Local Air Quality - Progress Report, April 2008.

# AIR QUALITY PROGRESS REPORT NORTH DORSET DISTRICT COUNCIL MARCH 2008

# **Contents**

Contents	1						
Summary							
Introduction	3						
Мар	5						
Outcomes of previous air quality assessments	6						
Pollutants	7						
<ul> <li>Carbon Monoxide</li> </ul>	7						
Benzene	8						
• 1,3-Butadiene	9						
• Lead	10						
Nitrogen Dioxide	11						
<ul> <li>Particulates</li> </ul>	13						
Sulphur Dioxide	15						
Progress							
<ul> <li>New Monitoring Results</li> </ul>	16						
<ul> <li>New developments</li> </ul>	17						
<ul> <li>Additional Elements</li> </ul>	19						
Air Quality Strategy	20						
Summary of Issues	21						
Conclusions	21						

Local Air Quality - Progress Report, April 2008.

# AIR QUALITY INTERIM PROGRESS REPORT NORTH DORSET DISTRICT COUNCIL MARCH 2008

#### **SUMMARY**

North Dorset District Council undertook a Stage 1 review of air quality in 1999, which concluded that none of the regulated pollutants required further assessment at that time. In 2003 the Council published its Updating, Screening & Assessment report which concluded that "this assessment has shown that there is no need to consider any of the pollutants further at this stage".

NDDC's second report 'Updating and Screening Assessment' was published in May 2006. This concluded that "a Detailed Assessment will not be required for any of the seven pollutants assessed. None of the UK air quality objectives are likely to be breached within North Dorset District". This progress report confirms that the Council is maintaining concentrations of the specified pollutants below the air quality objectives.

The focus of this progress report is any changes to emissions, relevant exposure, new monitoring locations and the air quality objectives relating to a number of specific locations previously identified for screening. As with the 2003 report, the focus of emissions is upon traffic, as North Dorset has few polluting processes requiring regulation by Part 1 of the Environmental Protection Act 1990. However, there are few busy roads in the district, the busiest being a section of the A350 Blandford bypass with an annual average flow of 19 500 vehicles per day (2006 data) – a slight reduction on the 2004 figure of 19 800 vehicles per day.

Local Air Quality - Progress Report, April 2008.

#### 1 INTRODUCTION

# 1.1 General

Clean air is essential to a good quality of life. Poor air quality can cause or worsen many health problems and is linked to a number of breathing illnesses and cancers. The main source of air pollution in North Dorset is road traffic.

The amount of pollution a vehicle produces depends on its age, engine size and type of fuel burned. How well the vehicle is driven and maintained will also affect the amount of pollution produced.

Since 1995 North Dorset's work on air quality has been driven by the statutory duty placed on local authorities to manage air quality. Over the years the Local Air Quality Management process has required a number of technical reports to be prepared and submitted to the Department for Environment Food and Rural Affairs.

We also make comments on proposed planning applications where there is a potential to affect air quality.

# 1.2 Legal Provisions

Air Quality Progress Reports form part of the Local Air Quality Management (LAQM) system introduced in the Environment Act 1995 and subsequent Regulations. LAQM itself forms a key part in the UK Government's and Devolved Administrations' strategies to achieve the air quality objectives. The Government published the Air Quality Strategy for England, Scotland, Wales and Northern Ireland in January 2000. The Strategy sets objectives for seven pollutants which have been described for the purposes of local authorities' Local Air Quality Management duties under Part IV of the Environment Act. The seven regulated pollutants are:

- Carbon Monoxide
- Benzene
- 1,3-Butadiene
- Lead
- Nitrogen Dioxide
- Particulates (PM<sub>10</sub>)
- Sulphur Dioxide

Progress Reports should assist local authorities with the LAQM process in a number of ways, including:

- Helping to retain a profile for LAQM within the authority
- Providing a means for communicating air quality information to the public
- Making the next round of review and assessment easier (due in 2009)
- Helping authorities respond to requests for up-to-date information on air quality
- Providing information to assist in other policy areas
- Providing a timely indication of the need for further measures to improve air quality, rather than delaying until the next full round of review and assessment.

Local Air Quality - Progress Report, April 2008.

Under section 88(2) of the Act, local authorities are required to have regard to guidance when carrying out any of their duties under, or by virtue of, Part IV of the Act. In December 2003 DEFRA published the guidance document "Progress Report Guidance LAQM.PRG(03)", which has subsequently been updated on a number of occasions. This progress report has been compiled having regard to this guidance. The purpose of this Progress Report is to demonstrate that North Dorset District Council is working towards securing the air quality objectives across the local authority, as set out in the Air Quality Regulations 2000 (S.I. 2000/928) and Air Quality Amendment (England)(Amendment) Regulations 2002 (S.I. 2002/3043).

Air quality objectives are health-based, and therefore public exposure remains the focus of all air quality planning and assessment.

Where an area is identified as being at risk of exceeding an air quality objective, the local authority must declare an Air Quality Management Area (AQMA). North Dorset District Council has satisfied the Government following the first round of air quality review and assessment and again with both the 2003 and 2006 Updating and Screening Assessments that there were unlikely to be any exceedences of air quality objectives across the district. Similarly, Progress Reports for 2004, 2005 & 2007 were also accepted by consultants appointed by DEFRA to audit reports on their behalf.

In accordance with the guidance set out in chapter 2 of the Defra document 'Progress Report Guidance LAQM.PRG(03)', the overall aim of this report is to:

- report progress on implementing local air quality management; and
- report progress in achieving, or [as in the case at North Dorset] maintaining, concentrations below the air quality objectives.

The guidance considers these aims can be best achieved by addressing two matters:

- new monitoring results
- new local developments that might affect local air quality.

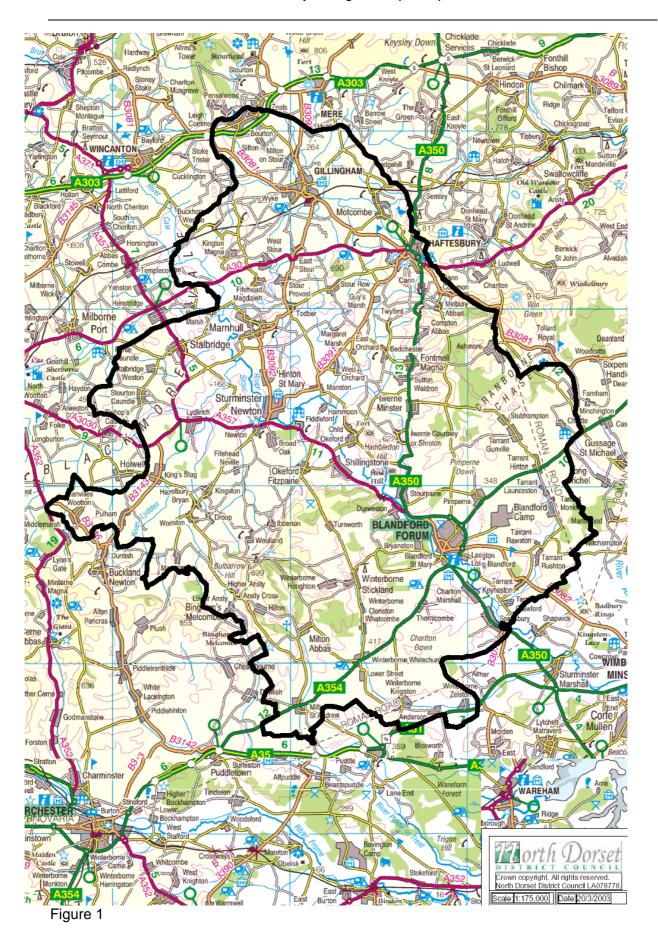
These two matters are discussed at paragraphs 4.1 & 4.2 below.

#### 1.3 North Dorset location

North Dorset is a largely unspoilt area embracing the five market towns of Blandford Forum, Gillingham, Shaftesbury, Stalbridge and Sturminster Newton. In the south and east of the District are the Dorset Downs and Cranborne Chase, both officially recognised as Areas of Outstanding Natural Beauty. The Blackmore Vale occupies the western part of the District. North Dorset is still one of the least developed parts of rural England. The rural area of North Dorset covers 235 square miles. The population is 66,713 (2006 mid-year estimate); this figure has increased significantly in recent years and is likely to continue increasing for the foreseeable future, with predictions of 68,600 by next year and 72,100 by 2014. The number of residential properties is approximately 29,619.

A map of the district is shown on the following page in figure 1.

#### Local Air Quality - Progress Report, April 2008.



Local Air Quality - Progress Report, April 2008.

### 2 OUTCOMES OF PREVIOUS AIR QUALITY ASSESSMENTS:

#### 2.1 Round 1 in North Dorset - 1999

The Stage 1 assessment of air quality concluded that there was no likelihood of exceedence of any of the air quality objectives in the district. There were no significant industrial or domestic sources and no roads over 20 000 vehicles per day (the criteria for Stage 2 review and assessment for nitrogen dioxide at that time). As a result, North Dorset District Council was not required to proceed to Stage 2 of the LAQM procedure.

# 2.2 Updating, Screening & Assessment - 2003

The purpose of the Updating, Screening and Assessment report ("USA") was to build upon the Round 1 report produced in 1999. The conclusion to the 2003 report stated:

The Updating and Screening Assessment for North Dorset District Council indicates that the objectives for all seven pollutants regulated by the Air Quality Regulations 2000 and the Air Quality (England) Amendment Regulations 2002 will be met by their target years. This is on the basis of having considered changes to the emission sources, relevant exposure, new objectives and any other changes that have taken place since the first round of assessment. North Dorset District Council is **not** therefore expected to move to a detailed assessment for any pollutant.

'USA' reports are required to be published at three-yearly intervals.

# 2.3 Updating and Screening Assessment - 2006

The Executive Summary to the 2006 report stated:

An Updating and Screening Assessment (USA) has been performed for the seven UK criteria pollutants in the District of North Dorset. The aim of this assessment is to determine whether there is the potential for exceedences of any of the UK national air quality objectives. If this potential is identified a Detailed Assessment is recommended.

The results of this USA indicate that a Detailed Assessment will not be required for any of the seven pollutants assessed. None of the UK air quality objectives are likely to be breached within North Dorset District.

Local Air Quality - Progress Report, April 2008.

#### 3 POLLUTANTS

# 3.1 Carbon Monoxide (CO)

The main source of carbon monoxide in the United Kingdom is road transport, which accounted for 67% of total releases in 2000. Annual emissions of CO have been falling since the 1970s, and are expected to continue to do so. Previous projections indicated that road transport emissions would decline by a further 42% between 2000 and 2005<sup>1</sup>.

Note: Information presented in boxes is the Air Quality Objective for each pollutant, and the result of each assessment taken from the 2006 Air Quality Updating & Screening Assessment.

# Relevant Carbon Monoxide (CO) Objective

UK Maximum daily running 8-hour mean to be achieved by 31 December 2003: 10mg/m<sup>3</sup>

#### **Updating & Screening Summary for Carbon Monoxide**

There are no very busy roads or junctions in North Dorset (i.e. single carriageway roads where the AADT>80,000, or dual carriageway roads where the AADT>120,000, or motorways where the AADT>140,000). The busiest road in the authority is the A354 (Blandford Bypass, south-eastern section) which has an AADT of 19,800\* (2004).

The assessment has indicated that the CO objective is unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment for this pollutant will not be required.

<sup>\*</sup> Note – this figure reduced to 19 500 in 2006

Local Air Quality - Progress Report, April 2008.

# 3.2 Benzene

The main sources of benzene emissions in the UK are petrol-engined vehicles, petrol refining, and the distribution and uncontrolled emissions from petrol station forecourts without vapour recovery systems. A number of [national] policy measures already in place, or planned for future years, will continue to reduce emissions of benzene.

Since January 2000, EU legislation has reduced the maximum benzene content of petrol to 1%, from a previous upper limit of 5%. The European Auto-Oil programme will further reduce emissions for cars and light-duty vehicles, and emissions of benzene from the storage and distribution of petrol are controlled by vapour recovery systems<sup>2</sup>.

# **Relevant Benzene Objectives**

UK running annual mean Objective to be achieved by 31 December 2003: 16.25µg/m³

UK annual mean Objective to be achieved by 31 December 2010: 5μg/m<sup>3</sup>

# **Updating & Screening Summary for Benzene**

There are no very busy roads or junctions in North Dorset (i.e. single carriageway roads where the AADT>80,000, or dual carriageway roads where the AADT>120,000, or motorways where the AADT>140,000). The busiest road in the authority is the A354 (Blandford Bypass, south-eastern section) which has an AADT of 19,800\* (2004).

There are no petroleum processes or other industrial processes that emit sufficient quantities of benzene within North Dorset DC, or in neighbouring authorities, to consider for the purpose of this assessment.

There are no petrol filling stations with an annual throughput of more than 2 million litres per year, near to a busy road (>30,000 vehicles per day), and within 10m of a sensitive receptor.

There are no major fuel depots within the authority.

The assessment has indicated that the benzene objectives are unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment for this pollutant will not be required.

<sup>\*</sup> Note – this figure reduced to 19 500 in 2006

Local Air Quality - Progress Report, April 2008.

# 3.3 1,3-Butadiene

The main source of 1,3-butadiene in the United Kingdom is emissions from motor vehicle exhausts. 1,3-butadiene is also an important industrial chemical and is handled in bulk at a small number of industrial premises. The increasing number of vehicles with three way catalysts will significantly reduce emissions of 1,3-butadiene in future years. Recently agreed further reductions in vehicle emissions and improvements to fuel quality, including those as part of the Auto-Oil programme, are expected to further reduce emissions. These measures are expected to deliver the air quality objective, and no further measures are thought to be needed<sup>3</sup>.

# Relevant 1,3-Butadiene Objective

UK Running annual mean Objective to be achieved by 31 December 2003: 2.25µg/m<sup>3</sup>

# **Updating & Screening Summary for 1,3-Butadiene**

There are no new industrial processes within North Dorset or within neighbouring authorities, nor are there any industrial sources with increased emissions, or new relevant exposure to consider for the purpose of this assessment.

The assessment has indicated that the 1,3-butadiene objective is unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment for this pollutant will not be required.

Local Air Quality - Progress Report, April 2008.

# 3.4 Lead (Pb)

Only those authorities with relevant locations in the vicinity of major industrial processes that emit significant quantities of lead, will need to progress beyond the Updating and Screening Assessment<sup>4</sup>.

The 2003 USA report stated that: "There are no AQMAs declared in respect of either of the lead objectives, with emissions of lead restricted to specific industrial activity such as alloys, battery manufacture and tank lining and piping".

# Relevant Lead (Pb) Objectives

UK Annual mean Objective to be achieved by 31 December 2004: 0.5µg/m<sup>3</sup> UK Annual mean Objective to be achieved by 31 December 2008: 0.25µg/m<sup>3</sup>

# **Updating & Screening Summary for Lead**

There are no new industrial processes within North Dorset or in the neighbouring authorities, nor are there industrial sources with increased emissions, or new relevant exposure to consider for the purpose of this assessment

The assessment has indicated that the lead objectives are unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment for this pollutant will not be required.

Local Air Quality - Progress Report, April 2008.

# 3.5 Nitrogen Dioxide (NO<sub>2</sub>)

Nitrogen dioxide ( $NO_2$ ) and nitric oxide ( $NO_3$ ) are both oxides of nitrogen, and are collectively referred to as nitrogen oxides ( $NO_x$ ). All combustion processes produce  $NO_x$  emissions, largely in the form of nitric oxide, which is then converted to nitrogen dioxide, mainly as a result of reaction with ozone in the atmosphere. It is nitrogen dioxide that is associated with the adverse effects upon human health.

The principal source of nitrogen oxides emissions is road transport, which accounted for about 49% of total UK emissions in 2000. Major roads carrying large volumes of high-speed traffic (such as motorways and other primary routes) are a predominant source, as are conurbations and city centres with congested traffic. The contribution of road transport to nitrogen oxides emissions has declined significantly in recent years as a result of various [national] policy measures, and further reductions are expected up until 2010 and beyond<sup>5</sup>.

# Relevant NO<sub>2</sub> Objectives Hourly mean

UK Objective to be achieved by 31 December 2005 (<18 times a year)  $200\mu g/m^3$  EU Objective to be achieved by 31 December 2010 (<18 times a year)  $200\mu g/m^3$ 

#### Annual mean

UK Objective to be achieved by 31 December 2005: 40μg/m<sup>3</sup> EU Objective to be achieved by 31 December 2010: 40μg/m<sup>3</sup>

# Updating & Screening Summary for NO<sub>2</sub>

There has been no change since the previous round of assessment; there are no narrow congested streets with residential properties close to the kerb where there is an AADT flow of above 10,000.

Since the previous round of Review and Assessment, no new junctions with an AADT of over 10,000 and with relevant exposure within 10 m of the kerb have been identified. The previous round of Review and Assessment predicted a maximum concentration at a sensitive receptor near to a junction of 17.1  $\mu$ g/m³ in 2005.

There has been no change since the previous USA; there are no busy streets where people may spend 1 hour or more close to traffic where there is an AADT flow of above 10,000.

There has been no change since the USA; there are no roads with unusually high flows of buses and/or HGVs (i.e. greater than 25%)

There have been no new roads constructed or proposed since the previous round of Review and Assessment.

No roads with an AADT of >10,000 have shown a significant increase (>25%) in traffic flow. There is no new relevant exposure.

There are no bus stations in North Dorset with relevant exposure within 10 m of the kerb.

There are no new industrial processes within North Dorset or within neighbouring authorities, nor are there industrial sources with increased emissions, or new relevant exposure to consider for the purpose of this assessment.

Local Air Quality - Progress Report, April 2008.

Nitrogen Dioxide (NO<sub>2</sub>) cont/....

There is one airfield in North Dorset which caters for light aircraft only. This is a small airfield that does not exceed the criteria for passengers or freight and will therefore not be considered further for the purpose of this assessment.

The assessment has indicated that the nitrogen dioxide objectives are unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment for this pollutant will not be required.

Local Air Quality - Progress Report, April 2008.

# 3.6 Particulates (PM<sub>10</sub>)

There are a wide range of emission sources that contribute to  $PM_{10}$  concentrations in the UK. (*Note:*  $PM_{10}$  refers to particles less than 10 microns in diameter). Primary particle emissions are derived directly from combustion sources, including road traffic, power generation, industrial processes, etc. Secondary particles are formed by chemical reactions in the atmosphere, and comprise principally of sulphates and nitrates. Coarse particles comprise emissions from a wide range of sources, including re-suspended dusts from road traffic, construction works, wind-blown dusts and soils, sea salt.

It is important to bear in mind the different emission sources, and their respective contributions to PM<sub>10</sub> concentrations, within the review and assessment process for several reasons:

- The expected reduction in particle emissions in future years is different for each source type. For example, emissions from road transport will be governed by new legislation on vehicle emission standards; emissions of secondary particles will be largely governed by controls over power generation, industrial and transport SO<sub>2</sub> and NO<sub>x</sub> emissions, both in the UK and in Europe; emissions of coarse particles are largely uncontrolled, and in general are not expected to decline in future years.
- The principal focus of Local Air Quality Management should be towards the control of emissions at *local* level<sup>6</sup>.

# Relevant PM<sub>10</sub> Objectives 24-hour mean

UK Objective to be achieved by 31 December 2004 (<35 times a year) 50μg/m³ Proposed EU Limit Value to be achieved by 31 December 2010 (<7 times a year) 50μg/m³

# **Annual mean**

UK Objective to be achieved by 31 December 2004:  $40\mu g/m^3$ 

Cont/...

Local Air Quality - Progress Report, April 2008.

Cont/....Particulates (PM<sub>10</sub>)

# **Updating & Screening Summary for PM<sub>10</sub>**

Since the previous round of Review and Assessment, no new junctions with an AADT of over 10,000 and with relevant exposure within 10 m of the kerb have been identified. The previous round of Review and Assessment predicted a maximum concentration, at a sensitive receptor near to a junction, of less than 22 µg/m³ (2004).

There has been no change since the previous round of assessment; there are no roads with unusually high flows of buses and/or HGVs (i.e. greater than 20%).

There have been no new roads constructed or proposed since the previous round of Review and Assessment.

No roads with an AADT of >10,000 have shown a significant increase (>25%) in traffic flow. There is no new relevant exposure.

There were no roads close to the objective during the second round of Review and Assessment (the greatest number of exceedences predicted in 2004, at a sensitive receptor, was 5).

There are no new industrial processes within North Dorset or within neighbouring authorities, nor are there industrial sources with increased emissions, or new relevant exposure to consider for the purpose of this assessment.

There are no known areas where significant domestic solid fuel burning takes place.

There are no landfill sites or opencast coal mines in North Dorset. The only quarries are small sandstone quarries (where no regular quarrying takes place), with no exposure within 1000m.

There are no poultry farms in the District where it is thought likely that emissions of PM<sub>10</sub> could contribute to exceedences of the PM<sub>10</sub> objectives.

There is one airfield in North Dorset which caters for light aircraft only. This is a small airfield that does not exceed the criteria for passengers or freight and will therefore not be considered further for the purpose of this assessment.

The assessment has indicated that the  $PM_{10}$  objectives are unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment for this pollutant will not be required.

Local Air Quality - Progress Report, April 2008.

# 3.7 Sulphur Dioxide (SO<sub>2</sub>)

The main source of sulphur dioxide in the UK is power stations, which accounted for more than 71% of emissions in 2000. There are also significant emissions from other industrial combustion sources. Domestic sources now only account for 4% of emissions, but can be locally much more significant. Road transport currently accounts for less than 1% of emissions.

Concentrations of SO<sub>2</sub> have fallen at all monitoring sites across the UK in recent years, and the objectives have only been exceeded at one site in Northern Ireland – this is associated with domestic coal burning which is still widespread in the area<sup>7</sup>.

# Relevant SO<sub>2</sub> Objectives 15-minute mean

UK Objective to be achieved by 31 December 2005 (<35 times a year): 266μg/m<sup>3</sup> **1-hour mean** 

UK Objective to be achieved by 31 December 2004 (<24 times a year): 350µg/m<sup>3</sup> **24-hour mean** 

UK Objective to be achieved by 31 December 2004 (<3 times a year): 125µg/m<sup>3</sup>

# Updating & Screening Summary for SO<sub>2</sub>

There are no new industrial processes within North Dorset or within neighbouring authorities, nor are there industrial sources with increased emissions, or new relevant exposure to consider for the purpose of this assessment.

There are no known areas where significant domestic coal (or smokeless fuel) burning takes place.

There are no known boilers of greater than 5MW that burn coal or oil in the District.

The District is land-locked, and there are no busy waterways.

There are no locations where diesel locomotives are regularly stationary for 15mins (there is one single-track line through approximately 13km of the District, with a passenger station at Gillingham, and no other railway track).

The assessment has indicated that the sulphur dioxide objectives are unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment for this pollutant will not be required.

Local Air Quality - Progress Report, April 2008.

#### 4 PROGRESS

# 4.1 New Monitoring Results

While the majority of local authorities undertake some form of air quality monitoring, there are a considerable number who do not. Even in those areas where monitoring is undertaken, this is frequently limited to defined areas (busy roads, junctions; near to known industrial pollution sources, etc). In order to provide meaningful data, monitoring should be undertaken over prolonged periods so that the data acquired reflects seasonal trends, meteorological variations, etc. LAQM.PRG(03) states: "... changes in concentrations occur from year to year due to weather conditions. It

"... changes in concentrations occur from year to year due to weather conditions. It is normal practice only to consider a trend as being significant when five years worth of data are available, although a longer timescale may be appropriate for some pollutants, e.g.  $PM_{10}$ ".

Historically, North Dorset has not routinely undertaken local air quality monitoring, as desk-top studies have indicated that this was not necessary. The First Stage Review and Assessment of Air Quality for North Dorset carried out in 1999, and the subsequent Updating, Screening and Assessment undertaken in 2003 confirmed that none of the pollutant thresholds was likely to be breached by their respective target years. The 2006 Updating and Screening Assessment has also concluded that "... the national air quality objectives for each pollutant are unlikely to be exceeded at any location in the District, and therefore a Detailed Assessment will not be required". This was based on the results derived from working through the guidance published by DEFRA, combined with the background pollutant concentrations from extrapolated data provided by the national monitoring network. All of the reports prior to this one have been subject to external auditing on behalf of DEFRA.

In view of the findings of the earlier investigations, it was determined that air quality monitoring was not necessary to inform any of the interim Progress Reports.

Local Air Quality - Progress Report, April 2008.

# 4.2 New developments that might affect local air quality.

The Guidance LAQM.PRG(03) states that items to include under this heading are:

- new industrial processes subject to control under Local Air Pollution Control or Integrated Pollution Prevention & Control schemes;
- new landfill sites, quarries etc, that have been granted planning permission;
- new developments with an impact on air quality, especially those that will significantly change traffic flows [but only if planning permission has been granted].

# 4.2.1 New industrial processes

A limited number of new processes or installations have been granted permits to operate under the relevant pollution control schemes in North Dorset since the Updating & Screening Assessment report was published in 2006. These include six dry cleaners, and one waste oil burner. The location in each case, coupled with the likely (very limited) emissions from each, indicates that none of them will have a significant negative impact upon air quality objectives, either individually or in combination.

# 4.2.2 New landfills, quarries

No new landfills or quarries have been granted planning permission or commenced operations in North Dorset since the Updating & Screening Assessment report was published in 2006.

# 4.2.3 New developments with an impact on air quality

Only developments which have been granted planning permission and are expected to have an impact on air quality need be included under this heading (LAQM.PRG(03) paragraph 2.07).

A number of large residential developments are underway in and around Gillingham in the north of the District. These are discrete developments predominantly on greenfield sites and not directly adjacent to major roads, and the planning applications were not accompanied by Environmental Impact Assessments. None of these developments is expected, by virtue of their content, location, etc., to have a significant impact upon, or to be affected by, air quality issues.

A major residential development to the east of Shaftesbury has been granted outline planning consent although development is not anticipated to commence for some time. The application for this development was accompanied by an E.I.A. The

Local Air Quality - Progress Report, April 2008.

possible re-routing of the A350 along a north-south corridor to the east of this area has been suggested and this may require more detailed consideration in the future.

However, it is anticipated that, should this road be built, it would lead to a significant improvement in air quality for those properties alongside the existing part of the A350 which runs adjacent to residential properties in Christie's Lane. It is also likely that the design of the new road, and the increased distance between the kerb and the new housing, would avoid any exceedences of traffic-related pollutants for future residents of these new properties. Any new road in this area would not be expected to give rise to a significant increase in traffic movements, but merely re-direct existing through-traffic away from Christie's Lane.

New housing developments are underway adjacent to the A354 Blandford by-pass and again, known traffic flows indicate that these properties will not be subject to exceedences of traffic-sourced pollutants. Redevelopment of the Hall and Woodhouse Brewery site will be subject to further consideration and planning controls.

In Sturminster Newton, development of the former cattle market site is nearing completion. This includes both residential and commercial development alongside the re-aligned road. Vehicle numbers (particularly) together with the anticipated distance between the kerb and the residential developments are again predicted to prevent exceedences of the air quality objectives.

#### 4.2.4 Road Traffic

In the absence of heavy industry, the most significant impact upon air quality in the district is the volume of road traffic. The 2006 *Updating, Screening and Assessment* report considered traffic flow data in more detail and determined that:

"There are no very busy roads or junctions in North Dorset (i.e. single carriageway roads where the AADT>80,000, or dual carriageway roads where the AADT>120,000, or motorways where the AADT>140,000). The busiest road in the authority is the A354 (Blandford Bypass, south-eastern section) which has an AADT of 19,800 (2004)".

Data provided by Dorset County Council shows that in 2006 (the last year for which data is available) this traffic count on this stretch of road had reduced slightly to an AADT of 19,500.

This data has also confirmed that, with one exception, daily average figures at the regular monitoring locations showed very little change in traffic flows (some slightly higher, some marginally lower) from 2004 figures. The one slightly greater increase was at the 'Blandford Bypass (East)' monitoring location, where the AADT had increased by 1,550 or 8.7%. However, the overall figure of 19,400 remains well below the threshold levels at which the regulated pollutants would breach air quality objectives.

Local Air Quality - Progress Report, April 2008.

#### 4.3 Additional Elements

# 4.3.1 Air Quality Planning Policies

The North Dorset District Council District-wide Local Plan

- Planning Policies are contained within statutory Local Plan, adopted in January 2003. Work has started on replacing this with a Local Development Framework in accordance with Regulations laid down in the Planning and Compulsory Purchase Act 2004. In the meantime, policies in the Local Plan are "saved".
- The "saved" Local Plan does not contain specific policies on air quality. However, policies generally promote environmental protection.
- Local Plan policies were subject to Environmental Assessment in accordance with the former DoE requirements.
- Local Plan policies are in accordance with the "sustainable development" aims set out in Regional Planning Guidance.

# 4.3.2 Dorset County Council Local Transport Plan

Dorset County Council have completed a number of key actions in the local transport plan which may have led to a reduction in car borne traffic and hence contribute to improved levels of air quality:

- Developing a network of safe cycle routes in the area, including the provision of the National Cycle Network through North Dorset.
- Speed management and environmental enhancement scheme in Blandford town centre
- Traffic management scheme in Stalbridge town centre
- Introduction and development of the 'Nordcat' accessible transport scheme
- Provision of a number of footpaths & cycle routes connecting employment areas to nearby towns & villages
- Implementing a 20mph zone in Blandford on a street passing 3 schools, a hospital and leisure centre
- Promoting the Safer Routes to School initiative and the National & International Walk to School Weeks.
- Speed management and environmental enhancement in Shaftesbury town centre

Local Air Quality - Progress Report, April 2008.

# 4.4 Air Quality Strategy

North Dorset has yet to develop an air quality strategy. This issue will be considered in due course by the Policy Directorate and in particular will consider how land use planning policy can influence air quality across the District. The Environmental Health & Development Control Services have an agreed protocol to ensure that relevant planning applications are referred for consultation in respect of environmental issues. The Environmental Health Office routinely examines planning lists to identify applications which should be 'called in' for consideration and comment.

The land use developments of any Air Quality strategy will be incorporated into the Local Development Framework as it is progressed (see 4.3.1).

Policies in the local development Framework will be assessed against the Sustainability Appraisal Framework which includes SA Objective 16 "minimise....air....pollution"

Local Air Quality - Progress Report, April 2008.

# **5 SUMMARY OF ISSUES**

- ♦ Previous air quality assessments in 1999, 2003 & 2006 have confirmed that concentration thresholds for the specific pollutants were not likely to be breached
- ♦ Traffic flows have not increased significantly, and are not above guideline values where further investigation is suggested; some traffic flows have reduced slightly
- No further industrial emission sources have been developed which would affect air quality
- Other planning developments of a residential nature are not considered likely to have a detrimental impact upon air quality
- ♦ Planning strategies generally promote environmental protection, and individual planning applications are considered having regard to air quality issues.
- ♦ It is therefore not considered necessary for the authority to undertake further assessment of any of the specified pollutants at this stage.

#### 6 CONCLUSIONS

- Previous Assessments have concluded that it has not been necessary to proceed to secondary stages of the air quality management regime.
- No breaches of the air quality objectives have been identified, or are anticipated.
- ♦ It has not been necessary to declare an Air Quality Management Area.

# Footnotes:

1.	Para.	2.03,	Technical	Guida	nce	LAQM.	TG(03)	published	by	Defra	&	the	Devolved
	Admir	istratio	ons										
2.	Para.	3.05 "	"	"	"	"	"	"	"	"		"	
3.	Para.	4.04 "	"	"	"	"	"	"	"	"		"	