



2016 Air Quality Annual Status Report (ASR)



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

Date: 30 June 2016

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29 September 2016

Dear Mr Slaughter

LOCAL AIR QUALITY MANAGEMENT: 2016 ANNUAL STATUS REPORT

Thank you for consulting the Department for Environment, Food and Rural Affairs on Test Valley Borough Council's 2016 Air Quality Annual Status Report (ASR).

Defra has reviewed the ASR and comments on the report are available in the appraisal report. Please take note of the comments.

The next Annual Status Report is due in 2017. Defra expects local authorities to upload a copy of the ASR to the Report Submission Website <http://laqm.defra.gov.uk/1rsw/> no later than 30 June 2017.

Yours sincerely

Tutu Aluko
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Local Authority:	Test Valley Borough Council
Reference:	ASR16-037
Date of issue	August 2016

Annual Status Report

The Report sets out the Annual Status Report, which forms part of the Review & Assessment process required under the Environment Act 1995 and subsequent Regulations.

The Test Valley Borough Council (TVBC) currently monitors for concentrations of nitrogen dioxide. Traffic is the main cause of air quality exceedences in the borough. Levels of this pollutant are declining and below the Air Quality Strategy Objectives at relevant locations. The local authority therefore has not declared any AQMAs.

The local authority does not have a specific air quality strategy, but it draws on various local and regional plans a strategies to minimise potential impacts on Air Quality within the area. These are: Hampshire Local Transport Plan (2011-2031); Test Valley Borough Council Local Plan (2011-2029) and the Climate Change Strategy which is taken from 'Building a Sustainable Test Valley (2012-2017). The Test Valley's priorities for the coming year are to continue monitoring concentrations of nitrogen dioxide across the Borough, ensure that all proposed development is subject to scrutiny to ensure that compliance with Policy E8 of the Council's Local Plan and work with neighbouring local authorities with regards to the non-compliance for nitrogen dioxide in the Southampton Urban Area.

The Test Valley does not currently monitor for particulate matter, however current data indicates that PM2.5 varies across the Borough with background concentrations of between 9.9µg/m3 and 13.3µg/m3 (Source: <https://uk-air.defra.gov.uk/data/laqm-background-home>). Key sources of PM2.5 include road traffic and industrial emissions. Whilst TVBC has only a limited role in road traffic management it will continue to work with Hampshire County Council and Highways England to reduce PM2.5 emissions wherever possible. The report does not make the link between PM2.5 and Public health very clear, so it could be that another measure in Table 2.1 could be to collaborate with the local Public Health team to identify geographical areas of concern with respect to air quality and the incidence rate of asthma for example.

The report details the many actions that are currently in place in the Borough to improve air quality in Table 2.1 (Progress on Measures to Improve Air Quality). It would be very

Test Valley Borough Council

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useful if a measure could be included linking PM2.5 with Public Health and a KPI for assessing the success of this.

On the basis of the evidence provided by the local authority the conclusions reached are acceptable for all sources and pollutants.

The next step for Test Valley Borough Council is to submit their next Annual Status Report in 2017.

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Commentary

The report is well structured, detailed, and provides the information specified in the Guidance. The following comments are made:

1. The local authority has identified the need to consider PM_{2.5} and this is supported. In future reports they could outline how they plan to work together with Public Health to address this health issue.
2. It would be very useful to develop KPIs to include in Table 2.1 so that it obvious how the measures being taken to improve air quality are being assessed.

This commentary is not designed to deal with every aspect of the report. It highlights a number of issues that should help the local authority either in completing the Updating and Screening Assessment adequately (if required) or in carrying out future Review & Assessment work.

Issues specifically related to this appraisal can be followed up by returning the attached comment form to Defra, Welsh Assembly Government, Scottish Government or DOE, as appropriate – or by emailing the form to reportappraisal@ttr-ltd.com.

For any other queries please contact the Local Air Quality Management Helpdesk:
Telephone: 0800 0327 953
Email: LAQMHelpdesk@uk.bureauveritas.com

Local Authority:	Test Valley Borough Council
Reference:	ASR16-037
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Appraisal Response Comment Form

Contact Name:	
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Comments on appraisal/Further information:

Test Valley Borough Council

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Executive Summary: Air Quality in Our Area

Air Quality in Test Valley

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}. The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³.

Due to the importance of air quality to the health of the nation, Test Valley is required to review and assess air quality within the Borough on a regular basis. This involves the production of reports on a three year cycle and this 2016 report is the second part of Round 6 of the assessment process requiring the submission of an Annual Status Report by 30th June 2016. The report is intended to maintain continuity in the Local Air Quality Management process and present the results of on-going monitoring of air quality pollutants within the Borough where emissions from a range of sources could adversely impact sensitive receptors.

This Annual Status Report includes the results of nitrogen dioxide diffusion tube monitoring carried out in 2015 has indicated a downward trend at 16 out of 17 sites and there is no evidence that the Annual Mean concentration of nitrogen dioxide may exceed the specific Air Quality Objective of 40µg/m³. Based on the findings of this report, Test Valley Borough Council has found no evidence that the levels of any other relevant pollutants may exceed the specific Air Quality Objectives and therefore has not identified the need to designate any Air Quality Management Areas.

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

Actions to Improve Air Quality

The Council takes its responsibilities for air quality very seriously and any proposals within the Borough are carefully assessed in accordance the Local Plan? Development that would or could generate potentially significant levels of pollution will only be permitted if it can be demonstrated that there would not be any adverse impact on human health, the natural environment or general amenity.

Test Valley has agreed to support Southampton City Council with their aim to improve air quality in the Southampton Urban Area agglomeration zone. The Air Quality Plan for Southampton Urban Area was published in December 2015 and Test Valley Borough Council will be working with our neighbouring local authorities (Southampton City Council, Winchester City Council and Eastleigh Borough Council) to target sources of nitrogen dioxide in the Southampton Urban Area (UK0019).

Local Priorities and Challenges

Although Test Valley has not identified any areas of non-compliant air quality from its monitoring network, some small areas in the south of the Borough near the Southampton City Council boundary, have been included in the Defra Air Quality Action Plan relating to the “Southampton Urban Area”. An assessment was undertaken and this indicted that the annual average limit value of $40\mu\text{g}/\text{m}^3$ for nitrogen dioxide was exceeded in 2013.

How to Get Involved

Test Valley Borough Council’s website provides a number of sources of information to enable members of the public to plan journeys using alternatives to private vehicle use.

- http://www.travelinesw.com/swe/XSLT_REQUEST?language=en&itdLPxx_link=home. (Journey Planner)
- <http://www.testvalley.gov.uk/resident/communityandleisure/cyclingwalking/> (Cycling and Walking)
- <http://www.hants.gov.uk/schooltravelplans/> (Hampshire County Council’s School Travel Plans)

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1 Local Air Quality Management

This report provides an overview of air quality in Test Valley Borough Council during 2015. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) 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 an exceedance is considered likely the local authority must 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. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Test Valley Borough Council to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England can be found in Table E.2 in Appendix E.

2 Actions to Improve Air Quality

Although Test Valley currently does not have any AQMAs, it does utilise a number of local and regional plans and strategies in order to minimise and/or reduce potential impacts on air quality within the Borough. A brief summary of these documents is set out below.

2.1 Local Transport Plan

Hampshire Local Transport Plan 2011 – 2031

Hampshire County Council's Local Transport Plan (LTP) was formally approved at a full meeting of the County Council in February 2011.

The LTP was written in two parts:

- Part A is a 20-year Strategy, which sets out a long-term vision for how the transport network of Hampshire will be developed over the next 20 years, and includes a policy (Policy E) to specifically deliver improvements in air quality.
- Part B was a three-year Implementation Plan setting out planned expenditure on transport over the period April 2011 to March 2014.

The LTP builds on the successes of previous local transport plans and looks to make improvements to the transport system which will benefit people living and working in Hampshire. It was produced following extensive consultation with the public and the County Council's strategic partners.

Policy E: To deliver improvements in air quality

Why?	Congestion creates higher levels of air pollution as queuing traffic, especially in more restricted or confined spaces, generates higher concentrations of vehicle emissions. Poor air quality can create or exacerbate health and respiratory problems, for example asthma. Air Quality Management Areas (AQMAs) are places where pollutant levels exceed government thresholds. Twenty AQMAs have been identified within urban areas across the sub-region. The White Paper on Public Health indicates that by April 2013, Unitary Authorities and County Councils will be given funding and responsibility for improving public health.
How?	The Transport for South Hampshire authorities will work with key partners, environmental health professionals and transport operators to mitigate the impacts of traffic on air quality. The principal causes of poor air quality will be addressed by implementing a strategic area-

	wide approach within each urban centre to minimise the cumulative effect of road transport emissions. This can be achieved through measures promoting modal shift towards public transport modes, walking and cycling, reducing single occupancy car journeys. Tackling congestion at hotspots can also improve air quality.
Delivery Options	<ul style="list-style-type: none"> • Air Quality Management Areas and Air Quality Action Plans; • Promotion of cleaner, greener vehicle technologies e.g. alternative fuels; • Car Share Schemes; • Support for and similar schemes?;
Outcomes	<ul style="list-style-type: none"> • Improved air quality & environment, and reduced greenhouse gas emissions; and • Promoting a higher quality of life.

2.2 Planning Policy Documents

Test Valley Borough Council's Local Plan (2011-2029) includes a policy which considers development for approval if the proposal will not have an adverse impact on the environment, including discharges or emissions to air and the extracts from the relevant policy are reproduced below.

Policy E8: Pollution

Development will be permitted provided that it does not result in pollution which would cause unacceptable risks to human health, the natural environment or general amenity. Development that would or could potentially generate pollution will only be permitted if it can be demonstrated that there would not be any adverse impact on human health, the natural environment or general amenity.

Development which is sensitive to pollution will only be permitted if the intended users are not subject to unacceptable impact from existing nearby uses having taken account of proposed mitigation measures.

7.61 The control of pollution is a complex process involving both the Council and other statutory bodies. The National Planning Policy Framework is clear that the impact of pollution is a material planning consideration.

7.62 Where development is proposed on or adjoining land which is known, or suspected, to contain or cause pollution the Council will require that all practicable and effective measures to investigate and remediate the site have been undertaken. It is the developer's responsibility to ensure that the site is safe for development.

7.63 Applications for development which are either likely to generate or are sensitive to

pollution will require the submission of the relevant assessment based on current guidance and/or best practice. Advice on which assessment to use can be obtained from the Council's Housing and Environmental Health Service.

7.64 Where mitigation measures are proposed the Council will need to be convinced that the proposed measures will be effective with respect to human health, water sources and the wider environment. The provision of these measures should be in place at an early stage of the development.

Air

7.70 Air quality within the Borough is generally good. There are no Air Quality Management Areas within the Borough. Recent monitoring by the Council has identified a modest decrease in air pollution levels. However, there are areas of the Borough where the air quality requires improving. They are generally in those areas close to major roads where there is a high volume of vehicular movements. To improve air quality proposals should reduce the reliance on the private car and support alternative modes.

2.3 Climate Change Strategy

Summary of 'BUILDING A SUSTAINABLE TEST VALLEY, Sustainability Strategy 2012 – 2017'

Introduction

The Council has a range of responsibilities in the way it delivers its services, including seeking to promote sustainable practices. This incorporates a range of issues and areas of focus, such as reducing demand on resources and using them more wisely (including energy and materials), adapting to a changing climate and reducing expenditure on energy and fuel.

Background

The environmental aspects of the Government's vision covers a range of issues, in particular tackling a changing climate (mitigation and adaptation) and protecting and enhancing the natural environment. Both of these issues are important in Test Valley and the links between the two are recognised.

Achievements to date

In 2008 the Council signed the Nottingham Declaration and embarked upon a number of initiatives including adoption of a Carbon Management Plan and Sustainability Strategy, undertaking a Green Fleet Review and preparing a Climate Change Adaptation Plan. Through implementing the actions set out in these documents we have reduced our carbon dioxide emissions and promoted the theme of sustainability in the running of the Council. By the end of the financial year 2010/11, the Council's carbon dioxide emissions had reduced by approximately

13.4% and by 2017, the Council will seek to reduce its carbon dioxide emissions by a further 10% against a baseline year of 2010/11.

Vision and Objectives

The Council's vision is: "To be an organisation of excellence committed to improving the quality of life of all the people of Test Valley".

This Strategy will help to deliver the Council's Vision and focuses on a number of objectives which are set out below:

- Ensure sustainability is incorporated into our procedures and policies
- Procure materials and resources from more sustainable sources
- Reduce our emissions of carbon dioxide and other greenhouse gases
- Through working with the residents of the Borough, reduce the amount of household waste collected, whilst increasing the proportion which is re-used, recycled or composted
- Reduce our water consumption
- Adapt to a changing climate to deliver a more robust estate and working practices
- Promote biodiversity and the positive management of Sites of Importance for Nature Conservation (SINCs) for which the Council is responsible
- Work with partner organisations and the community to preserve and enhance the local environment and quality of life of those living and working in the Borough
- Progress schemes which have an environmental benefit where there is a sound business case.

Key Themes and Areas for Action

A number of themes have been identified as a focus for action within Test Valley. They have been grouped by area of work rather than environmental / sustainability issue. It will be important to ensure that local and national policies and objectives for each of these themes are integrated into our work and operations.

The Council's key themes are:

- Policy development and implementation
- Internal practices and procedures
- Transport and travel
- Managing the Council's estate
- Managing green open spaces and biodiversity
- Partnership working
- Community involvement

Implementation and Monitoring

The actions associated with the key themes will provide the focus for project delivery within the Borough, in some cases these can be implemented by the Council alone, with others needing the support of partners. Monitoring of progress in delivering the actions will be undertaken on an annual basis through the production of a monitoring report and additional actions may be identified which would provide further opportunities for partnership working.

Conclusion

The implementation of this strategy is intended to support the delivery of the Council's objectives, incorporating sustainability into our procedures and policies and ensuring the sustainable use of resources. There should also be a 10% reduction of carbon dioxide emissions through the proposed actions.

2.4 Progress and Impact of Measures to address Air Quality in Test Valley Borough Council

Test Valley Borough Council has a number of measures in place during the current reporting year of 2015 which have direct and indirect benefits in the pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.1 and copies of the main reference plans/ strategies can be found via the web-links listed below:

Local Transport Plan (2011 – 2031)

<http://www3.hants.gov.uk/transport/local-transport-plan.htm>

Test Valley Borough Council's Local Plan (2011 – 2029)

<http://www.testvalley.gov.uk/resident/planningandbuildingcontrol/planningpolicy/local-development-framework/dpd/>

Sustainability Strategy (2012 – 2017)

<http://www.testvalley.gov.uk/aboutyourcouncil/corporatedirection/environmentandsustainability/environmental-strategies> and the latest update:

<http://www.testvalley.gov.uk/assets/files/8961/150630-Commitments-Update-June-2015.pdf>

Test Valley's priorities for the coming year are to continue monitoring concentrations of nitrogen dioxide across the Borough, ensure that all proposed development is subject to scrutiny to ensure that compliance with Policy E8 of the Council's Local Plan and work with our neighbouring local authorities with regards to the non-compliance for nitrogen dioxide in the Southampton Urban Area.

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
1	Bargain Farm, Nursling P&R	Alternatives to private vehicle use	Bus based Park & Ride	TVBC	Complete	tbc	Site allocated in Borough Local Plan. 2011-2019 Policy T3	Site located close to Southampton Urban Area (UK0019)	Feasibility study completed.	On hold	
2	Car sharing for travel to work and visits	Alternatives to private vehicle use	Car & lift sharing schemes	TVBC	Completed 2002	ongoing	No	NA		Ongoing	
3	Grateley and Andover Railway stations	Alternatives to private vehicle use	Rail based Park & Ride	TVBC	Completed	ongoing	No	NA	Andover parking capacity increased	Summer 2016	
4	Salary sacrifice for bicycles	Alternatives to private vehicle use	Other	TVBC	Completed 2012	ongoing	No	NA		Ongoing	
5	New car purchase scheme	Alternatives to private vehicle use	Other	TVBC	Completed 2014	ongoing	No	NA		Ongoing	
6	Rail season ticket loans	Alternatives to private vehicle use	Other	TVBC	Completed 2014	ongoing	No	NA	Poor uptake		Now ceased
7	Risk based charging for permits	Environmental Permits	Environmental charges through permit systems	TVBC		ongoing	Maximise number of low risk permits	NA	47 out of 48 permitted processes with Low Risk Scores	Ongoing	
8	Co-op Distribution Centre, Andover Airfield Business Park	Freight and Delivery Management	Route Management Plans/Strategic routing strategy for HGV's	TVBC	Completed 2010	Utilising cameras on 'barred' routes to fine vehicles not adhering to the agreed routing.	No	NA	Number of vehicles not adhering to agreed routing?	Ongoing	
9	Procurement of services from 3 rd parties	Policy Guidance and Development Control	(Sustainable) Procurement Guidance	TVBC	Completed 2012	Ongoing	No	NA		Ongoing	

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
10	Zero Emissions Vehicles	Promoting Low Emission Transport	Public Vehicle Procurement	TVBC	Completed 2015	2 New Electric Vehicles Purchased	No	NA		Ongoing	http://www.testvale.gov.uk/news/2016/mar/council-switches-green-miles/
11	Electric Vehicle Recharging Points	Promoting Low Emission Transport	EV recharging	TVBC	Completed 2015	2 EV recharging points installed at Romsey Sports Centre	No	NA		Ongoing	
12	Promotion of use of vehicles with best Environmental standards	Promoting Low Emission Transport	Taxi emissions incentives	TVBC	Completed 2014	Ongoing	No	NA		Ongoing	Review and update in 2016
13	Taxi licensing	Promoting Low Emission Transport	Taxi Licensing Conditions	TVBC	Completed 2014	Ongoing	No	NA		Ongoing	Review and update in 2016
14	TVBC staff working from home	Promoting Travel Alternatives	Encourage/ Facilitate home working	TVBC	Complete	Ongoing	No	NA		Ongoing	
15	Travel Plan	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	TVBC	Completed 2002	Promoted via the Council's intranet to all staff.	No	NA		Ongoing	
16	Travel planning for staff	Promoting Travel Alternatives	Personalised Travel Planning (PTP)	TVBC	Completed 2012	Complete	No	NA	Poor uptake by staff	Complete	PTP was offered to all staff
17	Promote rail services for work and personal journeys.	Promoting Travel Alternatives	Promote use of rail	TVBC	Completed 2002	Ongoing	No	NA		Ongoing	
18	Cycling events and activities within the Borough and nearby – e.g. Bike Week.	Promoting Travel Alternatives	Promotion of cycling	TVBC	Completed 2002	Ongoing	Events/activity monitored	NA			

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
19	Walking as a sustainable means for travel for staff and residents for short journeys within the settlements of Andover and Romsey.	Promoting Travel Alternatives	Promotion of walking	TVBC	Completed 2002	Ongoing	Participation monitored	NA		Ongoing	
20	'Walk to School' schemes	Promoting Travel Alternatives	School Travel Plans	Hampshire County Council	Completed 2000	Ongoing	Participation monitored	NA		Ongoing	
21	Community travel plans for large mix use developments have been secured, promoted and delivered the Council	Promoting Travel Alternatives	Other	TVBC	Completed 2001	Ongoing	No	NA		Ongoing	
22	Walking and cycling guides have been produced for TV and Andover and Romsey.	Public Information	Via leaflets	TVBC	Completed 2005	Ongoing	No	NA		Ongoing	
23	The above guides are also available via the Council's website	Public Information	Via the Internet	TVBC	Completed 2010	Ongoing	No	NA		Ongoing	
24	'20 is plenty' outside a number of schools in Test Valley	Traffic Management	Reduction of speed limits, 20mph zones	TVBC	Completed 2009	Ongoing	No	NA		Ongoing	
25	New developments in Andover and Romsey have provided infrastructure to attempt to give priority (bus only underpass/arch and bus gates	Traffic Management	Bus priority	TVBC	Completed 2002	Ongoing	No	NA		Ongoing	

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
26	There are two QBP in Test Valley on high frequency bus routes linking urban areas	Transport Planning and Infrastructure	Bus route improvements	TVBC	Completed 2001	Ongoing	No	NA		Ongoing	
27	SPD Cycle Strategy adopted by Council	Transport Planning and Infrastructure	Cycle network	TVBC	Completed 2009	Ongoing	No	NA		Ongoing	
28	Developer contributions funded enhancement of Andover Bus Station and the financial support of new/existing services in Andover and Romsey.	Transport Planning and Infrastructure	Public transport improvements / Interchanges stations and services	TVBC	Completed 2002		No	NA		Andover Bus Station completed 2013 + ongoing support	
29	CPC driver training for relevant staff	Vehicle Fleet Efficiency	Driver Training and ECO driving aids	TVBC	Completed	Ongoing	No	NA		Ongoing	
30	Regular emissions testing of Council vehicle fleet	Vehicle Fleet Efficiency	Testing Vehicle Emissions	TVBC	Completed	Ongoing	No	NA		Ongoing	

2.5 PM_{2.5} – Local Authority Approach to Reducing Emissions and or Concentrations

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM_{2.5} has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Although Test Valley does not currently monitor for Particulate Matter, current data indicates that PM_{2.5} varies across the Borough with background concentrations of between 9.9µg/m³ and 13.3µg/m³ (Source: <https://uk-air.defra.gov.uk/data/laqm-background-home>).

Key sources of PM_{2.5} include road traffic and industrial emissions. Whilst TVBC only has a limited role in road traffic management it will continue to work with Hampshire County Council and Highways England to reduce PM_{2.5} emissions wherever possible.

Table 2.1 includes a list of existing measures, (e.g. No's 1-6: Alternatives to Private Vehicle Use and No's 14-21: Promoting Travel Alternatives) which not only have the potential to reduce concentrations of PM_{2.5} but are likely to have a positive impact on other atmospheric pollutants including nitrogen dioxide and PM₁₀.

In addition, it is envisaged that emissions of particulate matter including PM₁₀, will be controlled and reduced wherever possible through the development control framework and the Environmental Permitting regime.

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Test Valley Borough Council does not currently carry out any automatic (continuous) monitoring of any pollutants.

3.1.2 Non-Automatic Monitoring Sites

Test Valley Borough Council undertook non- automatic (passive) monitoring of NO₂ at 17 sites during 2015. Table A.2 in Appendix A shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) and bias adjustment for the diffusion tubes are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for “annualisation” and bias and further details on adjustments are provided in Appendix C. In addition, nitrogen dioxide trend data for the period 2011 – 2015 is provided in Appendix E. These trend charts indicate small to moderate decreasing trends in concentrations of nitrogen dioxide in 16 out of 17 sites within the Borough. The only location which is showing a very small increasing trend over this 5-year period is ROM8 – Plaza Roundabout, Romsey.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.3 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past 5 years with the air quality objective of 40µg/m³.

For diffusion tubes, the full 2015 dataset of monthly mean values is provided in Appendix B. Based on the results of the nitrogen dioxide diffusion tubes monitoring, no exceedances of the air quality objective have been identified at any of the 17 sites. To date, no AQMA have been designated within Test Valley and based on the results of nitrogen dioxide diffusion tube monitoring during 2015 the Council have no plans to consider any such AQMA designation.

3.2.2 Particulate Matter (PM₁₀)

Test Valley does not currently monitor PM₁₀ concentrations within the Borough.

3.2.3 Particulate Matter (PM_{2.5})

Test Valley does not currently monitor PM_{2.5} concentrations within the Borough.

3.2.4 Sulphur Dioxide (SO₂)

Test Valley does not currently monitor SO₂ concentrations within the Borough.

4 New Local Developments/Planning Applications

4.1 Road Traffic Sources

Test Valley Borough Council has not identified any new road traffic sources since the Updating & Screening Assessment Report was produced in April 2015.

4.2 Other Transport Sources

Test Valley Borough Council has not identified any significant new transport sources since the Updating & Screening Assessment Report was produced in April 2015.

4.3 Industrial Sources

Test Valley Borough Council has identified one new industrial source of air pollution since the Updating & Screening Assessment Report was produced in April 2015. Further information about this 'Electrical Generation Facility' can be found in Section 4.6 (page 20).

4.4 Commercial & Domestic Sources

Test Valley Borough Council has not identified any significant new domestic sources of air pollution since the Updating & Screening Assessment Report was produced in April 2015, but has identified a number of commercial developments.

4.5 New Developments with Fugitive or Uncontrolled Sources

Test Valley Borough Council has not identified any new developments with fugitive or uncontrolled sources since the Updating & Screening Assessment Report was produced in April 2015.

4.6 Planning Applications submitted in 2015 with Potential Air Quality Implications

Test Valley Borough Council has received a number of planning applications during 2015 for new large-scale developments which have possible implications for local air quality. Where air quality assessments have been carried out, these indicate that there is no likelihood of a breach of any current air quality objectives. A brief summary of these applications are listed on pages 19-21.

Fields Farm, Land East of Rownhams Lane, Rownhams (15/00355/OUTS)

- Outline application for demolition of one dwelling and outbuilding and erection of up to 140 dwellings (Use Class C3) including access, associated landscaping, open space and management of the SINC.
- An Air Quality Assessment was submitted in support of the application which has demonstrated that the Magnitude of Change was assessed as 'Imperceptible' and the Significance of Change as 'Negligible'.
- Permission was refused but the application is now the subject of a planning appeal which is due to start in August 2016.

Land East of Rownhams Lane and South of M27, Rownhams (15/00998/OUTS)

- Demolition of two dwellings and existing farmhouse and associated farm buildings; the construction of up to 320 residential dwellings and a 60 unit extra care facility; the construction of a livery comprising stables for up to 30 horses and manège; the change of use of land from agricultural to paddocks and associated road/footway/cycleway provision, open space and landscaping, surface water attenuation and ancillary works.
- The Air Quality Assessment submitted in support of the application and has indicated that the impact on predicted NO₂ and PM₁₀ concentrations was assessed as 'Negligible'.
- This planning application was withdrawn by the applicant in July 2015.

Land North of Foxcotte Tower, Foxcotte Lane, Andover (15/01582/OUTN)

- Outline application for residential development of 175 dwellings, highways and associated infrastructure, public open space and landscaping.
- A 'basic' air quality screening review was carried out and a letter was submitted in support of the application and relied on background concentrations of NO₂ and PM₁₀ (9.9 and 16.6 µg/m³ respectively) being well below the annual mean air quality objectives for these pollutants.
- This planning application was refused in November 2015.

Land At Redbridge Lane, Nursling (15/01763/FULLS)

- Erection of 326 dwellings, construction of access, footpaths, cycleways, areas of open space, landscaping, drainage infrastructure and other associated infrastructure.
- An Air Quality Assessment was submitted in support of the application and has indicated that the impact on predicted concentrations of NO₂, PM₁₀ and PM_{2.5} as a result of the development was assessed as 'Negligible'.
- Planning permission for this development was granted in February 2016.

Land Adjacent to Bridge Farm, Romsey Road, West Wellow (15/01924/OUTS)

- Outline planning permission for up to 115 residential dwellings (including up to 40% affordable housing) introduction of structural planting and landscaping, informal public open space and children's play area, surface water attenuation, vehicular access point from Buttons Lane and associated ancillary works. All matters to be reserved with the exception of the main site access.
- A 'basic' air quality screening review was carried out and a letter was submitted in support of the application and relied on background concentrations of NO₂ and PM₁₀ (9.7 and 15.9 µg/m³ respectively) being well below the annual mean air quality objectives for these pollutants.
- This planning application was refused in January 2016.

Electricity Generation Facility, Nursling (15/01992/FULLS)

- Construction and operation of an emergency standby electricity generation facility.
- Planning permission granted subject to conditions in December 2015 and included a conditions requiring the applicant to "ensure that emissions to air associated with the approved energy plant are efficiently abated throughout the life of the plant" in accordance with Test Valley Borough Local Plan policy HAZ03.

Crematorium at Ridge Lane, Romsey (15/02328/FULLS)

- Construction of a crematorium, car parking facilities, access road, garden of remembrance, landscaping, service yard and associated works. Permission granted subject to conditions in December 2015.
- The Crematorium will comprise of a single Facultatieve Technologies FTIII cremator fuelled by mains gas. The FTIII cremator and flue gas treatment plant for mercury abatement fully comply with the requirements of PG5/2 (12) and will require an Environmental Permit in order to operate this new facility.

Biomass Boiler at Norman Court School, West Tytherley (15/02364/FULLS)

- Construction of portal frame building to house Biomass boiler and associated equipment, hot water generated to be pumped to main building via underground pipes connected to heating system in main building and formation of new estate access road.
- An Air Quality Assessment (Executive Summary attached below) was submitted in support of the application and demonstrated that predicted concentrations of NO₂ and PM_{2.5} will be well below the air quality objectives at the worst-case locations.
- Planning permission was granted subject to conditions in January 2016.

Picket Twenty Extension Site, London Road, Andover (15/03041/FULLN)

- The erection of 582 homes (including 233 affordable homes), public open spaces (including play areas and an extension to the Harewood Common buffer zone), allotments and associated infrastructure. Access from Picket Twenty Way and from Phase 4 of the approved Picket Twenty new community.
- No Air Quality Assessment was submitted with this application.
- The planning application was withdrawn by the applicant in March 2016.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
			Test Valley Borough Council does not currently operate any automatic monitoring sites							

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Table A.2 – Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	Easting OS Grid Ref	Northing OS Grid Ref	Pollutants Monitored	In AQMA ?	Distance to Relevant Exposure (m) ⁽¹⁾⁽²⁾	Distance to kerb of nearest road (m) ⁽³⁾	Tube collocated with a Continuous Analyser?	Approx. Height (m)
ROM1	Station Road	Urban background	435382	121377	NO ₂	N	0m	N/A	N	1.8m
ROM2	Cherville Street	Roadside	435135	121461	NO ₂	N	0m	1m	N	2m
ROM3	Bell Street	Roadside	435205	121147	NO ₂	N	0m	1.3m	N	2.4m
ROM5A	Palmerston Street (west)	Roadside	435474	121089	NO ₂	N	3m	1.1m	N	2m
ROM7	Palmerston Street (east)	Roadside	435480	121103	NO ₂	N	0m	2.3m	N	2m
ROM8	Plaza Roundabout	Roadside	435867	121277	NO ₂	N	-2m	4.5m	N	1.8m
ROM9	Alma Road (south)	Roadside	435697	121244	NO ₂	N	0m	2m	N	2m
ROM10	Alma Road (middle)	Roadside	435630	121403	NO ₂	N	6m	2.6m	N	2m
CHIL12	Chilworth Road	Roadside	441760	118091	NO ₂	N	18m	1m	N	2.4m
CHIL13	Winchester Road, Chilworth	Intermediate	442137	117670	NO ₂	N	0m	24m	N	2m
CHIL14	Bracken Place	Intermediate	442264	117625	NO ₂	N	0m	23m	N	1.5m
AND15	Weyhill Road	Intermediate	435923	145408	NO ₂	N	0m	14m	N	1.5m
AND19	Alexandra Road	Urban background	435848	145599	NO ₂	N	12m	N/A	N	1.5m
AND20	Humberstone Road (east)	Kerbside	436499	144935	NO ₂	N	6m	1.8m	N	2m
AND22	Humberstone Road (west)	Urban background	436362	144854	NO ₂	N	8.5m	N/A	N	2m
AND23	Barlows Lane, (north)	Urban background	435865	144430	NO ₂	N	0m	N/A	N	1.5m
AND25	Barlows Lane, (south)	Roadside	435741	144232	NO ₂	N	4m	1.8m	N	2.4m

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).

(2) A minus distance indicates that monitoring site is at a location of exposure further from the source than the nearest façade of a residential property.

(3) N/A if not applicable

Table A.3 – Annual Mean NO₂ Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2015 (%) ⁽²⁾	NO ₂ Annual Mean Concentration (µg/m ³) ⁽³⁾				
					2011	2012	2013	2014	2015
ROM1	Urban background	Diffusion Tube	100	100	17.5	15.5	15.1	15.6	14.9
ROM2	Roadside	Diffusion Tube	100	100	18.8	17.1	19.8	15.8	14.2
ROM3	Roadside	Diffusion Tube	91.6	91.6	23.2	20.3	21.6	20.9	20.1
ROM5A	Roadside	Diffusion Tube	100	100	37.9	33.6	33.4	35.0	34.2
ROM7	Roadside	Diffusion Tube	100	100	33.0	29.5	29.4	32.1	27.0
ROM8	Roadside	Diffusion Tube	100	100	30.3	28.4	27.6	35.2	28.1
ROM9	Roadside	Diffusion Tube	100	100	30.2	27.8	30.2	29.4	26.5
ROM10	Roadside	Diffusion Tube	100	100	30.1	29.6	30.8	28.6	27.1
CHIL12	Roadside	Diffusion Tube	100	100	38.8	36.9	35.1	37.7	30.9
CHIL13	Intermediate	Diffusion Tube	100	100	27.8	25.2	26.0	24.9	23.5
CHIL14	Intermediate	Diffusion Tube	100	100	29.0	26.9	28.0	28.0	25.5
AND15	Intermediate	Diffusion Tube	100	100	21.8	20.2	18.5	18.2	17.0
AND19	Urban background	Diffusion Tube	100	100	15.0	14.9	14.8	13.8	12.8
AND20	Kerbside	Diffusion Tube	91.6	91.6	18.9	18.8	20.2	19.2	17.7
AND22	Urban background	Diffusion Tube	100	100	14.7	14.7	15.4	13.6	12.3
AND23	Urban background	Diffusion Tube	100	100	15.5	14.6	15.7	14.9	13.4
AND25	Roadside	Diffusion Tube	100	100	20.5	19.8	17.4	16.6	16.1

Notes: The NO₂ annual mean objective level is currently 40µg/m³.

(1) data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per Technical Guidance LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Table A.4 – 1-Hour Mean NO₂ Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2015 (%) ⁽²⁾	NO ₂ 1-Hour Means > 200µg/m ³ ⁽³⁾					
					2011	2012	2013	2014	2015	
		Test Valley Borough Council does not currently operate any automatic monitoring sites								

Notes: Exceedances of the NO₂ 1-hour mean objective (200µg/m³ not to be exceeded more than 18 times/year) are shown in **bold**.

(1) data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) If the period of valid data is less than 90%, the 99.8th percentile of 1-hour means is provided in brackets.

Table A.5 – Annual Mean PM₁₀ Monitoring Results

Site ID	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2015 (%) ⁽²⁾	PM ₁₀ Annual Mean Concentration (µg/m ³) ⁽³⁾				
				2011	2012	2013	2014	2015
	Test Valley Borough Council does not currently monitoring for PM ₁₀							

Notes: Exceedances of the PM₁₀ annual mean objective of 40µg/m³ are shown in **bold**.

(1) data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) All means have been “annualised” as per Technical Guidance LAQM.TG16, valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Table A.6 – 24-Hour Mean PM₁₀ Monitoring Results

Site ID	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2015 (%) ⁽²⁾	PM ₁₀ 24-Hour Means > 50µg/m ³ ⁽³⁾				
				2011	2012	2013	2014	2015
	Test Valley Borough Council does not currently monitoring for PM ₁₀							

Notes: Exceedances of the PM₁₀ 24-hour mean objective (50µg/m³ not to be exceeded more than 35 times/year) are shown in **bold**.

(1) data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) If the period of valid data is less than 90%, the 90.4th percentile of 24-hour means is provided in brackets.

Table A.7 – PM_{2.5} Monitoring Results

Site ID	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2015 (%) ⁽²⁾	PM _{2.5} Annual Mean Concentration (µg/m ³) ⁽³⁾				
				2011	2012	2013	2014	2015
	Test Valley Borough Council does not currently monitoring for PM _{2.5}							

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) All means have been “annualised” as per Technical Guidance LAQM.TG16, valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Table A.8 – SO₂ Monitoring Results

Site ID	Site Type	Valid Data Capture for monitoring Period (%) ⁽¹⁾	Valid Data Capture 2014 (%) ⁽²⁾	Number of Exceedances (percentile in bracket) ⁽³⁾		
	Test Valley Borough Council does not currently monitoring for SO ₂					

Notes: Exceedances of the SO₂ objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year)

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%)

(3) If the period of valid data is less than 90%, the relevant percentiles are provided in brackets.

Appendix B: Full Monthly Diffusion Tube Results for 2015

Table B.1 – NO₂ Monthly Diffusion Tube Results - 2015

Site ID	NO ₂ Mean Concentrations (µg/m ³)													Annual Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted ⁽¹⁾	
ROM1	16.7	23.4	27.1	21.3	14	10.4	11.9	17.5	18.5	22.5	18.3	19.6	18.4	14.9	
ROM2	23	24.4	25.1	20.3	14.5	10.3	10.8	13	15.4	20.7	15.6	17.7	17.6	14.2	
ROM3	29	28.7	28.4	24.4	missing	18.3	15.8	18.5	41.8	27.1	20.1	20.8	24.8	20.1	
ROM5A	48.5	49.9	47	36.4	38.2	38.4	35.2	43.7	42.1	43	44.6	39.3	42.2	34.2	
ROM7	41.3	44.1	44.9	35.4	30.6	27.3	28.1	19.3	21.5	43.7	32.3	32	33.4	27.0	
ROM8	52.4	52.4	41.5	23.5	32.5	25.4	29.6	18	32.6	32.5	39.2	37.2	34.7	28.1	
ROM9	40.8	35.1	40.3	33.7	31.5	31.6	29.5	18.3	31.4	36.5	34.4	29.1	32.7	26.5	
ROM10	43.5	42.8	43.2	33	30.5	17	24.7	18.6	39.7	46.5	32.5	30.2	33.5	27.1	
CHIL12	47.5	37.1	48.7	28.8	33.7	36.3	37.4	21.5	43	23	46.4	54.1	38.1	30.9	
CHIL13	30.4	33.7	31.3	32.1	24.6	22.1	19.7	26.6	28.3	35	29.9	35.1	29.1	23.5	
CHIL14	34.4	38.2	39.3	36.8	25.7	22.4	22.9	30.5	32.5	37.4	30	27.9	31.5	25.5	
AND15	30.1	27.9	28.6	20	14.2	12.6	14.1	16.9	21.1	27	20	19.3	21.0	17.0	
AND19	22.8	21.9	20.7	16.6	12.4	7.7	8.9	12.6	16.2	21.5	13.6	15.4	15.9	12.8	
AND20	26.7	27.3	29.9	23.9	16.6	13.2	12.2	18.7	23.8	30.3	17.1	Void	21.8	17.7	
AND22	23.8	21.6	22	16.5	11.1	9.9	9.1	11.7	12.9	18.4	12.4	12.2	15.1	12.3	
AND23	19.2	23.3	23.9	18	13.7	10.5	11.6	15.7	17.2	21.2	10.9	13.1	16.5	13.4	
AND25	26.5	25.8	25.9	20.1	19.1	14.1	15.1	17.2	19.3	22.9	16	16.7	19.9	16.1	

(1) See Appendix C for details on bias adjustment

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources of Pollution

Test Valley Borough Council has not identified any significant changes to current sources of pollution or identified any new significant sources of pollution in 2015.

Dispersion Modelling

Test Valley Borough Council has not carried out or had commissioned any detailed dispersion modelling in order to determine whether an AQMA needs to be declared.

Evidence Gathering

Test Valley Borough Council has not been collecting evidence in support of measures to prepare an Air Quality Action Plan.

Diffusion Tube Bias Adjustment Factors

The diffusion tubes used by Test Valley Borough Council are supplied and analysed (50% TEA in Acetone) by Environmental Scientifics Group (ESG) laboratories, Didcot, Oxfordshire. The bias adjustment factor of **0.81** for our 2015 diffusion tubes was obtained from the following website:

http://laqm.defra.gov.uk/documents/Database_Diffusion_Tube_Bias_Factors-v03_16-Final_v2.xls

Short-term to Long-term Data adjustment

All 17 nitrogen dioxide diffusion tubes exceeded the minimum 90% capture rate therefore no adjustments of the data were necessary.

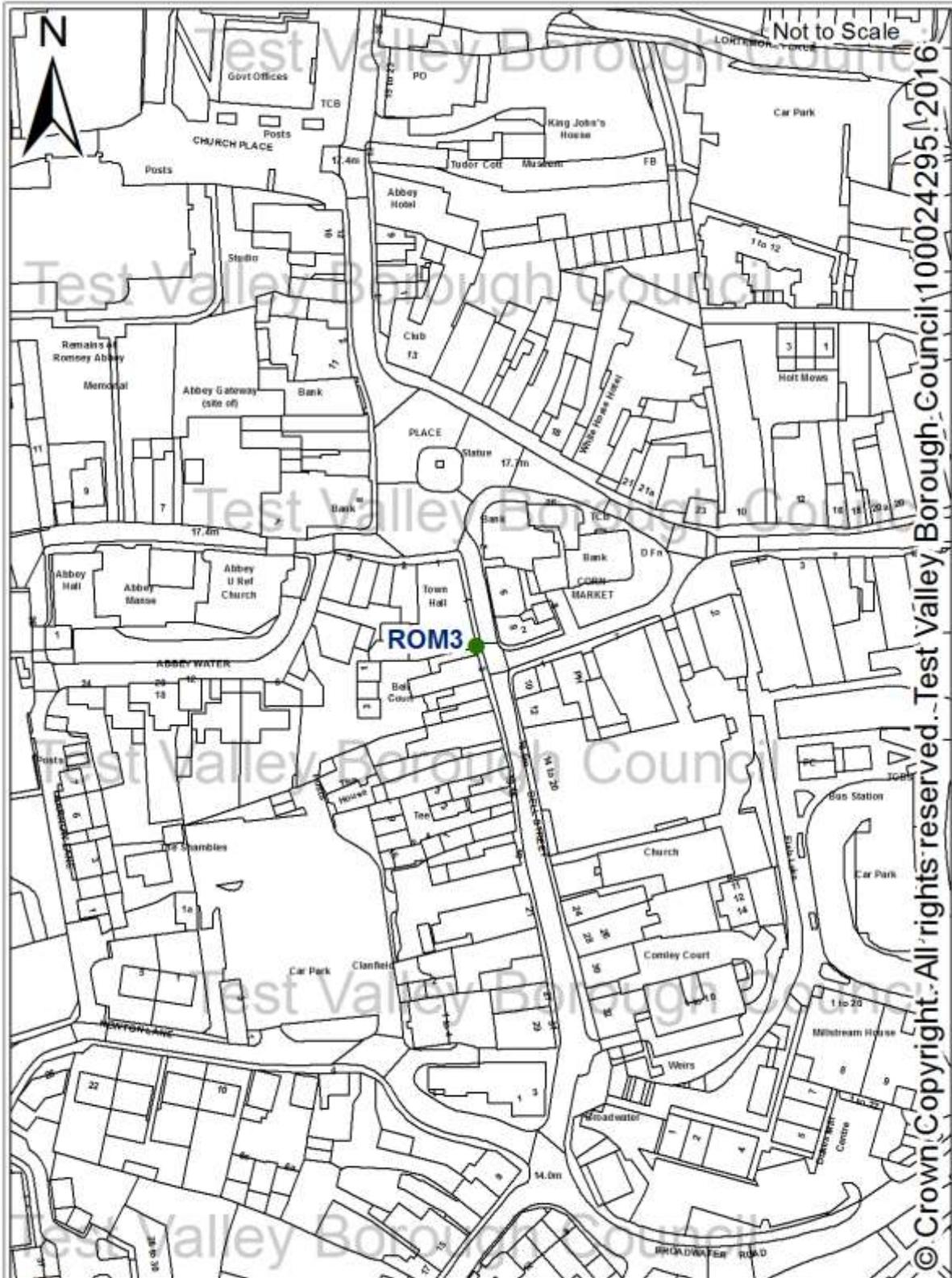
QA/QC of diffusion tube monitoring

Test Valley Borough Council can confirm that as far as reasonably practicable, all 17 diffusion tubes are located in accordance with the guidance set out in the February 2008 AEA Energy & Environment report.

A copy of the "Summary of Precision Results for Nitrogen Dioxide Diffusion Tube Collocation Studies, by Laboratory" was downloaded from:

http://laqm.defra.gov.uk/documents/Tube_Precision_2015_version_03_16-Final.pdf

Of the 21 studies which used ESG (50% TEA in Acetone) diffusion tubes during 2015, 15 studies indicated 'Good' precision with the remaining 6 indicating 'Poor' precision.



Plan 3
Approximate location of ROM3
diffusion tube in Romsey

Housing & Environmental Health Service
Beech Hurst, Weyhill Road,
Andover Hampshire SP10 3AJ



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Plan 4
 Approximate location of ROM5A & ROM7
 diffusion tubes in Romsey

Housing & Environmental Health Service
 Beech Hurst, Weyhill Road,
 Andover Hampshire SP10 3AJ



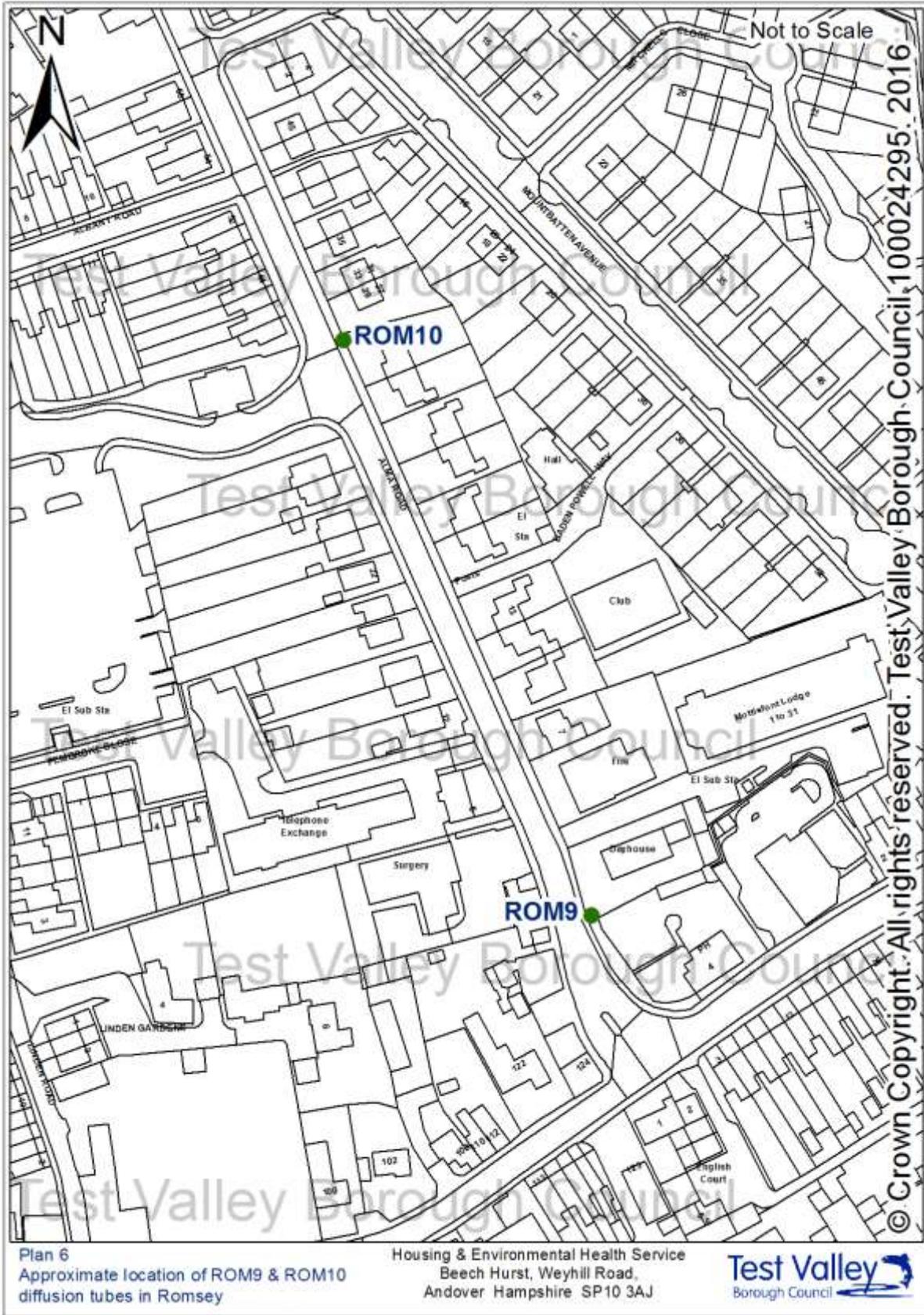


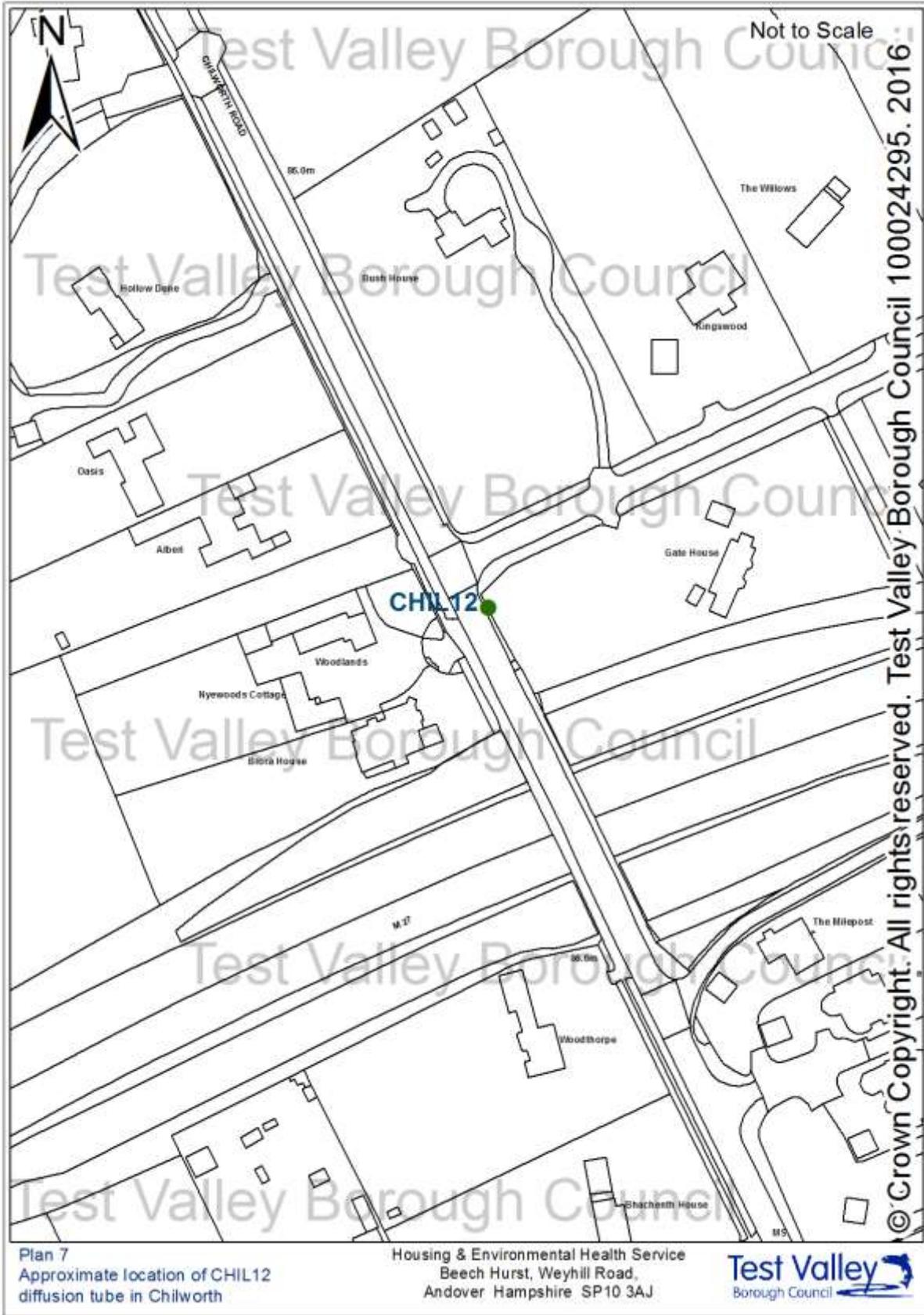
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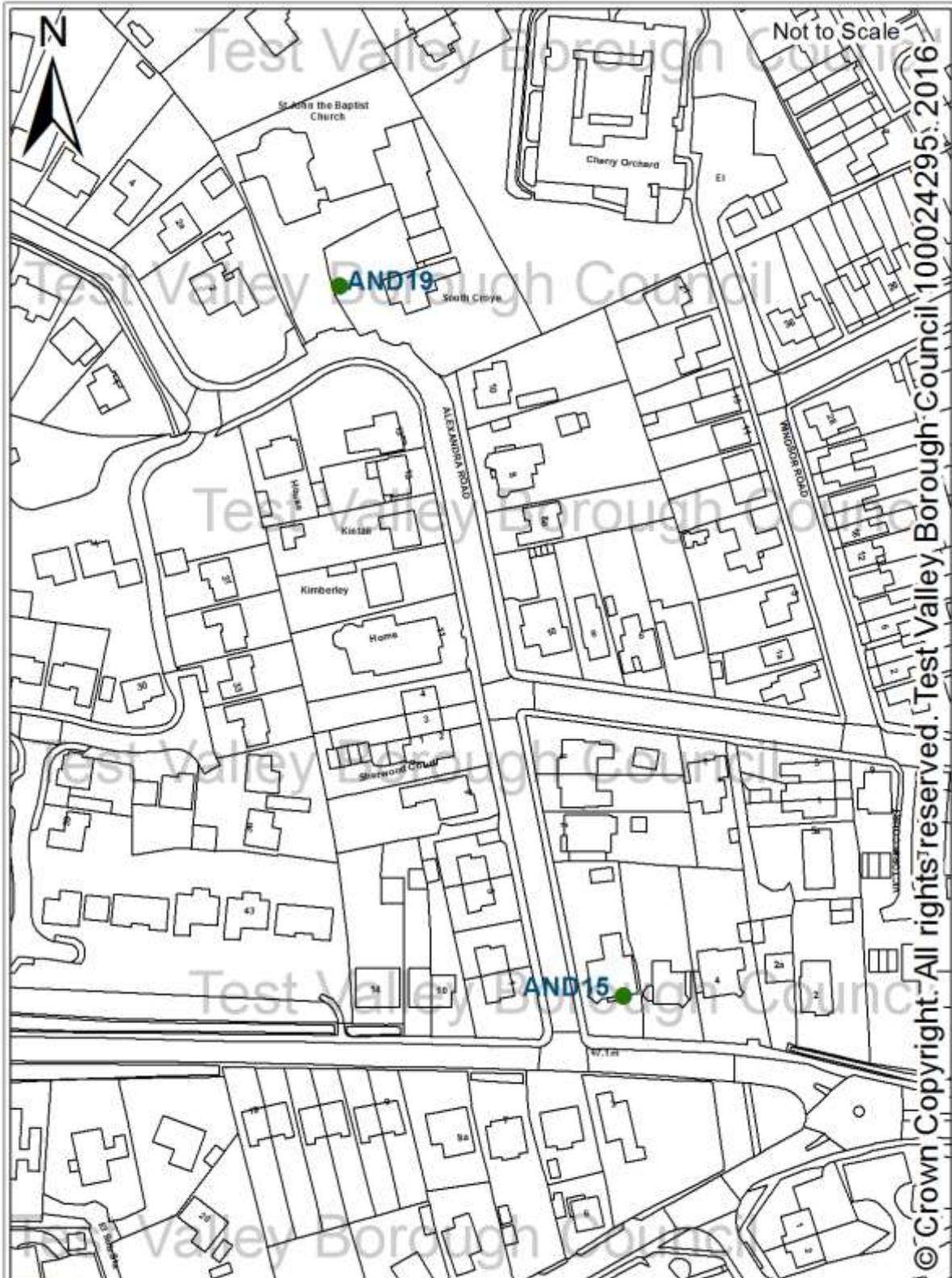
Plan 5
Approximate location of ROM8
diffusion tube in Romsey

Housing & Environmental Health Service
Beech Hurst, Weyhill Road,
Andover Hampshire SP10 3AJ









Plan 9
 Approximate location of AND15 & AND19
 diffusion tubes in Andover

Housing & Environmental Health Service
 Beech Hurst, Weyhill Road,
 Andover Hampshire SP10 3AJ



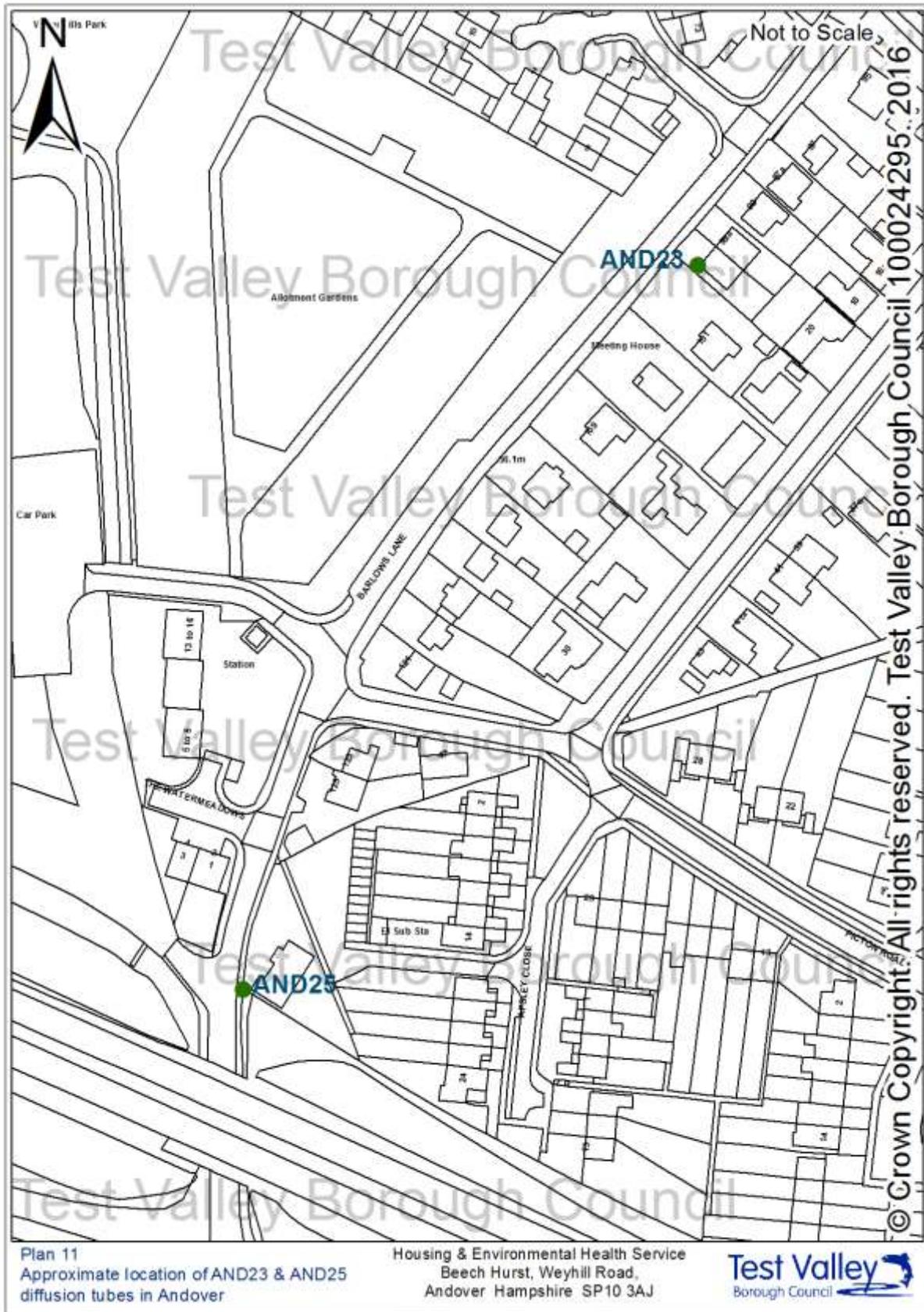


Plan 10
 Approximate location of AND20 & AND22
 diffusion tubes in Andover

Housing & Environmental Health Service
 Beech Hurst, Weyhill Road,
 Andover Hampshire SP10 3AJ



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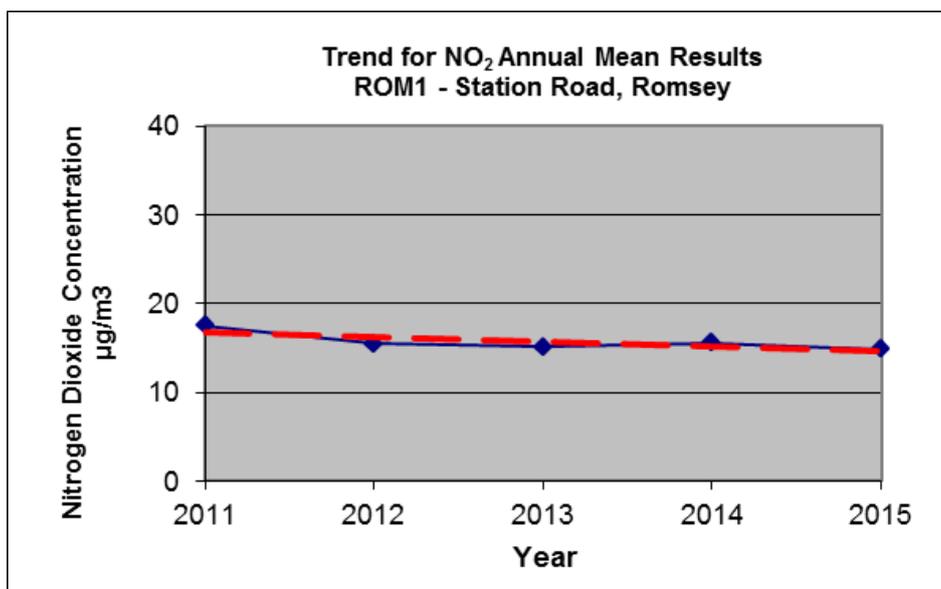


Appendix E: Summary of Air Quality Objectives in England and NO₂ trend charts

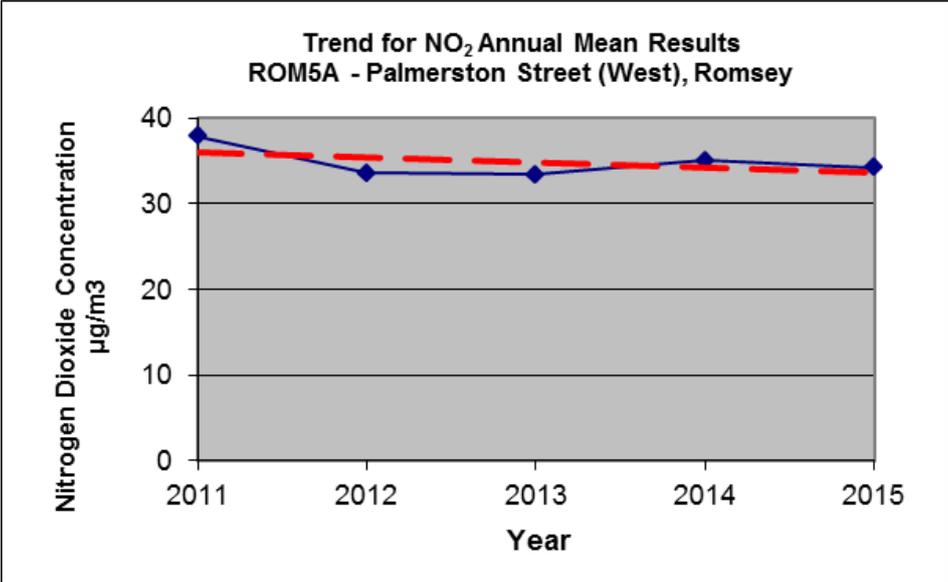
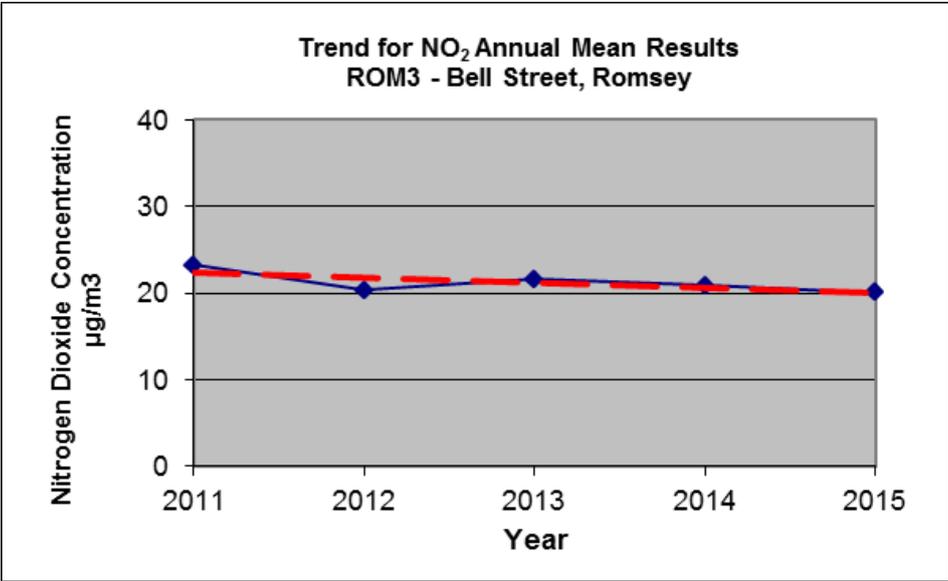
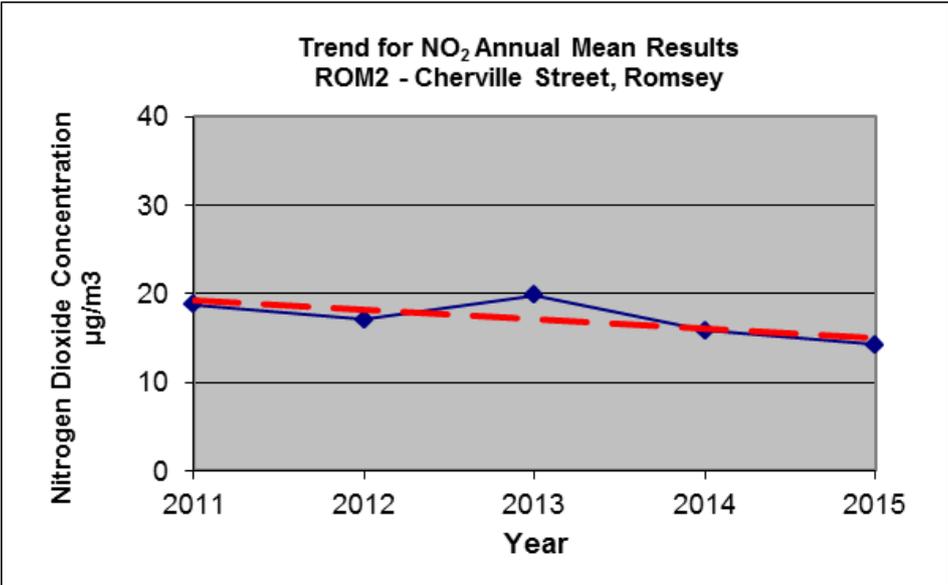
Table E.1 – Air Quality Objectives in England

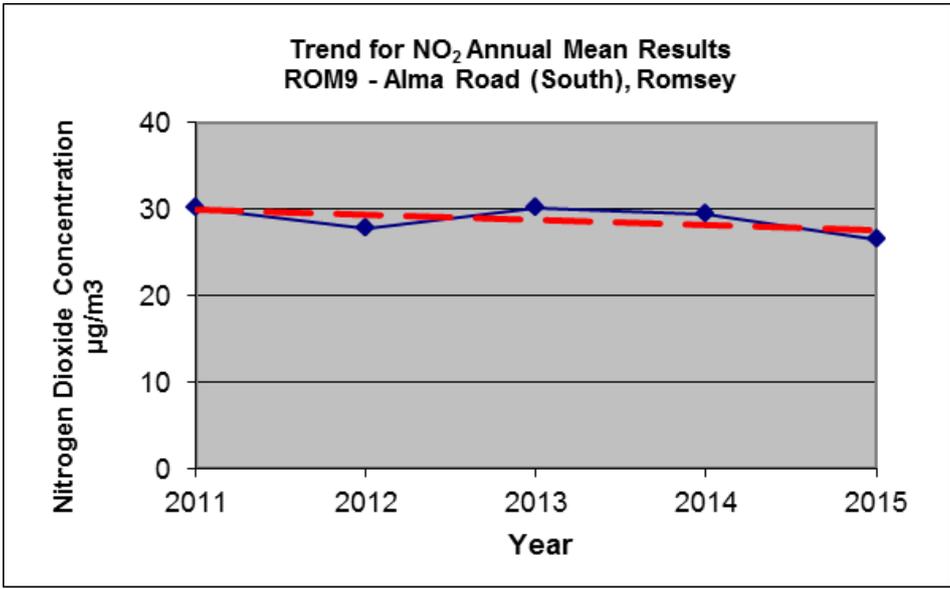
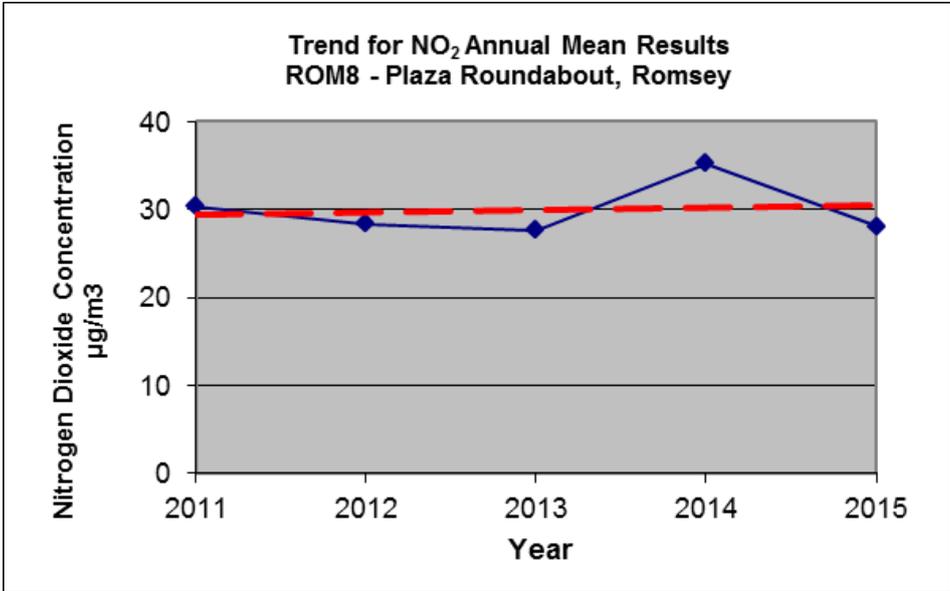
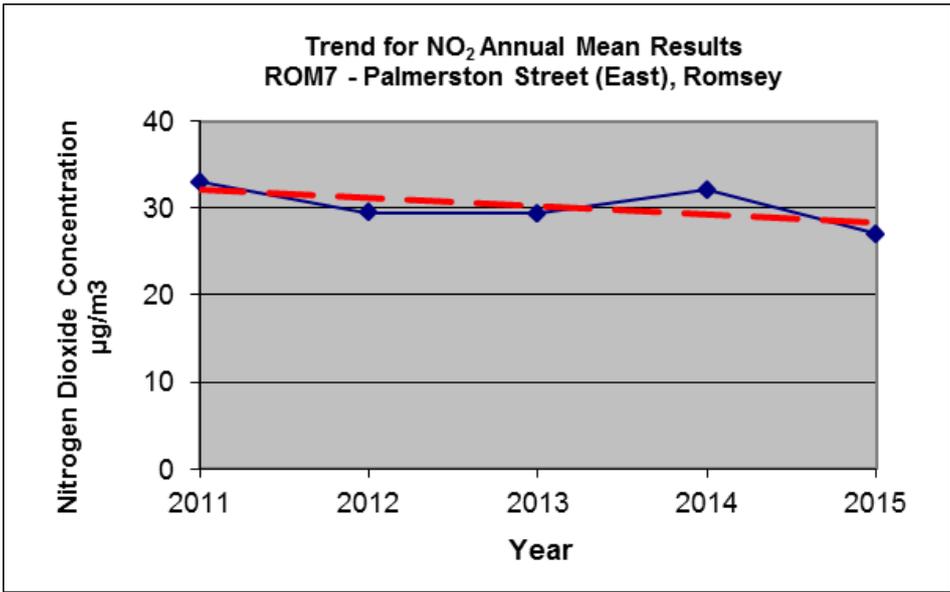
Pollutant	Air Quality Objective ⁴	
	Concentration	Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

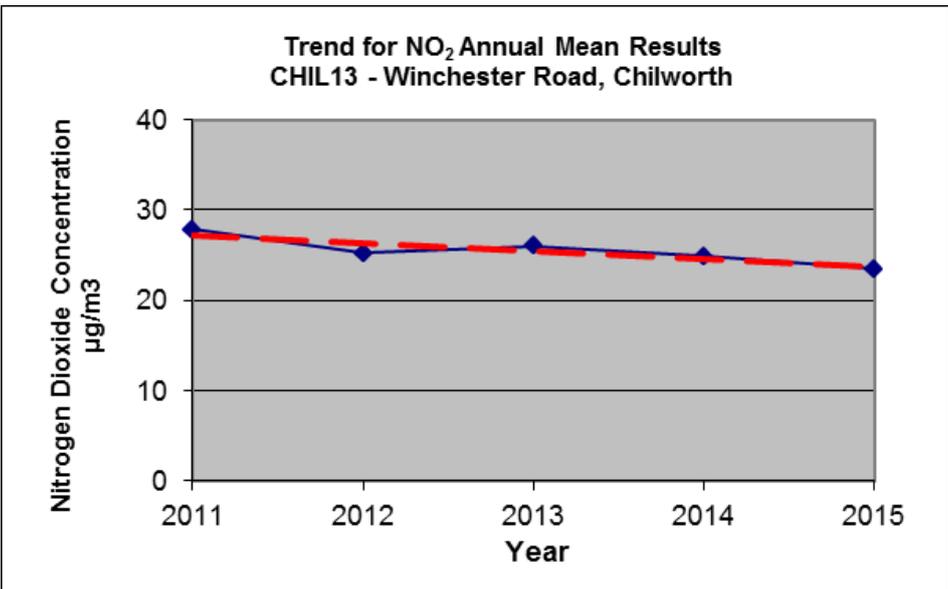
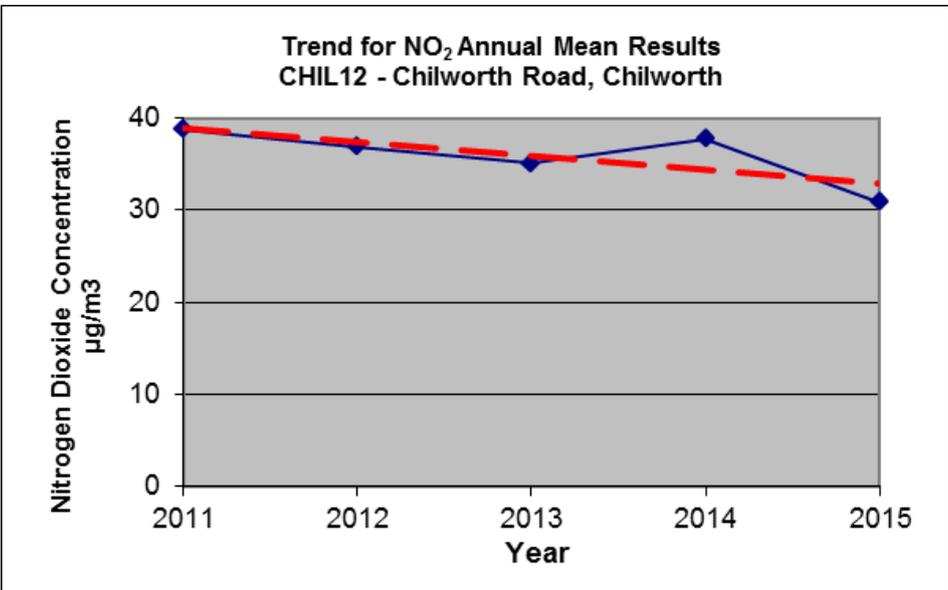
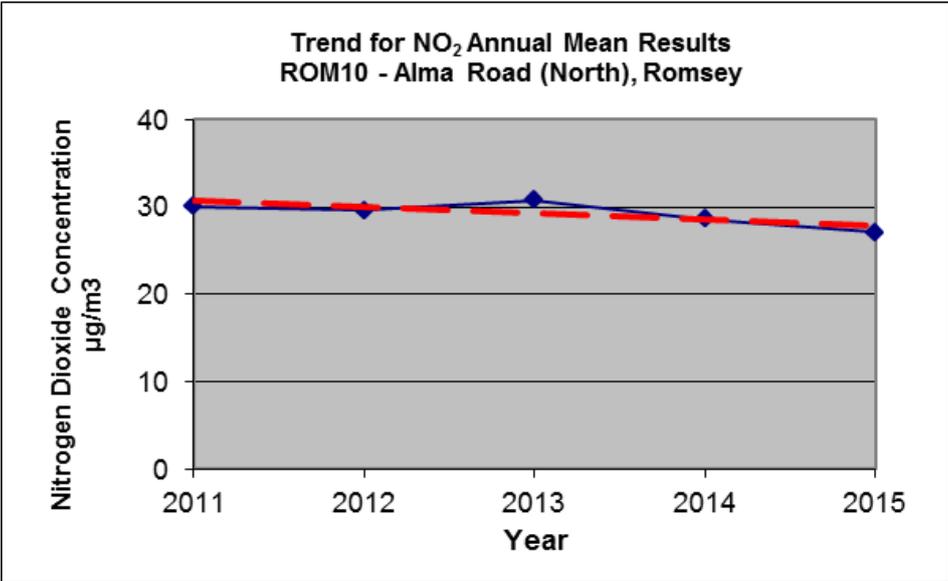
NO₂ trend charts 2011–2015

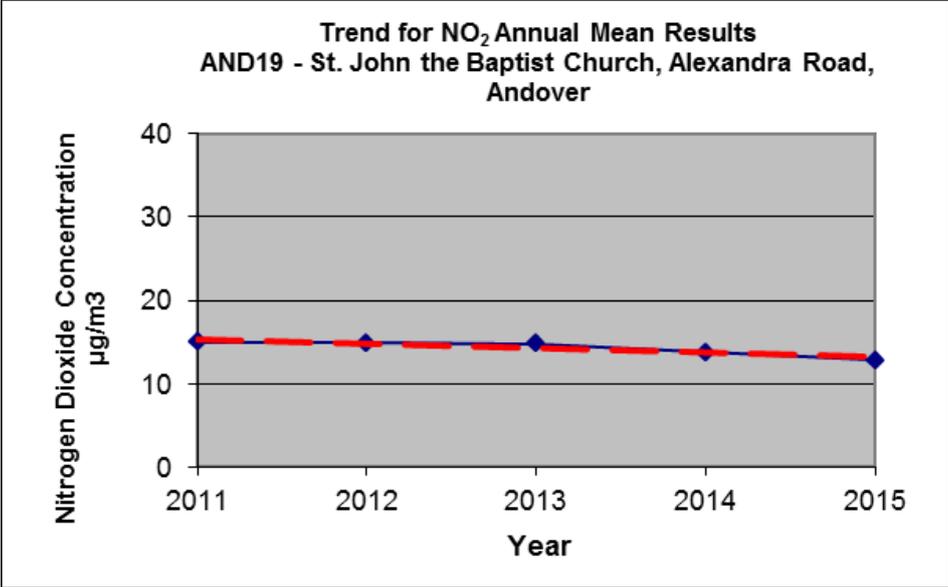
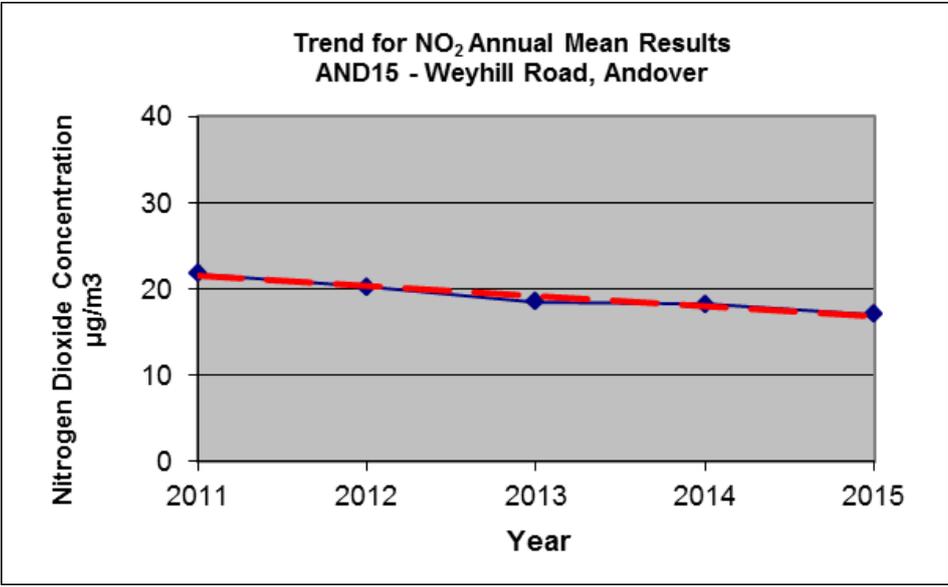
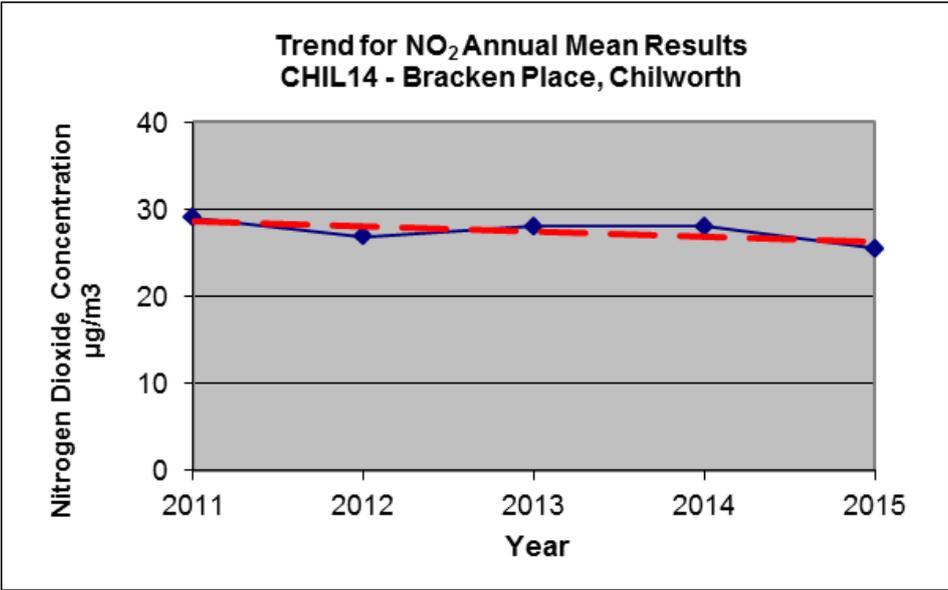


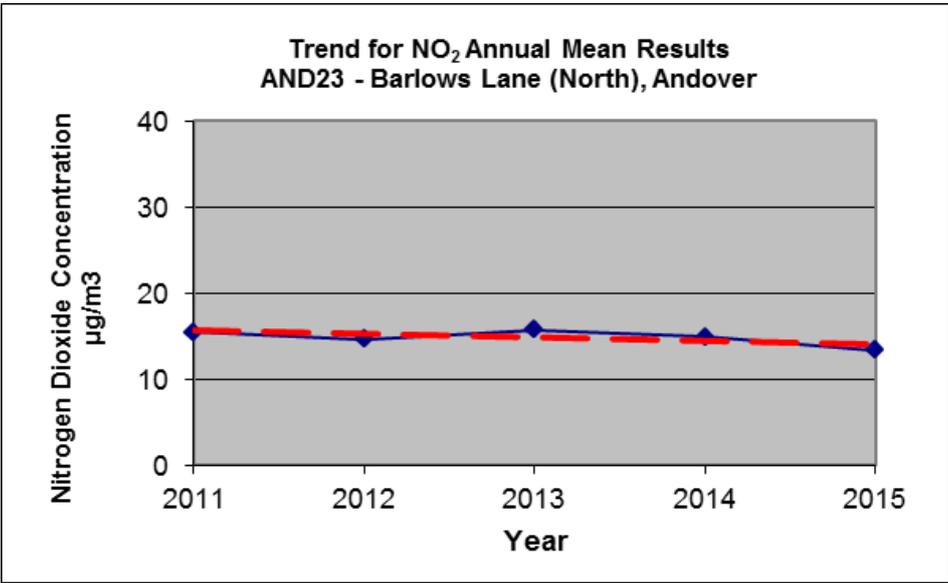
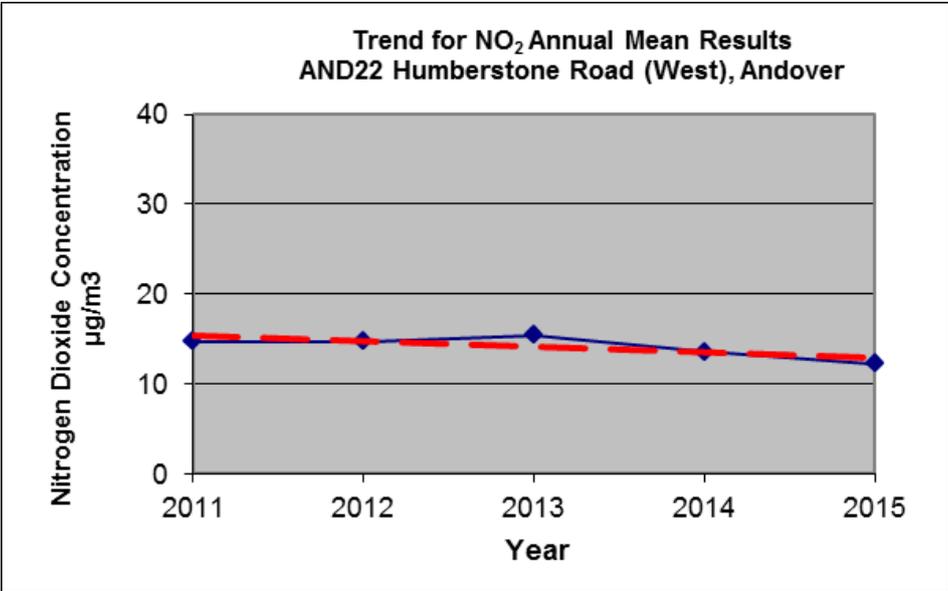
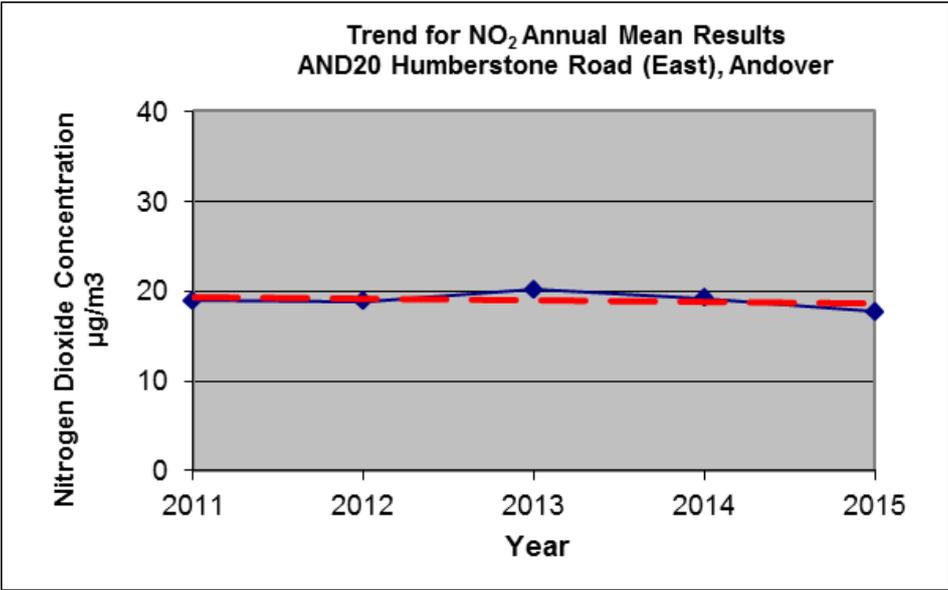
⁴ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

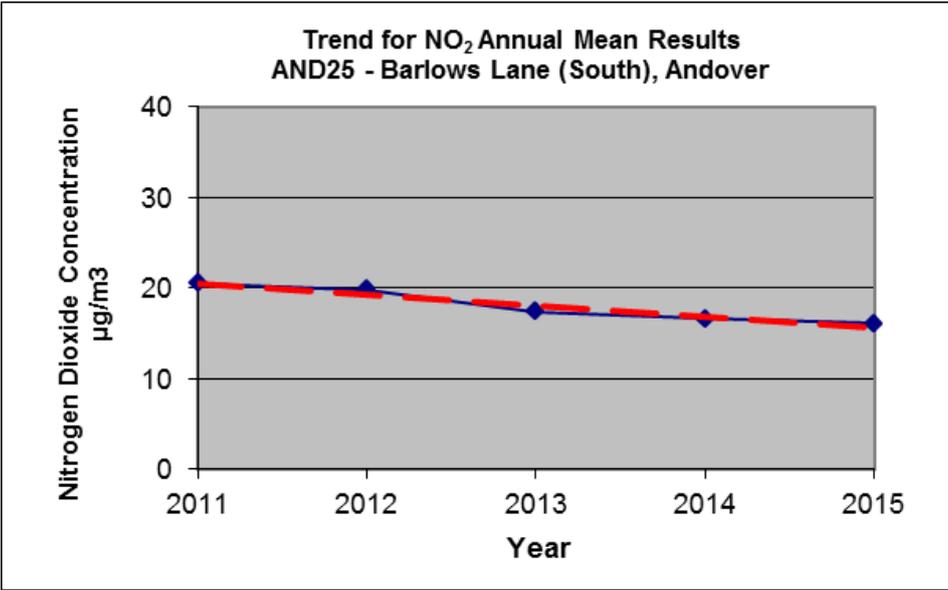












Appendix F: Summary of Air Quality Objectives in England

Table E.2 – Air Quality Objectives in England

Pollutant	Air Quality Objective ⁵	
	Concentration	Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ , not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

⁵ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

Please add a description of any abbreviation included in the ASR – An example is provided below.

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO ₂	Sulphur Dioxide
...	...

References

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Defra (December 2015), Air Quality Plan for the achievement of EU air quality limit value for nitrogen dioxide (NO₂) on Southampton Urban Area (UK0019)

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