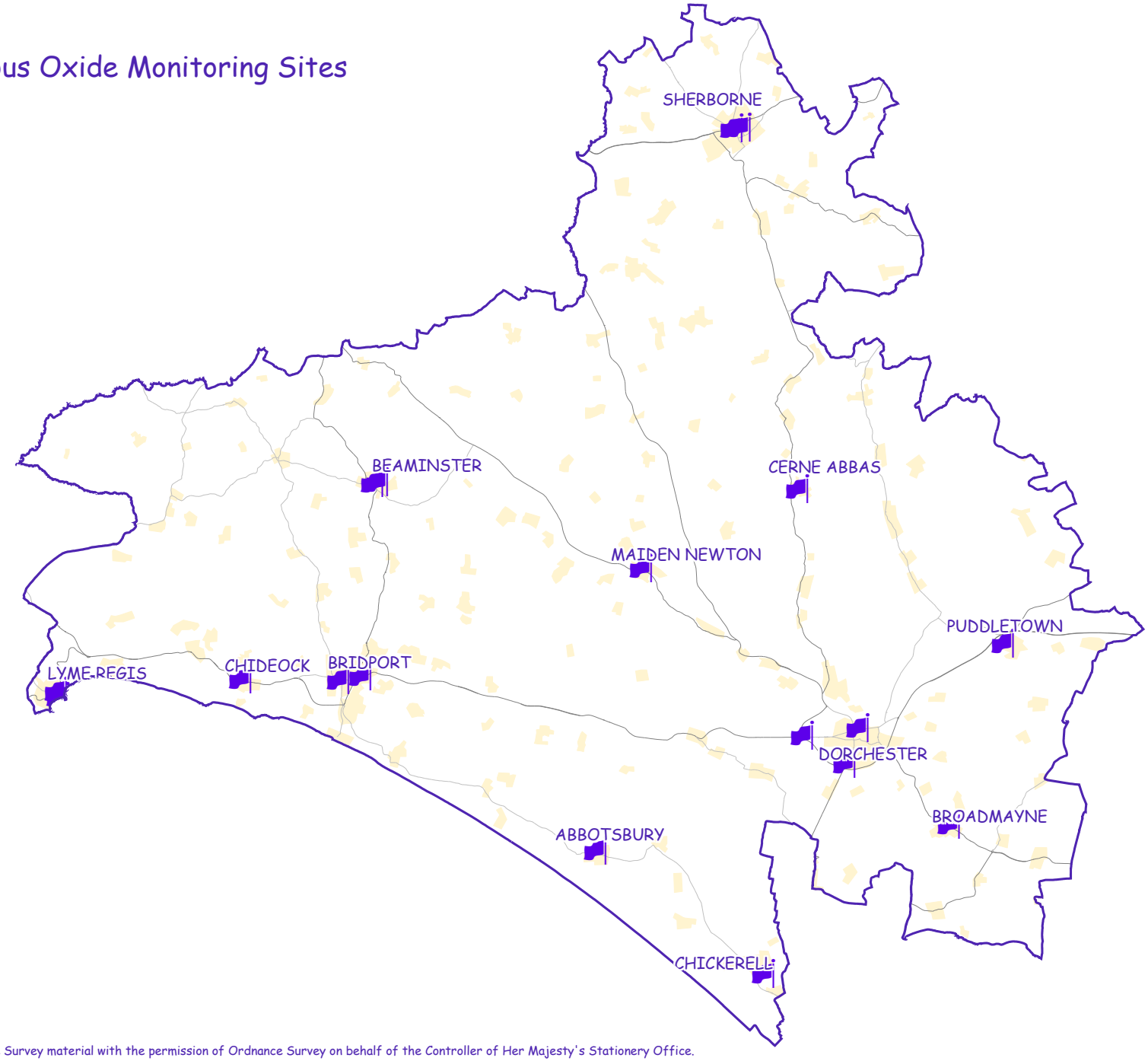
Applicant	Head Office	Process	Process address	os
Aggregate Industries UK Ltd	Callow Rock Quarry Shipham Gorge CHEDDAR Somerset BS27 3DQ	Sand Drying Storage and Handling	EPA 4 Warmwell Quarry, Warmwell, Dorchester, Dorset, DT2 8HU	725 895
F G Parker and Co	The Factory 20 East Street BRIDPORT Dorset	Timber Processing	EPA 7 The Factory, 20 East Road, Bridport	470 931
Hanson Aggregates	Supplier Accounts PO Box 1829 Chipping Sodbury BS37 6AL	Blending of Cement, including the batching of Ready Mixed Concrete	EPA 9/1 Weymouth Premix, Chickerell Road, Weymouth DT3 4DO	655 795
Hanson Aggregates	Supplier Accounts PO Box 1829 Chipping Sodbury BS37 6AL	Blending of Cement in bulk, including the batching of Ready Mixed Concrete	EPA 9/2 West Knighton Pit, Highgates Lane, West Knighton	725 895
Hanson Aggregates	Supplier Accounts PO Box 1829 Chipping Sodbury BS37 6AL	Blending of cement in bulk, including the batching of Ready Mixed Concrete	EPA 9/3 Bridport premix, Old Gas Works, South Street, Bridport, DT6 3NP	463 927
Ready Mixed Concrete (South West) ltd	Ashton Road Marsh Barton EXETER Devon EX2 8LS	Ready mixed concrete plant, comprising the blending, packing, loading and use of bulk cement	EPA 10 Warmwell Quarry, Warmwell, Dorchester DT2 8HU	701 905
P D Interglas Technologies Ltd	Westbury SHERBORNE Dorset DT9 3RB	Textile and Fabric Coating and finishing and adhesive coating processes	EPA 11 C S Interglass, Sherborne, Dorset	635 165
Loders Garage (Dorchester) Ltd	The Grove DORCHESTER Dorset	Respraying of Road Vehicles	EPA 15 Loders Garage (Dorchester), The Grove, Dorchester, Dorset	683 901
Dorset Aluminium Products Ltd	Poundbury West Trading Estate Dorchester Dorset	Nitric Acid Process	EPA 18 Dorset Aluminium Products, Poundbury West Trading Estate, Dorchester, Dorset	682 905
Dorset Motorbody Work	Littlesea Industrial Estate 83 Lynch Lane WEYMOUTH Dorset	Respraying of Road Vehicles	EPA 19 Dorset Motorbody Works, Littlesea Industrial Estate, 83 Lynch Lane, Weymouth, Dorset	645 805
Lanehouse Vauxhall	1 Avon Close Granby Industrial Estate WEYMOUTH Dorset	Respraying of Road Vehicles	EPA 20 Lanehouse Vauxhall, 1 Avon Close, Granby Industrial Estate, Weymouth, Dorset	
Newscom Plc	Newspaper House Test Lane Redbridge SOUTHAMPTON SO16 9JX	Coating and Printing	Newscom Plc, Granby Industrial Estate, Hampshire Road, Weymouth DT4 9TU	
Olds Body Repair Centre	31 London Road DORCHESTER Dorset DT1 1NF	The Respraying of Road Vehicles	EPA 26/98 Olds Body Repair Centre 31 London Road Dorchester Dorset	
G Crook and Sons	Lower Glebe Farm West Knighton DORCHESTER Dorset DT2 8PE	Mobile Crusher	EPA 29/00	
Mr Adrian Johnson	The Workshops West Road Garage	Waste Oil Burner	EPA 22	

Applicant	Head Office	Process	Process address	os
	BRIDPORT Dorset			
Southern Feeds ltd	Bourne Park Piddlehinton Dorchester Dorset DT 2 7TU	Animal Feed Compounding Process	EPA 31/2003 Bourne Park, Piddlehinton, Dorchester, Dorset DT2 7TU	
Bridport Car Repair Centre	Unit 18A Dreadnought Trading Estate BRIDPORT Dorset	Waste Oil Burner	EPA 30/01	

Appendix 2 Monitoring sites for NO2 - 2004

ID	SITE	EASTINGS	NORTHINGS
1	DORCH	369115	90732.6
2	PUDTOWN	375451	94400.3
3	SHERB	363613	116879
4	BEAM	347934	101395
5	BRID1	346452	92803.9
6	BRID2	347420	92964.4
7	LYME	334220	92091.7
8	DORC1	366686	90393.6
9	DORC2	368534	89144
10	BROAD	373097	86492.4
11	SHERB2	363968	116892
12	CERN	366481	101153
13	MAID	359662	97696.5
14	BEAM2	348144	101421
15	LYME2	334140	92297.5
16	ABB	357666	85385.1
17	CHICK	365925	80001.7
18	CHID1	342184	92839.1

Nitrous Oxide Monitoring Sites



Appendix 3 Nitrogen Dioxide Results 1999-2004

NITROGEN DIOXIDE 1999 WEST DORSET

	DORCHESTER	PUDTOWN	SHERB	BEAM	BRID 1	BRID 2	LYMREGIS	DOR1	DOR2	BROADM	SHER 2	CERN	MAIDNEW	BEA 2	LYM 2	ABB	CHICK
JAN	20.07	8.74	20.44	13.4	19.3	7.5	10.87	13.1	15.9	6.66	11.86	4.42	8.74	6.5	6.81	6.71	
FEB	31.15	10.56	18.56	11.6	17	7.64	10.45	12.74	14.3	10.24	13.05	6.24	9.46	7.54	8.16	6.08	
MAR	9.67	6.14	5.82	10	22.3	5.41	6.08	18.04	13.21	8.32	13.47	7.44	8.16	5	3.95	6.29	
APR	20.28	7.12	17.42	6.55	12.3	4.26	4	10.14	11.65	5.1	6.86	3.43	7.75	3.43	4.94	3.69	8.42
MAY	18.86	5.41	18.36	5.56	14.1	6.71	9.36	10.97	9.41	10.24	8.01	8.11	9.52	4.37	6.55	4.16	10.4
JUN	18.9	4.11	18.3	5.04	16.6	3.07	4.16	12.06	12.48	4.26	8.32	8.22	5.62	1.61	8.85	7.02	6.6
JUL	11.91	4.52	14.6	6.03	15.7	2.7	4.32	10.5	13	3.8	3.02	3.12	8.22	2.08	4.84	3.12	5.67
AUG	22.93	7.6	20.7	7.44	28.2	6	6	21.79	15.34	7.38	8.79	5.15	8.6	5.04	6.4	4.7	12.8
SEPT	23.04	7.2	27	11.5	23.3	6.55	6.86	18.46	23.7	8.63	11.13	6.86	10.61	5.5	5.41	5.15	
OCT	20.6	9.72	24.6	10.8	22.8	8.8	9.05	19.8	18.93	11.13	11.8	8.42	12.38	7.3	8.74	7.96	14.7
NOV	29.54	9.15	23.97	16.6	22.9	11.1	11.6	17.42	24.44	11.18	14.14	12.01	13.52	10.8	11.7	8	13.5
DEC	28.82	8.22	18.3	12.5	19	7.64	8.37	12.74	14.04	10.45	12.27	6.4	9.31	7.49	14.3	5	7.96
Mean	21.31	7.37	19.01	9.75	19.47	6.45	7.59	14.81	15.53	8.12	10.23	6.65	9.32	5.56	7.55	5.66	10.00
Mean ugm3	40.92	14.16	36.49	18.72	37.38	12.39	14.58	28.44	29.82	15.58	19.64	12.77	17.90	10.67	14.50	10.86	19.20

NITROGEN DIOXIDE 2000 WEST DORSET

SHERB 1	BEAM	BRID 1	BRID 2	LYM R 1	DOR1	DOR2	BROADM	SHER 2	CERN	MAIDNEW	BEA 2	LYM 2	ABB	CHICK	CHID 1.
26.48	17.1	24.43	11.39	13.76	15.2	23.83	12.68	17.61	9.58	12.33	11.14	11.26	6.65	15.71	
24.75	7.32	22.3	7.78	7.41	12.9	19.36	9.28	13.73	7.09	9.23	10.67	9.06	7.14	13.49	
19.81	8.42	17.47	6.71	7.8	13.6	14.51	10.35	13.62	7.12	8.27	7.64	5.41	6.24	12.58	
23.19	9.05	16.33	7.44	6.86	17.1	20.3	9.36	8.16	6.03	9.52	5.36	6.92	6.24	11.23	28.18
18.04	8.53	16.85	2.13	5.77	15	18.15	5.2	7.75	4	8.01	3.64	3.69	4.1	10.35	19.19
15.5	5.82	13.42	3.4	3.8	12	15.34	4.37	4.84	2.65	6.34	2.96	3.75	4.37	9.78	21.84
18.93	9.4	21.22	5.2	8.37	15	11.23	8.84	8.89	5.41	7.17	7.85	7.49	5.36	9.1	28.81
15.76	6.3	13.4	5.1	5.62	12.1	12.37	4.94	5.62	3.45	7.02	2.81	3.2	5.3	4.16	20.12
17.42	13	15.6	2.4	4.9	10.6	24.02	9.46	7.02	3.28	5.2	5.7	3.38	5.93	6.1	25.8
21	10.1	17.47	5.98	7.8	12.4	17.12	4.89	11.13	6.3	4.1	1.66	0.36	0.78	7.07	7.52
14.8	11.2	23.3	7.23	9.31	15.7	12.32	8.84	12.06	6.92	8.53	7.3	7.33	5.93	18.82	19.45
16.33	9.46	13.73	9	8.37	20	14.6	10.35	12.58	8	9.23	4	8.53	6.86	13.3	12.22
19.33	9.64	17.96	6.15	7.48	14.30	16.93	8.21	10.25	5.82	7.91	5.89	5.87	5.41	10.97	20.35
37.12	18.50	34.48	11.80	14.36	27.45	32.50	15.77	19.68	11.17	15.19	11.32	11.26	10.38	21.07	39.07

		NITROGEN DIOXIDE ugm3				2001		WEST DORSET									
	DORCH 3	SHERB 1	BEAM 1	BRID 1	BRID 2	LYM R 1	DOR1	DOR2	BROADM	SHER 2	CERN	MAIDNEW	BEAM 2	LYM 2	ABB	CHICK	CHID 1.
Wolverhampton																	
JAN	52.9	62.7	24.5	51.6	30.9	30.3	45.3	63.3	36.9	40.1	29.9	34.6	24.5	27.4	26	46.6	54.9
FEB	31.8	42.9	39.3	43.2	25.4	22.9	39.1	39.9	28.6	34.2	24.1	25.6	14	25.3	17.7	37.4	37.4
MAR	46.8	52	35.1	48.6	21.8	23.3	49.5	37.7	23.4	28.2	16.6	25	18	20.4	18	35.3	66.7
Gradko	Correction Factor		1.45														
APR		20.59	22.51	18.86	7.11	5.92	22.31	13.16	8.29	13.73	4.58	5.15	4.15	7.11	4.15	10.07	27.25
MAY	21.47	23.91	28.72	20.87	9.07	9.49	26.84		6.17	13.17	9.27	11.86	6.17	7.59	8.54	15.18	31.78
JUN	15.02	23.92	3.34	17.8	6.12	5.01	22.8	16.13	4.45	3.77	4.06	7.23	12.79	6.12	4.45	11.12	31.15
JUL	19.59	20.16	15.53	24.77	6.34	6.33	23.63	22.47	5.76	7.49	5.79	9.79		5.18	5.18	8.64	36.24
AUG	18.91	23.92	13.9	26.7	5.01	6.67	15.57	19.47	7.79	8.34	5.56	7.23	5.56	6.12	3.89	11.12	32.36
SEPT	28.46	23.24	21.35	30.36	3.32	9.01	27.51	18.03	9.49	19.08	7.12	10.91	8.06	3.32	9.01	15.18	35.58
OCT	24.77	27.65	13.82	29.95	9.22	9.23	38.59	27.07	12.1	12.65	8.06	12.67	9.22	7.5	7.49	16.13	25.92
NOV	20.7	30.22	30.81	29.03	17.18	20.74	32.59	25.48	18.37	29.03	14.22	18.96	11.85	13.63	10.07	23.11	26.66
DEC	25.47	14.37	16.96	16.36	32.65	25.04	31.83	25.89	18.68	12.31	19.1	15.3	13.17	27.59	16.36	16.13	18.68
Mean	34.94	38.26	28.41	37.89	18.11	18.15	40.36	34.92	18.42	22.99	15.28	19.07	14.49	16.26	13.50	25.25	45.35

NITROGEN DIOXIDE ug/m3 2002 WEST DORSET

DORCHESTER	SHERB	BEAM	BRID 1	BRID 2	LYMREGIS	DOR1	DOR2	BROADM	SHER 2	CERN	MAIDNEW	BEA 2	LYM 2	ABB	CHICK	CHID 1.
8.15	14.75	10.2	8.9	4.84	5.08	10.18	5.08	6.36	7.88	3.31	6.1	2.8	5.34	4.33	7.38	10.93
15.64	11.66	11.1	14.39	4.59	3.68	8.59	7.36	7.05	7.67	3.99	5.22	4.91	4.9	3.68	5.52	12.27
17.73	6.22	2.19	10.27	5.59	9.08	11.82	11.51	9.39	2.18	3.42	8.48	6.27	2.19	1.25	9.69	13.46
13.92	11.04	7.73	11.28	5.53	3.37	11.52	11.03	6.23	7.44	4.32	7	2.66	3.61	3.11	7.65	17.58
11.2	10.96	5.72	9.77	3.34	3.1	7.15	3.81	3.68	4.77	2.38	4.77	1.43	2.15	2.86	4.29	11.2
10.2	13.5	9.96	13.69	2.49	2.8	12	10.5	5.29	6.3	3.3	3.73	1.79	3.42		6.84	17.42
14.64	12.96	10.3	16.8	3.12	4.32	9.6	11.04	5.76	6	3.36	4.56	3.12	2.88	1.44	4.8	15.36
13.8	2.7	10.8	15.9	4.5	4.8	10.2	13.5	6	7.19	10.71	5.7	2.1	3.3	3.6	6	20.1
16.96	12.16	3.52	16.96	4.48	3.84	16.32	15.68	6.08	7.04	3.84		3.52	4.16		6.4	20.48
16.27	18.49	12.8	16.79	6.42	7.41	15.06	17.26	8.15	9.13	6.9	8.64	5.43	5.68		8.89	
	19.41	12.5	14.48	5.79	5.79	13.9	11.59	8.11	10.14	6.37	10.43	6.08	5.5	6.66	8.98	23.63
17.27	16.33	13.8	18.67	10.03	8.63	15.4	15.17	11.9	12.6	8.63	8.63	8.4	7.7	7.7	14.47	17.25
14.16	12.52	9.21	13.99	5.06	5.16	11.81	11.13	7.00	7.36	5.04	6.66	4.04	4.24	3.85	7.58	16.33
27.19	24.03	17.69	26.86	9.72	9.90	22.68	21.36	13.44	14.13	9.68	12.79	7.76	8.13	7.39	14.55	31.36
34.53	30.52	22.46	34.12	12.34	12.58	28.80	27.13	17.07	17.95	12.30	16.24	9.86	10.33	9.38	18.47	39.83

NITROGEN DIOXIDE ppb. 2003 WEST DORSET

	DORCHESTER	SHERB	BEAM	BRID 1	BRID 2	LYMREGIS	DOR1	DOR2	BROADM	SHER 2	CERN	MAIDNEW	BEA 2	LYM 2	ABB	CHICK	CHID 1.	DORCH.3
jan	17.45	17.45	13.89	16.15	7.43	8.4	13.57	10.99	8.72	10.99	5.82	9.37	6.14	7.43	6.46	10.99	20.68	
feb	21	18.28	15.79	0	8.64	10.36	14.58	17.3	11.12	11.61	8.89	12.34	8.39	8.14	7.41	17.3	22.46	
mar	13.58	20.06	12.96		6.48	7.71	14.81	17.28	8.95	10.49	7.71	8.95	5.55	6.79	7.1	11.73	21.91	
apr	15.9	16.5	13.2	24.9	6.3	7.81	18	15.3	9.01	8.4	6.9	8.1	4.5	6.01		10.82	23.14	
may	18.72	13.2	11.52	21.12	3.6	4.08	11.28	12.24	4.8	5.04	2.64		3.12	3.36	7.2	7.92	22.32	20.64
jun	13.04	14.48	10.72	29.84	4.35	4.63	13.04	17.38	6.08	6.66	4.35		3.19	6.08	8.11	8.98	24.33	23.46
jul	17.28	16.66	16.05	32.09	4.32	4.94	11.11	17.59	7.1	7.71	3.7	10.8	3.7	5.55	6.79	7.71	30.55	20.68
aug	16.5	15.6	16.5	38.7	5.1	7.2	23.4	17.4	9	9.6	4.2	8.7	3.9	4.2	11.1	7.5	34.5	22.5
sep	-	19.41	13.48	32.34	5.12	4.85	22.91	23.45	7.01	11.05	5.39	13.48	4.58	3.5	9.7	11.32	25.34	18.06
oct	-	18.67	-	26.31	7.47	9.33	-	16.49	9.64	11.82	4.98	13.07	7.16	8.09	8.4	8.4	21.78	19.91
nov	24.24	21.84	15.6	24	7.68	9.12	14.4	12.48	9.84	10.56	6.72	13.2	7.68	7.68	7.44	11.28	19.44	23.76
dec	15.6	15.12	12.72	10.56	6.96	8.16	9.12	12.48	7.2	10.32	7.68	10.08	5.04	6	7.2	9.84	14.16	17.04
Mean	17.33	17.27	13.86	23.27	6.12	7.22	15.11	15.87	8.21	9.52	5.75	10.81	5.25	6.07	7.90	10.32	23.38	20.64
ug/m3	33.2	33.2	26.7	44.7	11.8	13.9	29	30.5	15.7	18.3	11	20.8	10.1	11.7	15.2	19.8	44.9	39.63
Correction	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Factor																		
Corrected																		
mean	35.19	35.19	28.30	47.38	12.51	14.73	30.74	32.33	16.64	19.40	11.66	22.05	10.71	12.40	####	20.99	47.59	42.01

NITROGEN DIOXIDE ug/m3 2004 WEST DORSET

	DORCH 4	SHERB	BEAM	BRID 1	BRID 2	LYMREGIS	DOR1	DOR2	BROADM	SHER 2	CERN	MAIDNEW	BEA 2	LYM 2	ABB	CHICK	CHID 1.	DORCH.3
jan	46.35	30.25	22.93	41.47	10.73	16.1	20.49	21.47	9.76	15.61	9.27	17.08	7.81	10.73	10.25	12.2	35.13	37.57
feb	45.61	36.71	24.77	57.6	19.59	16.13	28.92	26.7	17.86	24.47	15.02	23.04	24.77	15.55	16.7	20.74	39.17	35.59
mar	26.05	25.08	24.75	11.34	27.58	7.85	27.14	21.41	12.44	10.68	7.34	13.14	6.56	6.88	7.74	12.24	24.09	19
apr	24.88	17.51	23.04	40.9	9.22	10.37	29.95	19.82	8.06	10.5	8.6	13.82	6.91	8.06	11.52	16.7	32.26	11.06
may	31.99	21.33	16	34.96	7.7	7.11	38.51	26.07	13.03	10.07	8.29	17.77	4.74	7.7	14.22	16.59	37.92	23.11
jun	33.52	22.77	13.92	34.79	7.59	6.33	18.34	22.14	8.54	12.65	6.01	11.07	3.8	6.64	12.02	10.75	39.85	34.79
jul	28.23	19.59	20.74	40.32	6.91	8.64	17.86	22.47	9.22	11.52	6.91	15.55	5.76	6.91	14.4	13.25	47.81	36.29
aug	29.64	30.95	20.05	37.49	7.41	NR	NR	30.51	10.46	13.41	7.41	15.26	6.1	5.67	14.39	17	43.16	41.85
sep	40.59	27.06	20.02	50.87	NR	9.74	22.19	28.68	7.58	15.15	8.12	10.82	6.49	7.58	13.53	12.99	48.7	38.96
oct	26.7	31.15	10.61	41.65	9.44	11.11	34.48	23.92	12.01	16.13	11.12	17.88	8.65	9.44	10.94	15.55	31.66	23.92
nov	39.78	22.04	23.66	48.39	15.05	13.98		25.27	14.52	23.12	13.44	18.87	9.98	11.29	15.59	17.74	37.32	26.34
dec	43.87	23.26	23.03	38.77	16.02	17.46	44.34	24.42	25.86	31.66	14.02	19.73	13.65	13.7	14.21	20.75	37.37	25.86
Mean	34.77	27.97	20.29	39.88	12.48	11.35	28.22	24.41	12.45	16.25	9.63	16.17	8.77	9.18	12.96	15.54	37.87	29.53
Correction																		
Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Corrected Mean	33.03	26.57	19.28	37.89	11.86	10.78	26.81	23.19	11.83	15.44	9.15	15.36	8.33	8.72	12.31	14.76	35.98	28.05