2012-14 Air Quality Progress Report for **Coventry City Council**

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

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Executive Summary

This latest Local Air Quality Management Progress Report provides information on the review and assessment of air quality in the City. This review includes monitoring data collected during 2011, 2012 and 2013 for the pollutants of nitrogen dioxide (NO_2). Monitoring data for PM_{10} was limited to one automatic monitoring unit and only for the period 2013 due to data capture issues and technical problems.

Coventry declared a city-wide AQMA in late 2009, and as a consequence of that there are no exceedences of the air quality standards outside an AQMA.

Whilst there has been a downwards trend of nitrogen dioxide at some of the automatic units, this change is not been reflected by the diffusion tube data. Although this is not as reliable as the automatic units, the tubes do provide a wider spatial indication that levels of nitrogen dioxide in the city have not reduced, despite on-going improvement in emission control technology in vehicles. The 2012 diffusion tube results are higher than the results for 2013 but across the city there are still a significant number of locations that exceed the national air quality objective for nitrogen dioxide.

Poor air quality can affect the respiratory systems of vulnerable residents, and can cause premature death.

The city needs to develop a new Air Quality Action Plan to tackle emissions from the transport sector, the main contributor to poor air quality.

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1 Introduction

1.1 Description of Local Authority Area

Coventry City Council is a unitary metropolitan authority situated in the West Midlands. The city covers 98.34 square kilometres and has a population of approximately 323,100 residents (mid 2012 population estimate). The city of Coventry is situated 95 miles northwest of London and 19 miles east of Birmingham. Coventry is near the M6, M69, M45 and M42, and is served by the A45 and A46 dual carriageways.

Typical sources of air pollution include emissions from the commercial and domestic sector, road traffic and industrial processes. Coventry is classed as a smoke control area making it an offence to emit smoke from a chimney caused by the use of an unauthorised appliance, or the burning of unauthorised fuel.

Coventry City Council regulates 86 industrial processes under the Environmental Permitting regime, including petrol filling stations and dry cleaners. In addition to this, the Environment Agency regulates 9 Part A1 installations within the city.

Previous reports within earlier rounds of Coventry City Council's review and assessment programme confirmed that emissions from road traffic are the major source of pollution within the city

1.2 Purpose of Progress Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedences are considered likely, the local authority must then declare an Air

Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

Progress Reports are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the LAQM process.

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

1.3 Air Quality Objectives

The air quality objectives applicable to LAQM in England are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1.1. This table shows the objectives in units of micrograms per cubic metre µg/m^3 (milligrams per cubic metre, mg/m^3 for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Table 1.1 Air Quality Objectives included in Regulations for the purpose of LAQM in England

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m^3	Running annual mean	31.12.2003
	5.00 µg/m^3	Annual mean	31.12.2010
1,3-Butadiene	2.25 µg/m^3	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.50 µg/m^3	Annual mean	31.12.2004
	0.25 µg/m^3	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m^3 not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m^3	Annual mean	31.12.2005
Particulate Matter (PM_{10}) (gravimetric)	50 µg/m^3, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m^3	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m^3, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m^3, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m^3, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

This Progress Report continues round five of Coventry City Council's Review and Assessment cycle. The results of previous rounds are summarised below:

Round one, initiated in 1998, involved several stages:

- ***Stage 1 (Review and Assessment)*** involved the identification of the main sources of air pollution in and around Coventry, reviewing the levels of air pollutants for which prescribed standards and objectives had been set, and estimating the likely future levels.
- ***Stage 2*** required the local authority to provide further screening of pollutant concentrations within the area. The purpose of screening was to assess whether the air quality objectives would be achieved by the target date.
- ***Stage 3*** was a more complex assessment of monitoring and modelling.

For **Round Two** the review and assessment process was revised to include an **Updating and Screening Assessment (USA),** followed by a **Detailed Assessment** whenever necessary. The USA identified two locations in Coventry that were assessed to be unlikely to meet the annual mean objective for nitrogen dioxide by the target date of 2005. These were the Ball Hill area of Walsgrave Road and an area of the city centre including Trinity Street and the Burges. They were both designated as Air Quality Management Areas (AQMAs) in August 2003.

As exceedences of the Air Quality Objectives were predicted in the USA a **Detailed Assessment** was produced. The outcome of which was that the junction of Queensland Avenue and Allesley Old Road was also unlikely to meet the 2005 annual mean objective for NO_2 and was declared an AQMA in August 2004.

For **Round Three,** an **Updating and Screening Assessment** was completed in **2006**, which found that for the majority of pollutants, levels in Coventry still remain below the UK objectives. The exception to this was nitrogen dioxide where more

areas were found to exceed the UK objective annual mean for 2005 and will require Detailed Assessment. These areas were:

- Foleshill Road
- London Road / Tollbar Island
- Radford Road / Beake Avenue junction (if residential property is introduced)
- Spon End / Hearsall Lane
- Stoney Stanton Road
- Croft Road, City Centre

The **2007 Detailed Assessment** found that all areas identified by the USA were confirmed as exceeding the UK objective for annual mean NO_2. Following DEFRA's suggestion that conjoining areas should be designated a single AQMA, the City Council had to consult and determine whether to:

a) designate the whole of Coventry an AQMA, or
b) designate two separate AQMAs; one covering the city centre and northern area of the city and one covering Tollbar End.

A **Progress Report** was produced in **2008**, which indicated exceedences of the NO_2 annual mean objective at the following locations:

- Stoney Stanton Road
- Foleshill Road / Longford Road
- Beake Avenue / Radford Road junction
- Tollbar End
- Croft Road / Victoria Road
- London Road near the Ringway
- Holyhead Road
- Fairfax Street

but not at Spon End / Hearsall Lane as indicated by the Detailed Assessment.

However the **Updating and Screening Assessment of 2009,** beginning the fourth round of review and assessment, found exceedence of NO_2 at Spon End/ Hearsall

Lane as the **Detailed Assessment of 2007** had predicted but was not found to be the case in the **Progress Report of 2008.**

A city wide AQMA for nitrogen dioxide was declared, effective from 1st November 2009. Subsequent to this a further assessment must be completed within 12 months, together with an Air Quality Action Plan.

The 2010 **Progress Report** indicated that the following areas showed exceedences of the NO_2 annual mean objective:

- Ball Hill, Walsgrave Road
- Trinity Street
- Fairfax Street
- Queensland Avenue
- Tollbar End, London Road
- Foleshill Road

Coventry was to develop an Air Quality Action Plan subsequent to the declaration of the city-wide AQMA. The boundary of the city-wide AQMA is shown in **Error! Reference source not found.**.

The **Further Assessment produced in January 2014** as part of the fifth round of review and assessment concluded that levels of nitrogen dioxide in the city have not reduced and continue to exceed the national air quality objectives at key locations influenced by local traffic.

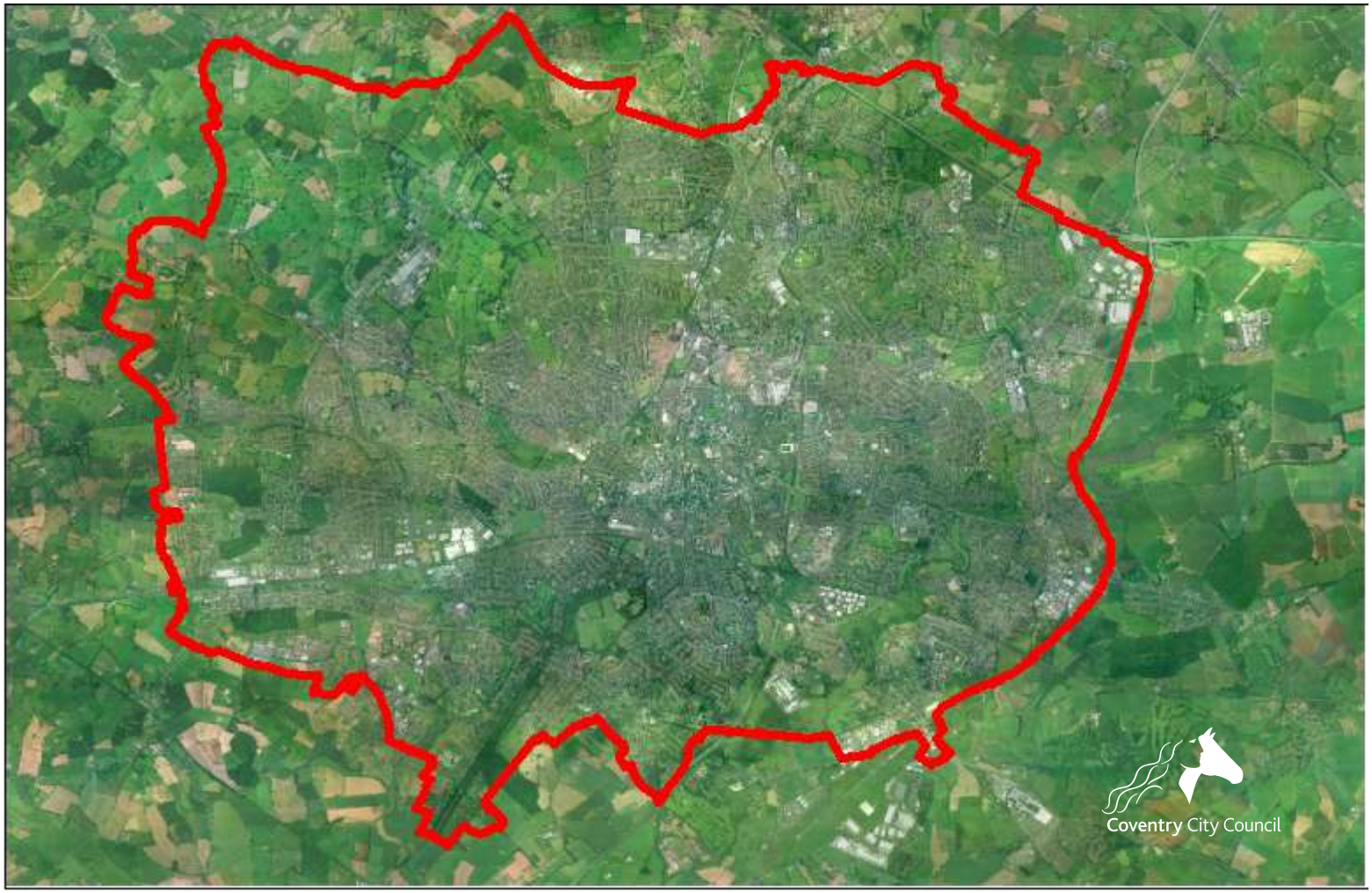
Timescales for the submission of documents required under Local Air Quality Management (LAQM) are given in Box 1.3 of LAQM.TG (09). The documents published by Coventry City Council as part of its obligations under LAQM, are summarised in Table 1. below. Formal extensions to the submission of documents required under LAQM have been given by DEFRA, due to a lack of resources available within Coventry City Council as a result of financial restraints, and an ongoing service review.

Table 1.2 Summary of previous Review and Assessment reports

Year	Type	Summary
1998	**Stage 1 (Round 1)**	The main sources of air pollution within and around Coventry City Council's boundary were identified, reviewing the levels of air pollutants for which prescribed standards and objectives have been set, and estimating the likely future levels.
2000	**Stage 2 (Round 1)**	Coventry City Council provided further screening of pollutant concentrations within the area. The purpose of screening was to assess whether the air quality objectives would be achieved by the target date.
2001	**Stage 3 (Round 1)**	Coventry City Council carried out a more complex assessment of monitoring and modelling which led to the declaration of the first two of the city's AQMAs.
2003	**Updating and Screening Assessment (Round 2)**	Two locations in Coventry were assessed to be unlikely to meet the annual mean objective for nitrogen dioxide by the target date of 2005. These were the Ball Hill area of Walsgrave Road and an area of the city centre including Trinity Street and the Burges. They were both designated as AQMAs in August 2003.
2004	**Detailed Assessment (Round 2)**	The junction of Queensland Avenue and Allesley Old Road was also unlikely to meet the 2005 annual mean objective for nitrogen dioxide by 2005 and was declared an AQMA in August 2004.
2006	**Updating and Screening Assessment (Round 3)**	For the majority of pollutants, levels in Coventry still remain below the UK objectives. The exception to this is nitrogen dioxide where more areas have been found to exceed the UK objective annual mean for 2005 and will need to proceed to Detailed Assessment. The USA also concluded that given the number of areas to proceed to Detailed Assessment it is highly

Year	Type	Summary
		likely that Coventry will have to declare further Air Quality Management Areas.
2007	**Detailed Assessment (Round 3)**	All areas identified by the Updating and Screening Assessment 2006 were confirmed as exceeding the UK objective for annual mean nitrogen dioxide.
2008	**Progress Report (Round 3)**	The Progress Report indicates exceedences of the NO_2 annual mean objective at a number of locations across the city.
2009	**Updating and Screening Assessment (Round 4)**	A number of locations outside the AQMAs continued to exceed NO2 objectives. Including Spon End/ Hearsall avenue as was indicated by detailed assessment of 2007 but not 2008 Progress Report.
2010	**Progress Report (Round 4)**	A city-wide AQMA was declared, effective from 1st November 2009. Several areas of Coventry continued to exceed the annual mean objective for NO_2.
2013	**Further Assessment**	Levels of nitrogen dioxide continue to exceed the national air quality objectives at key locations influenced by local traffic, confirming the need to retain the city-wide AQMA

Figure 1.1 Map of Coventry City Council's AQMA Boundary



2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

The city has 5 automatic monitoring units, all of which measure nitrogen dioxide. All 5 sites are located on roadsides. Locations have remained unchanged since the declaration of the city wide AQMA in 2009. For some of the past 3 year period data capture rates have been below the 85% required by DEFRA due to a number of technical difficulties with the units. However it provides an indication of whether the air quality in the city is improving. The location of the units is shown in figure 2.1 and more detailed information is contained in Table 2.1. As of July 2013 only 3 units are now operational due to resource restrictions: Hales Street and Tollbar Ends units have been turned off.

A new service contract with our service engineers was signed in July 2011, which outlines specific service and repair responsibilities against which the service company will be assessed. Faults have been identified and in some cases replacement of whole analyser units has been required.

Professional technical support has also been provided by air quality colleagues at Birmingham City Council.

Each NOx analyser is operated according to manufacturers' instructions. Coventry City Council officers carry out calibration of the equipment every 4 weeks. Certified Calibration Gas is supplied by BOC and this is used to obtain a span value for each analyser during the calibration. The equipment is also tested against zero air. The data is collected and scaled, and any instrumental drift is corrected during data processing. The filter is changed after every calibration. Engineers from TRL Ltd service the analysers at six monthly intervals

A visual inspection of the TEOM analyser is carried out monthly, and the filter changed as required during routine site visits. All site visits are documented to ensure any problems are recorded and any works noted. All calibrations are recorded.

Data report for Ball Hill 2013

There was missing data throughout 2013 for NOx, specifically January and February, May and June and a major loss of data between September and December. The overall data capture rate was slightly down on the previous year at 65%. The data showed good stability and within the range expected. The missing data was caused by a number of issues such as power supply problems and instrument faults.

The FDMS TEOM data capture for this site is 16% with many gaps in the data. The FDMS part of the system was faulty. Due to the high costs of repairing the FDMS and its unreliability, the instrument was returned to a standard TEOM in December 2013. The instrument now appears to be operating normally and data capture rates are expected to be higher next reporting period. The VCM has been applied to the data post return to TEOM state and this corrected data has been used to evaluate the site against the objective.

Data report for Foleshill Road 2013

There was very little data missing for NOx for this site during 2013 with an overall data capture rate of 95%. There was, however, some poor quality data that could not be used due to an instrument fault resulting in an overall data capture rate of 84%.

The PM_{10} data for this site is very noisy and due predominantly to problems with unstable flow rates and a poorly seated transducer filter. The FDMS part of the TEOM was removed in December 2013 and returned to a standard TEOM as a precaution due to the problems that the FDMS had caused at Ball Hill. The VCM has been applied to the data post return to TEOM state and this corrected data has been used to evaluate the site against the objectives.

Data report for Queensland Avenue 2013

There was missing NOx data at various points throughout the year, giving an initial data capture rate of 83%. This was reduced to 52% after spurious data was removed. This was due to operational problems including a faulty ozone generator.

The TEOM data capture for this site was 83%. The FDMS TEOM appeared to produce data that was within the range expected. The FDMS was returned to a standard TEOM in August 2013. The VCM has been applied to the data post return to TEOM state and this corrected data has been used to evaluate the site against the objectives.

Data report for Toll Bar 2013

There was very little data missing for this site during 2013 until it was decommissioned in early July pending the completion of a three year road improvement scheme in the area. This gave an overall data capture rate of 50% but the unit maintained 95% data capture up until its decommissioning.

There was no PM_{10} data for this site as this was not measured at this location.

Figure 2.1 Map of Automatic Monitoring Sites

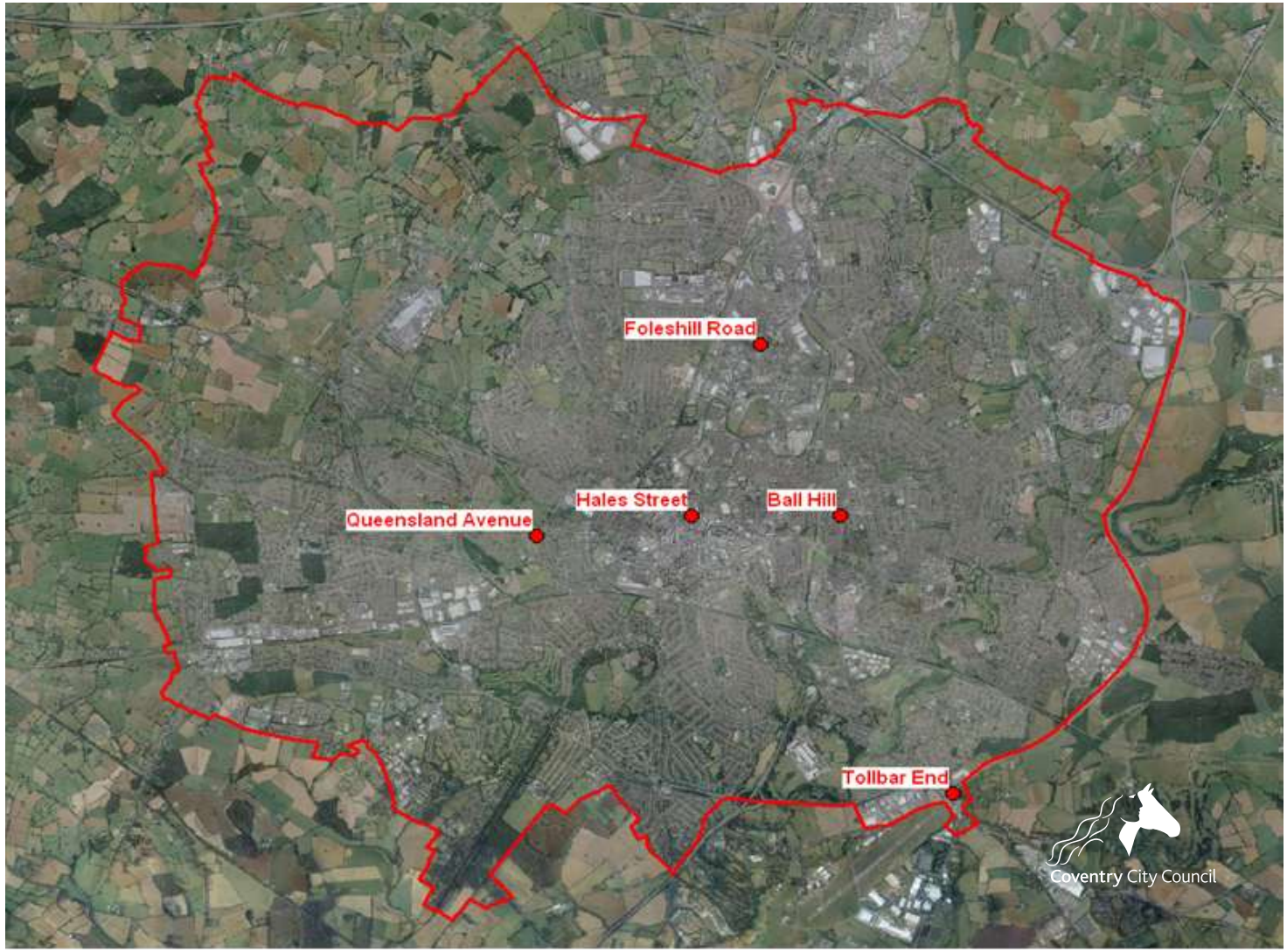


Table 2.1 Details of Automatic Monitoring Sites

Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Inlet Height (m)	Pollutants Monitored	In AQMA?	Monitoring Technique	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
Queensland Avenue	Roadside	431572	279022	**2.8**	PM_{10} NO_2	Y	TEOM- VCM method applied from August 2013	Y(9m)	3.5m	N
Foleshill Road	Roadside	434251	281512	**2.8**	PM_{10} NO_2	Y	TEOM- VCM method applied from August 2013	Y(9m)	6m	N
Ball Hill	Roadside	435129	279282	**2.8**	PM_{10} NO_2	Y	TEOM- VCM method applied from August 2013	Y(2.5m)	3.5m	N
Tollbar End – removed July 2013	Roadside	436530	275696	**2.8**	NO_2	Y	N/A	Y(25m)	4.5m	N
Hales Street – removed July 2013	Roadside	433414	279279	**2.8**	NO_2	Y	N/A	Y (2m)	3.2m	N

2.1.2 Non-Automatic Monitoring Sites

Coventry City Council operates a network of diffusion tubes around the city, as shown in Figure 2.2. In 2011 there were 127 tubes, reducing to 118 tubes in 2012 and rising again to 125 tubes by the end of 2013. Details of the locations of NO_2 diffusion tubes can be found in Table 2.2.

Coventry City Council use Gradko International for analysis of diffusion tubes. The preparation method used is 20% TEA in water.

The diffusion tube results have been bias adjusted using the National Diffusion Tube Bias Adjustment Factor Spreadsheet, as Coventry's continuous monitoring stations have not had sufficient data capture to produce a robust adjustment factor.

QA/QC of non-automatic monitoring

Grakdo International is part of the Workplace Analysis Scheme for Proficiency (WASP), and in 2012 they were deemed to be satisfactory. The tubes are stored and deployed according to the manufacturer's instructions and field and fridge blanks are used each month to ensure that no contamination has occurred.

Between 2012 and 2013 several residents in the city took part in the Community Tubes project. This involved deploying tubes monthly at their properties. Details of the locations and results of this project are included in this progress report but are not analysed or included in the statistics. This is due to the way in which residents were selected to take part in the project. Residents were volunteers who have existing respiratory conditions such as asthma, COPD etc. As such, tubes were not necessarily placed in locations with known or suspected exceedences of air quality standards. The exceptions to this were the placement of tubes on Swan Lane and Gosford Street.

Figure 2.2 Map of Coventry City Council's Non-Automatic Monitoring Sites

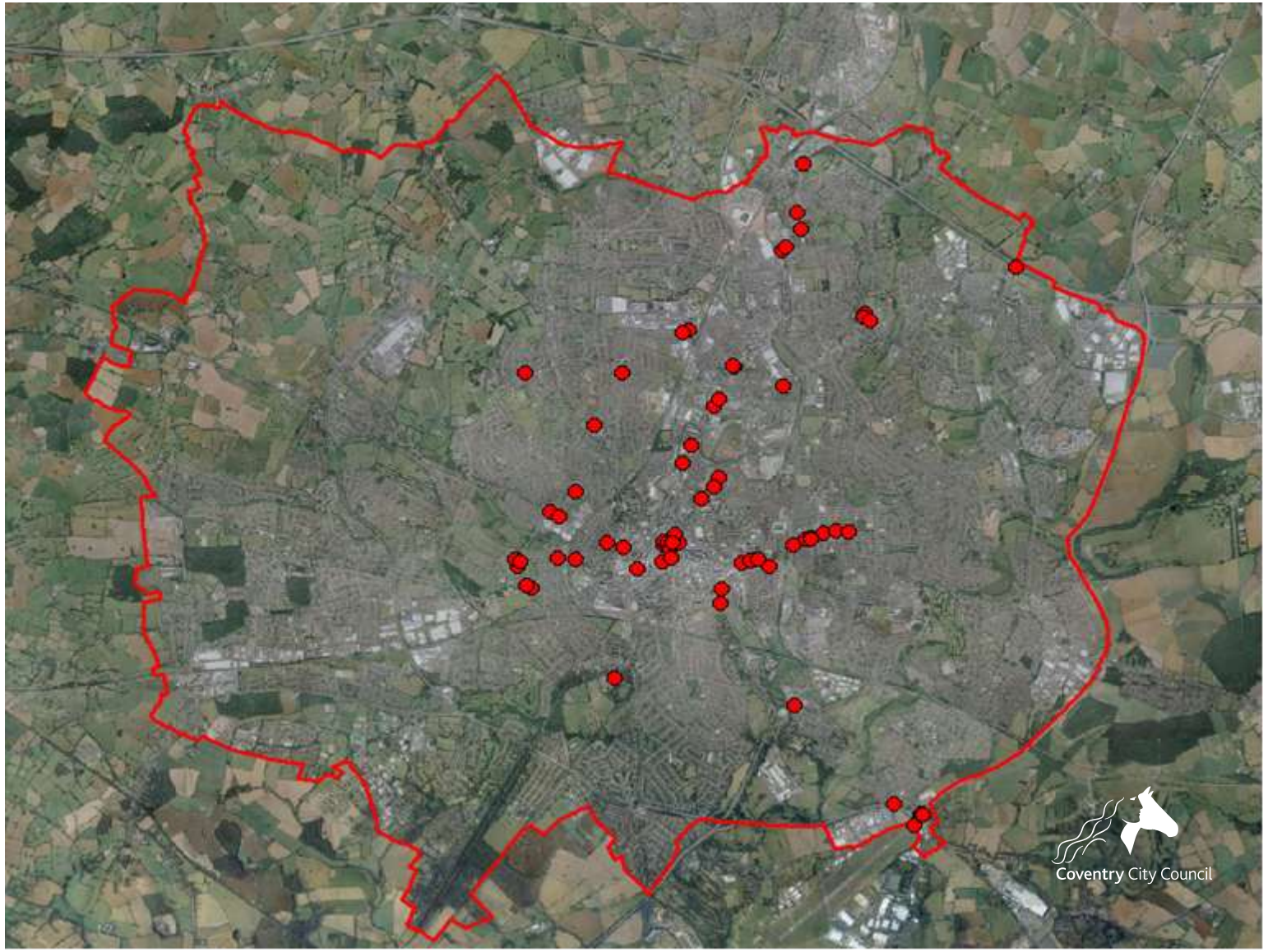


Table 2.2 Details of Non- Automatic Monitoring Sites

KEY - Added December 2013 Removed March 2012 Removed April 2013 Removed 2011

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
6Nd	Holyhead Road	Roadside	431990	279644	1.6	NO_2	Y	N	Y(7.2m)	3.4	Y
6Ndd	Holyhead Road	Roadside	431990	279644	1.6	NO_2	Y	N	Y(7.2m)	3.4	Y
6N*	Holyhead Road	Roadside	431990	279644	1.6	NO_2	Y	N	Y(7.2m)	3.4	Y
CCO1*/1N	Holyhead Road	Roadside	432105	279578	1.6	NO_2	Y	N	Y(7.2m)	3.1	Y
CCO3/3N*	Holyhead Road	Urban background	432299	279898	2.7	NO_2	Y	N	Y(5.8m)	N/A	N/A
HR1	Holyhead Road	Façade	432683	279240	2.7	NO_2	Y	N	Y(0m)	5.8	Y
HR2	Holyhead Road	Façade	432029	279622	2.7	NO_2	Y	N	Y(0m)	8.3	Y
HR2a	Holyhead Road	Façade	432029	279622	2.7	NO_2	Y	N	Y(0m)	8.3	Y
HR2b	Holyhead Road	Façade	432029	279622	2.7	NO_2	Y	N	Y(0m)	8.3	Y
BH1	Ball Hill	Roadside	434966	279204	3.5	NO_2	Y	N	Y(5.2m)	2.6	Y
BH2a	Ball Hill	Façade	435126	279286	2.8	NO_2	Y	N	Y(0m)	3.9	Y
BH4	Ball Hill	Roadside	435331	279358	1.8	NO_2	Y	N	Y(3.5m)	1.3	Y
BH6i (BH15i)	Ball Hill	Roadside	435184	279298	3.1	NO_2	Y	Y	Y(4.5m)	1.0	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
BH6ii (BH15ii)	Ball Hill	Roadside	435184	279298	3.1	NO_2	Y	Y	Y(4.5m)	1.0	Y
BH6iii (BH15iii)	Ball Hill	Roadside	435184	279298	3.1	NO_2	Y	Y	Y(4.5m)	1.0	Y
BH9	Ball Hill	Roadside	435645	279371	2.7	NO_2	Y	N	Y(2m)	0.1	Y
BH10	Ball Hill	Roadside	435189	279281	3.1	NO_2	Y	N	Y(2m)	0.1	Y
BH11	Ball Hill	Roadside	435189	279281	3.1	NO_2	Y	N	Y(2m)	0.1	Y
BH12	Ball Hill	Roadside	435189	279281	3.1	NO_2	Y	N	Y(2m)	0.1	Y
BH13	Walsgrave Road	Façade	435508	279387	2.5	NO_2	Y	N	Y(0m)	5.2	Y
BH14	Walsgrave Road	Roadside	435658	279357	2.5	NO_2	Y	N	Y(9m)	2.6	Y
BGH1	City Centre	Background	433370	278990	N/A	NO_2	Y	N	N/A	N/A	N/A
BUR2i	City Centre	Roadside	433398	279168	3	NO_2	Y	N	Y(7.7m)	0.5	Y
BUR4i	City Centre	Roadside	433387	279199	3	NO_2	Y	N	Y(2m)	0.01	Y
BUR4ii	City Centre	Roadside	433387	279199	3	NO_2	Y	N	Y(2m)	0.01	Y
BUR4iii	City Centre	Roadside	433387	279199	3	NO_2	Y	N	Y(2m)	0.01	Y
BUR6	City Centre	Roadside	433373	279257	3	NO_2	Y	N	Y(1.8m)	1	Y
BUR7	City Centre	Roadside	433371	279226	2.5	NO_2	Y	N	3.5	3.5	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
HS1	City Centre	Roadside	433467	279267	3	NO_2	Y	N	Y(24.6m)	0.9	Y
HS2	City Centre	Roadside	433420	279236	3	NO_2	Y	N	Y(35m)	2	Y
TS1	City Centre	Roadside	433465	279154	3	NO_2	Y	N	Y(3.6m)	3.0	Y
TS2	City Centre	Roadside	433496	279241	3.7	NO_2	Y	N	Y(4.4m)	3.7	Y
CL1	City Centre	Façade	433471	279043	3.4	NO_2	Y	N	N/A	21	N/A
FS1	City Centre	Roadside	433569	279234	3	NO_2	Y	N	Y(4.9m)	1	Y
CR4	City Centre	Roadside	433052	278897	1.8	NO_2	Y	N	N/A	2.3	Y
CR4a	City Centre	Roadside	433052	278897	1.8	NO_2	Y	N	N/A	2.3	N/A
CR4b	City Centre	Roadside	433052	278897	1.8	NO_2	Y	N	N/A	2.3	N/A
High1	City Centre	Roadside	433480	278932	2.85	NO_2	Y	N	N/A	1.3	N/A
ES1	City Centre	Roadside	433624	278891	2.6	NO_2	Y	N	N/A	2.8	N/A
LPS1	City Centre	Roadside	433532	278878	2.75	NO_2	Y	N	N/A	6.1	N/A
CS1	City Centre	Roadside	433204	279234	2.7	NO_2	Y	N	Y(22m)	1.9	Y
CS2	City Centre	Roadside	433322	279500	2.85	NO_2	Y	N	Y(12m)	1.7	Y
LON4	Tollbar End	Roadside	436520	275705	2.5	NO_2	Y	Y	Y(26.3m)	5.9	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
LON5	Tollbar End	Roadside	436520	275705	2.5	NO_2	Y	Y	Y(26.3m)	5.9	Y
LON6	Tollbar End	Roadside	436520	275705	2.5	NO_2	Y	Y	Y(26.3m)	5.9	Y
LON7i	Tollbar End	Façade	436540	275727	2.5	NO_2	Y	N	Y(0m)	19.4	Y
LON7ii	Tollbar End	Façade	436545	275713	2.5	NO_2	Y	N	Y(0m)	18.3	Y
LON8a	Tollbar End – removed December 2012	Façade	436551	275703	2.5	NO_2	Y	N	Y(0m)	17.9	Y
LON12	London Road	Façade	434075	278450	2.3	NO_2	Y	N	Y(0m)	5.1	Y
LON13	London Road	Façade	434987	277129	2.6	NO_2	Y	N	Y (0m)	7.1	Y
STL1	Tollbar End	Roadside	436203	275841	3	NO_2	Y	N	Y(17.1m)	12	Y
STL2	Tollbar End	Roadside	436203	275841	3	NO_2	Y	N	Y(17.1m)	12	Y
STL3	Tollbar End	Roadside	436203	275841	3	NO_2	Y	N	Y(17.1m)	12	Y
SE1	Spon End	Roadside	432084	279042	2.5	NO_2	Y	N	Y(2.6m)	0.1	Y
SE1d	Spon End	Roadside	432084	279042	2.5	NO_2	Y	N	Y(2.6m)	0.1	Y
SE1dd	Spon End	Roadside	432084	279042	2.5	NO_2	Y	N	Y(2.6m)	0.1	Y
SE3	Spon End	Façade	432303	279028	2.5	NO_2	Y	N	Y(0m)	2.3	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
QAV01	Queensland Avenue	Roadside	431595	278991	2.5	NO_2	Y	N	Y(3m)	0.1	Y
QAV01d	Queensland Avenue	Roadside	431595	278991	2.5	NO_2	Y	N	Y(3m)	0.1	Y
QAV01dd	Queensland Avenue	Roadside	431595	278991	2.5	NO_2	Y	N	Y(3m)	0.1	Y
QAV6	Queensland Avenue	Roadside	431573	279020	3.1	NO_2	Y	Y	Y(10.8m)	5.0	Y
QAV7	Queensland Avenue	Roadside	431573	279020	3.1	NO_2	Y	Y	Y(10.8m)	4.3	Y
QAV8	Queensland Avenue	Roadside	431573	279020	3.1	NO_2	Y	Y	Y(10.8m)	4.9	Y
QAV12	Queensland Avenue	Façade	431704	278680	2	NO_2	Y	N	Y(0m)	4.3	Y
QAV13	Queensland Avenue	Façade	431763	278657	2.5	NO_2	Y	N	Y(0m)	4.9	Y
R1	Foleshill Road	Roadside	434250	281513	3.3	NO_2	Y	N	Y(13.2m)	5.1	Y
R2	Foleshill Road	Roadside	434250	281513	3.3	NO_2	Y	N	Y(13.2m)	5.1	Y
R3	Foleshill Road	Roadside	434250	281513	3.3	NO_2	Y	N	Y(13.2m)	5.1	Y
R4	Foleshill Road	Façade	434233	281526	3.75	NO_2	Y	N	Y(0m)	8.8	Y
R5	Foleshill Road	Façade	433716	280503	2.8	NO_2	Y	N	Y(0m)	3.7	Y
R6	Foleshill Road	Façade	433617	280276	2.75	NO_2	Y	Y	Y(0m)	4.9	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
R6a	Foleshill Road	Façade	433617	280276	2.75	NO_2	Y	Y	Y(0m)	4.9	Y
R6b	Foleshill Road	Façade	433617	280276	2.75	NO_2	Y	Y	Y(0m)	4.9	Y
R8	Foleshill Road	Façade	433992	281008	3.1	NO_2	Y	N	Y(0m)	4.3	Y
R9	Foleshill Road	Roadside	434059	281105	3	NO_2	Y	N	Y(4.9m)	3.0	Y
LR1	Longford Road	Façade	434836	283030	2	NO_2	Y	N	Y(0m)	5.6	Y
LR2	Longford Road	Façade	434880	283077	2	NO_2	Y	N	Y(0m)	4.2	Y
LR3	Longford Road	Façade	435016	283515	1.5	NO_2	Y	N	Y(0m)	8.5	Y
LP1	Longford Park Urban BG	Urban background	435083	283316	N/A	NO_2	Y	N	N/A	N/A	N/A
BR1	Longford Road	Facade	435094	284156	1.5	NO_2	Y	N	Y(0m)	4.9	Y
HL1	Holbrook Lane	Roadside	433690	281987	1.5	NO_2	Y	N	Y(0m)	3.5	Y
BRN2	Burnaby Road	Façade	433605	281965	2.75	NO_2	Y	N	Y(0m)	5.5	Y
BRN2a	Burnaby Road	Façade	433605	281965	2.75	NO_2	Y	N	Y(0m)	5.5	Y
BRN2b	Burnaby Road	Façade	433605	281965	2.75	NO_2	Y	N	Y(0m)	5.5	Y
BA1	Beake Avenue/Radford Road	Roadside	432531	280769	3	NO_2	Y	N	Y(7.5m)	2.2	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
BA1d	Beake Avenue/Radford Road	Roadside	432531	280769	3	NO_2	Y	N	Y(7.5m)	2.2	Y
BA1dd	Beake Avenue/Radford Road	Roadside	432531	280769	3	NO_2	Y	N	Y(7.5m)	2.2	Y
SS1	Stoney Stanton Road	Façade	434062	280082	2.5	NO_2	Y	N	Y(0m)	3.7	Y
SS2	Stoney Stanton Road	Façade	433994	279969	2.5	NO_2	Y	N	Y(0m)	4.5	Y
SS3	Stoney Stanton Road	Façade	434842	281272	2.5	NO_2	Y	N	Y(0m)	4.5	Y
SS5	Stoney Stanton Road	Façade	433847	279814	1.5	NO_2	Y	N	Y(0m)	3.0	Y
AUN1	Memorial Park	Urban background	432785	277475	3.1	NO_2	Y	N	N/A	116.4	N/A
AUN2	Memorial Park	Urban background	432785	277475	3.1	NO_2	Y	N	N/A	116.4	N/A
AUN3	Memorial Park	Urban background	432785	277475	3.1	NO_2	Y	N	N/A	116.4	N/A
EH1	Earlsdon High Street	Façade	431978	278050	2.75	NO_2	Y	N	Y(0m)	4.6	Y
EH2	Earlsdon High Street	Roadside	431932	278005	2.5	NO_2	Y	N	Y(4.7m)	3	Y
EH3	Earlsdon High Street	Façade	431950	277998	2.7	NO_2	Y	N	Y(0m)	5.5	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
EH4	Earlsdon High Street	Roadside	431971	278022	2.7	NO_2	Y	N	Y(3.1m)	3.0	Y
BELL1	Bell Green	Façade	435849	282211	2.8	NO_2	Y	N	Y (0m)	1.7	Y
BELL2	Bell Green	Façade	435826	282158	2.5	NO_2	Y	N	Y (0m)	5.7	Y
WL1	Woodway Lane (M6)	Façade	437692	282814	2.75	NO_2	Y	N	Y (0m)	12.55	Y
CH1	Jubilee Crescent	Façade	432877	281436	2.1	NO_2	Y	N	Y (0m)	8.9	Y
FGS1	Far Gosford Street	Façade	434330	278973	2.7	NO_2	Y	N	Y (0m)	2.9	Y
FGS2	Far Gosford Street	Façade	434450	279001	2.7	NO_2	Y	N	Y (0m)	5.1	Y
FGS3	Far Gosford Street	Façade	434530	279026	2.7	NO_2	Y	N	Y (0m)	2.4	Y
GR1	Gulson Road	Façade	434678	278922	2.5	NO_2	Y	N	Y(0m)	4.5	Y
Grange 1	Grange Road	Roadside	435772	284260	2.2	NO_2	Y	N	Y(1.7)	0.3	Y
Grange2	Grange Road N of M6	Roadside	435765	284246	2.1	NO_2	Y	N	Y(1.74)	0.3	Y
AGR1	Inside compound M6 contribution only	Roadside	436262	283893	2.5	NO_2	Y	N	N/A	17.5	N/A

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
AGR2	Aldermans Green Road N of M6	Roadside	436286	283860	2.3	NO_2	Y	N	Y(10m)	1.75	Y
SW1	Swan Lane	Façade	434898	279587	2.7	NO_2	Y	N	Y(0m)	4.7	Y
SW2	Swan Lane	Roadside	434897	279484	2.5	NO_2	Y	N	Y(5.2m)	1.4	Y
GS1	Gosford Street	Façade	433899	278845	2.8	NO_2	Y	N	Y(0m)	9.8	Y
GF1	Greyfriars Lane	Facade	433407	278882	2.6	NO_2	Y	N	Y(0m)	0.47	Y
TS3	Trinity Street	Roadside	433492	279239	2.3	NO_2	Y	N	Y(3.28m)	2.4	Y
QV1	Queen Victoria Road	Roadside	433029	278798	2.5	NO_2	Y	N	Y(4m)	1.95	Y
JL1	St. James Lane	Façade	436092	276296	2.2	NO_2	Y	N	Y(0m)	3.95	Y
Grange 3	Grange Road	Roadside	435790	284285	2.4	NO_2	Y	N	Y(1.74m)	0.3	Y
CT1	Oakworth Close	Facade	437641	281816	na	NO_2	Y	N	Y (0m)	8	Y
CT10	Milbourne Road	Facade	432109	278825	na	NO_2	Y	N	Y (0m)	1.4	Y
CT11	Jacob Drive	Facade	430896	276774	na	NO_2	Y	N	Y (0m)	15	Y
CT12	Alderminster Road	Facade	429269	279348	na	NO_2	Y	N	Y (0m)	9.4	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
CT14	Holbrook Lane	Facade	433619	282250	na	NO_2	Y	N	Y (0m)	12.8	Y
CT15	Middlemarch Road	Facade	432999	280924	na	NO_2	Y	N	Y (0m)	7.4	Y
CT17	Wilson Green	Facade	437759	278244	na	NO_2	Y	N	Y (0m)	6	Y
CT18	Tutbury Avenue	Facade	431152	276505	na	NO_2	Y	N	Y (0m)	12.5	Y
CT19	Clayton Road	Facade	431281	280282	na	NO_2	Y	N	Y (0m)	8.2	Y
CT2	Clifford Bridge Road	Facade	437898	279298	na	NO_2	Y	N	Y (0m)	17	Y
CT20	Bennett's Road South	Facade	432095	282352	na	NO_2	Y	N	Y (0m)	15.2	Y
CT22	Greens Road	Facade	433596	279208	na	NO_2	Y	N	Y (0m)	7.9	Y
CT23	Belgrave Road	Facade	437373	279838	na	NO_2	Y	N	Y (0m)	7.3	Y
CT24	Knoll Drive	Facade	433386	276633	na	NO_2	Y	N	Y (0m)	10.7	Y
CT25	Mayflower Drive	Facade	437282	278882	na	NO_2	Y	N	Y (0m)	8.3	Y
CT26	Dersingham Drive	Facade	435615	282875	na	NO_2	Y	N	Y (0m)	6.53	Y
CT27	St James Lane	Facade	436090	276293	na	NO_2	Y	N	Y (0m)	4	Y
CT29	Green Lane	Facade	432376	275993	na	NO_2	Y	N	Y (0m)	11.8	Y
CT3	Gerard Ave	Facade	429906	277557	na	NO_2	Y	N	Y (0m)	9	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
CT30	Gosford St	Facade	433897	278845	na	NO_2	Y	N	Y (0m)	9.8	Y
CT31	Omar Road	Facade	436605	278829	na	NO_2	Y	N	Y (0m)	8.5	Y
CT33	West Avenue	Facade	435244	279032	na	NO_2	Y	N	Y (0m)	18.5	Y
CT34	South Avenue	Facade	435493	278874	na	NO_2	Y	N	Y (0m)	19.8	Y
CT35	Bray's Lane	Facade	435488	279221	na	NO_2	Y	N	Y (0m)	8.8	Y
CT36	North Avenue	Facade	435375	279042	na	NO_2	Y	N	Y (0m)	12.8	Y
CT38	South Avenue	Facade	435303	278854	na	NO_2	Y	N	Y(0m)	10	Y
CT39	Keresley Brook Road	Facade	432167	282748	na	NO_2	Y	N	Y(0m)	35	Y
CT4	100 Seneschal Road	Facade	434326	276931	na	NO_2	Y	N	Y (0m)	8.2	Y
CT5	Swan Lane	Facade	434907	279596	na	NO_2	Y	N	Y (0m)	5.3	Y
CT6	Rowley's Green Lane	Facade	434528	284043	na	NO_2	Y	N	Y (0m)	10.2	Y
CT7	Stubbs Grove	Facade	435570	280345	na	NO_2	Y	N	Y (0m)	5.2	Y
CT8	Wychwood Avenue	Facade	433378	275433	na	NO_2	Y	N	Y (0m)	8.4	Y
CT9	Broad Lane	Facade	427893	279555	na	NO_2	Y	N	Y (0m)	15.3	Y

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide

Automatic Monitoring Data

Data capture rates in some periods and locations were less than the 85% required by DEFRA due to technical difficulties at some of the stations. Where possible data has been annualised with reference to data from other sources as outlined in TG(09). For further information on this please refer to the previous reports in the relevant review and assessment cycle

A summary of the annual mean data for each station in the past 3 years is given in table 2.3 below. Where no data is reported (-) technical difficulties resulted in significant data losses. Hales Street was set up in 2012 but was not running in this period due to on-going power faults.

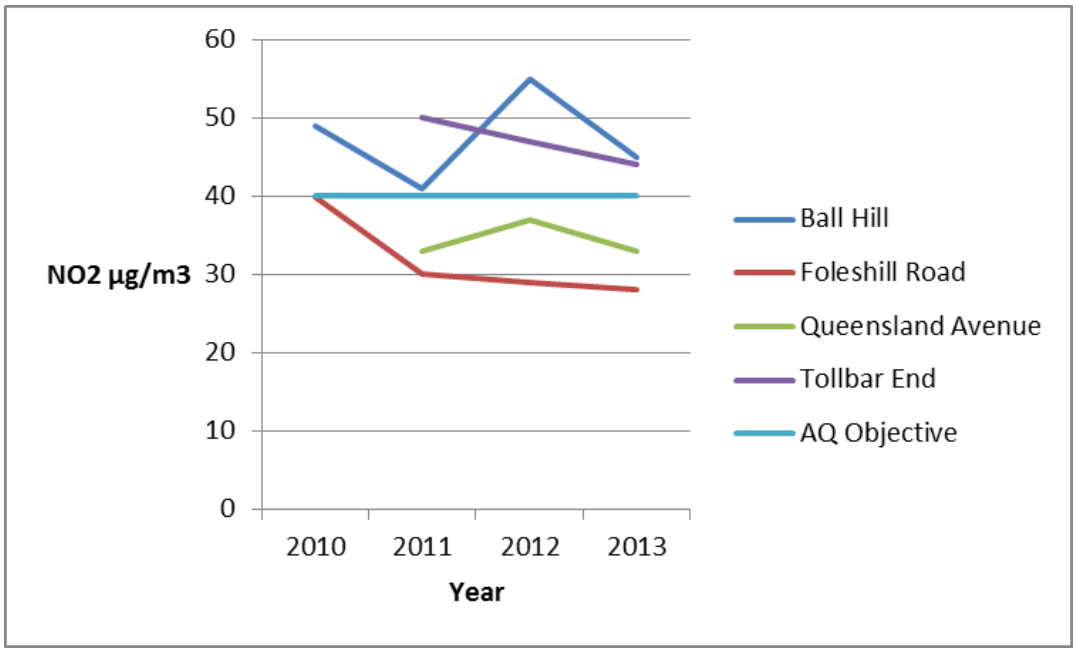
Table 2.3 Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with Annual Mean Objective

Site ID	Within AQMA?	Relevant public exposure? Y/N	Annual Mean (Limit 40 μg/m^3)			
			2013	2012	2011	2010
Ball Hill	Y	Y	**45**[65]	**55**[71]	**41**[95]	**49**[93]
Foleshill Road	Y	Y	28[84]	29[99]	30[84]	39.8[75]
Queensland Avenue	Y	Y	33[52]	37[39]	33[66]	-
Tollbar End	Y	Y	**44**[50]	**47**[99]	**50**[67]	-
Hales Street	Y	Y	**-**	**-**	**-**	-

*Superscript figures denote data capture rate as a percentage

Exceedences of annual mean are highlighted in bold

Figure 2.3 Trends in Annual Mean NO_2 Concentrations Measured at Automatic Monitoring Sites



Due to the fact that less than five years of data has been captured at all sites, any trend analysis of the data should be taken as indicative only.

Ball Hill shows an exceedence of the air quality standard for the last four years, with reasonable data capture rates in 2011 and 2012. Concentrations are variable and have fallen in 2013 to just above the air quality standard of 40µg/m^3. The data capture rate is low for 2013 however, and therefore less reliable.

The data for Foleshill Road shows the concentrations being consistently below the air quality standard. The data capture rates are reasonable and the trend suggests a slight decrease in concentrations since post 2011 following a significant drop between 2010 and 2011..

The Queensland Avenue data capture rates are consistently low and are therefore not reliable. The indication from the data is that concentrations are below the air quality standard of 40µg/m3.

The Tollbar End data shows concentrations above the air quality standard although the trend suggests that levels are falling.

There were no exceedences of the hourly mean in the period 2011 to 2013.

Table 2.4 Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with 1-hour Mean Objective

Site ID	Within AQMA?	Valid data capture 2013 %	Number of exceedences of hourly mean (200 μg/m^3) *If the period of valid data is less than 90% of a full year, include the 99.8th percentile of hourly means in brackets*			
			2013	2012	2011	2010
Ball Hill	Y	65	0(115)	0(139)	0	0
Foleshill Road	Y	84	0(101)	0	0	0 (144.7)
Queensland Ave	Y	52	0(173)	0(119)	0	-
Tollbar End	Y	50	0(146)	0	0	-
Hales Street	Y	-	-	-	-	-

In 2013 the data capture rate was below 90% at all locations and therefore the 99.8th percentile of the hourly data was calculated. These are all below the air quality standard of 200 μg/m^3 and this indicates that no breach of the standard has occurred.

Diffusion Tube Monitoring Data

Two diffusion tubes were removed from the survey in 2010; CC04/5N* and BUR2i. CC04/5N* was removed as it was not a true urban background site as in accordance with the guidance LAQM/TG09; it was within 10m of a road and therefore was not an urban background site. BUR2i was discontinued as the lamppost in the city centre to which it was attached was removed.

In April 2013, all triplicate tubes were removed as were tubes showing results consistently below the air quality standards. Several City centre tubes were relocated due to development resulting in traffic flow changes and pedestrianisation of parts of the city centre. Similarly tubes around the Tollbar Island have been removed due to construction of new road system designed to relieve traffic congestion. Four tubes were added following high results from the Community tubes project at Gosford Street, St. James Lane and Swan Lane.

Results of diffusion tube monitoring over the past 3 years are shown in table 2.5. Tubes with a data capture less than 75% have not been included as the results are not reliable. Results are bias adjusted and distance corrected where applicable. Results with values that exceed 40 µg/m3 are shown in bold and those that exceed 60 µg/m3 are underlined.

A number of tubes were removed, relocated or set in new locations during the 3 year period, and this is the cause of the low data capture rates for some of the results.

Table 2.5 Results of Nitrogen Dioxide Diffusion Tubes 2013 to 2011

Figures in bold show exceedences above 40 μg/m^3 and those underlined show levels above 60 μg/m^3

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (μg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (μg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (μg/m^3) - Bias Adjustment factor = 0.90
6Nd	Holyhead Rd	Roadside	Y	Triplicate	0	/	0	/	67	39.01
6Ndd	Holyhead Rd	Roadside	Y	Triplicate	0	/	0	/	67	**41.03**
6N*	Holyhead Rd	Roadside	Y	Triplicate	0	/	0	/	67	39.01
CCO1*/1N	Holyhead Rd	Roadside	Y	Single	42	32.5	50	**41.7**	50	38.15
CCO3/3N*	Holyhead Rd	Background	Y	Single	0	/	75	28.8	100	39.11
HR1	Holyhead Rd	Façade	Y	Single	83	**60.4**	92	**63.5**	75	**48.67**
HR2	Holyhead Rd	Façade	Y	Triplicate	92	**49.2**	92	**49.3**	17	***/***
HR2a	Holyhead Rd	Façade	Y	Triplicate	25	**47.8**	92	**47.9**	17	***/***
HR2b	Holyhead Rd	Facade	Y	Triplicate	17	/	92	**47.3**	17	***/***
BH1	Ball Hill	Roadside	Y	Single	50	**41.2**	83	**52.8**	92	**48.34**
BH2a	Ball Hill	Façade	Y	Single	92	**53.8**	83	**77.4**	100	29.47
BH4	Ball Hill	Roadside	Y	Single	75	**46.2**	83	**56.1**	100	**45.21**
BH6i	Ball Hill	Roadside	Y	Triplicate	83	**44.7**	17	/	100	**48.47**
BH6ii	Ball Hill	Roadside	Y	Triplicate	25	**47.8**	17	/	100	**46.12**
BH6iii	Ball Hill	Roadside	Y	Triplicate	17	/	17	/	92	**48.34**
BH9	Ball Hill	Roadside	Y	Single	0	/	0	/	67	29.47
BH10	Ball Hill	Roadside	Y	Triplicate	92	**45.3**	83	**53.7**	100	**45.21**
BH11	Ball Hill	Roadside	Y	Triplicate	92	39.2	75	**46.9**	100	**45.38**

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
BH12	Ball Hill	Roadside	Y	Triplicate	92	38.2	92	**42.5**	100	**45.10**
BH13	Walsgrave Rd	Façade	Y	Single	92	**41.2**	92	**42.9**	42	37.28
BH14	Walsgrave Rd	Roadside	Y	Single	75	36.2	92	**43.9**	17	/
BGH1	City Centre	Background	Y	Single	92	31.9	92	35.5	100	39.58
BUR2i	City Centre	Roadside	Y	Single	0	/	0	/		35.39
BUR4i	City Centre	Roadside	Y	Triplicate	0	/	8	/	92	37.11
BUR4ii	City Centre	Roadside	Y	Triplicate	0	/	8	/	100	37.92
BUR4iii	City Centre	Roadside	Y	Triplicate	0	/	8	/	100	**40.82**
BUR6	City Centre	Roadside	Y	Single	0	/	8	/	92	39.58
BUR7	City Centre		Y	Single	0	/	8	/	42	**45.52**
HS1	City Centre	Roadside	Y	Single	0	/	8	**/**	75	39.98
HS2	City Centre	Roadside	Y	Single	25	33.2	83	37.2	92	29.47
TS1	City Centre	Roadside	Y	Single	0	/	67	**70.5**	100	**51.27**
TS2	City Centre	Roadside	Y	Single	92	**54.3**	92	**54.1**	100	**49.51**
CL1	City Centre	Facade	Y	Single	58	31.5	92	30.8	100	36.31
FS1	City Centre	Roadside	Y	Single	92	**49.6**	92	**60.0**	92	**68.26**
CR4	City Centre	Roadside	Y	Triplicate	75	**42.9**	92	**47.7**	100	**40.71**
CR4a	City Centre	Roadside	Y	Triplicate	17	/	75	**43.5**	100	39.32
CR4b	City Centre	Roadside	Y	Triplicate	25	**49.8**	83	**42.5**	100	**40.65**

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
High1	City Centre	Roadside	Y	Single	33	36.2	92	39.8	50	**47.44**
ES1	City Centre	Roadside	Y	Single	83	38.0	75	**47.8**	58	30.15
LPS1	City Centre	Roadside	Y	Single	92	**41.5**	92	**46.0**	58	**40.52**
CS1	City Centre	Roadside	Y	Single	75	39.8	92	**40.5**	50	36.26
CS2	City Centre	Roadside	Y	Single	75	**45.9**	92	**49.1**	58	**46.34**
LON4	Tollbar End	Roadside	Y	Triplicate	42	38.7	92	39.7	100	31.44
LON5	Tollbar End	Roadside	Y	Triplicate	42	39.2	92	**40.1**	100	31.63
LON6	Tollbar End	Roadside	Y	Triplicate	33	35.3	92	**40.4**	100	31.23
LON7i	Tollbar End	Façade	Y	Single	17	/	92	**47.9**	92	35.11
LON7ii	Tollbar End	Façade	Y	Single	17	/	92	40.0	100	27.21
LON8a	Tollbar End	Façade	Y	Single	0	/	67	39.9	92	26.58
LON12	London Rd	Façade	Y	Single	83	**44.0**	92	**45.8**	92	**44.01**
LON13	London Rd	Façade	Y	Single	83	33.5	92	36.1	100	33.36
STL1	Tollbar End	Roadside	Y	Triplicate	67	**68.1**	92	**53.8**	92	37.55
STL2	Tollbar End	Roadside	Y	Triplicate	17	/	92	**53.7**	100	37.28
STL3	Tollbar End	Roadside	Y	Triplicate	17	/	92	**52.8**	100	37.53
SE1	Spon End	Roadside	Y	Triplicate	79	37.0	92	38.1	100	38.55
SE1d	Spon End	Roadside	Y	Triplicate	25	34.8	92	35.4	100	**41.09**
SE1dd	Spon End	Roadside	Y	Triplicate	25	35.0	92	38.7	100	**42.14**
SE3	Spon End	Facade	Y	Single	92	**42.5**	92	**46.4**	100	38.73

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
QAV01	Queensland Ave	Roadside	Y	Triplicate	83	38.1	92	39.1	100	**43.37**
QAV01d	Queensland Ave	Roadside	Y	Triplicate	17	/	92	39.8	100	**44.30**
QAV01dd	Queensland Ave	Roadside	Y	Triplicate	17	/	92	39.8	100	**45.14**
QAV6	Queensland Ave	Roadside	Y	Triplicate	67	**43.9**	83	33.7	92	24.65
QAV7	Queensland Ave	Roadside	Y	Triplicate	92	31.2	92	33.1	100	25.66
QAV8	Queensland Ave	Roadside	Y	Triplicate	83	30.7	75	**44.5**	100	25.53
QAV12	Queensland Ave	Facade	Y	Single	92	39.4	92	**41.6**	100	38.26
QAV13	Queensland Ave	Facade	Y	Single	83	**43.1**	92	**46.0**	100	**41.92**
R1	Foleshill Rd	Roadside	Y	Single	92	31.3	92	33.9	92	27.80
R2	Foleshill Rd	Roadside	Y	Single	92	32.8	92	33.8	92	27.50
R3	Foleshill Rd	Roadside	Y	Single	92	32.5	92	33.3	100	28.51
R4	Foleshill Rd	Façade	Y	Single	83	**40.1**	92	39.5	92	36.77
R5	Foleshill Rd	Façade	Y	Single	92	**48.8**	83	**53.4**	92	**42.15**

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
R6	Foleshill Rd	Façade	Y	Triplicate	92	**55.7**	92	**58.5**	100	**48.98**
R6a	Foleshill Rd	Façade	Y	Triplicate	25	**48.3**	92	**56.7**	100	**48.30**
R6b	Foleshill Rd	Façade	Y	Triplicate	25	**48.7**	92	**57.2**	100	**/**
R8	Foleshill Rd	Façade	Y	Single	92	**43.0**	92	**41.5**	83	38.30
R9	Foleshill Rd	Roadside	Y	Single	42	**45.8**	92	**46.6**	75	34.63
LR1	Longford Rd	Façade	Y	Single	92	**42.6**	92	**47.6**	100	**42.18**
LR2	Longford Rd	Façade	Y	Single	92	**47.4**	92	**47.2**	100	**44.85**
LR3	Longford Rd	Facade	Y	Single	92	**46.5**	83	**64.7**	92	**41.56**
LP1	Longford Park Urban BG	Background	Y	Single	25	31.5	58	34.0	75	23.47
BR1	Longford Rd	Facade	Y	Single	92	**42.6**	92	**43.5**	92	39.56
HL1	Holbrook Lane		Y	Single	92	**43.8**	92	**44.7**	100	**40.53**
BRN2	Burnaby Rd	Façade	Y	Triplicate	83	38.9	92	**44.7**	100	38.84
BRN2a	Burnaby Rd	Façade	Y	Triplicate	33	**40.8**	92	**41.7**	100	**40.92**
BRN2b	Burnaby Rd	Facade	Y	Triplicate	25	39.9	92	**42.7**	100	39.22
BA1	Beake Ave /Radford Rd	Roadside	Y	Triplicate	33	32.9	25	**59.8**	75	39.99
BA1d	Beake Ave /Radford Rd	Roadside	Y	Triplicate	0	/	25	**55.6**	58	**42.14**

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
BA1dd	Beake Ave /Radford Rd	Roadside	Y	Triplicate	0	/	25	**59.5**	50	**45.16**
SS1	Stoney Stanton Rd	Façade	Y	Single	92	37.3	83	**42.7**	83	37.55
SS2	Stoney Stanton Rd	Façade	Y	Single	92	39.0	75	**43.2**	67	37.53
SS3	Stoney Stanton Rd	Façade	Y	Single	83	39.0	92	**40.9**	100	38.68
SS5	Stoney Stanton Rd	Façade	Y	Single	83	**50.7**	92	**51.8**	83	**42.67**
AUN1	Memorial Park	Background	Y	Triplicate	75	19.3	92	21.3	92	17.06
AUN2	Memorial Park	Background	Y	Triplicate	25	25.1	92	20.7	92	17.67
AUN3	Memorial Park	Background	Y	Triplicate	25	24.4	83	18.8	75	16.71
EH1	Earlsdon High St	Façade	Y	Single	33	37.6	92	**40.8**	100	35.19
EH2	Earlsdon High St	Roadside	Y	Single	25	**40.7**	92	39.5	92	34.68

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
EH3	Earlsdon High St	Façade	Y	Single	25	35.1	92	33.6	92	28.53
EH4	Earlsdon High St	Roadside	Y	Single	25	34.9	92	34.6	100	30.92
BELL1	Bell Green	Façade	Y	Single	92	**42.3**	92	**44.1**	100	39.98
BELL2	Bell Green	Façade	Y	Single	92	39.5	92	**42.9**	100	39.18
WL1	Woodway Lane (M6)		Y	Single	0	/	/	/	75	34.37
CH1	Jubilee Crescent	Facade	Y	Single	25	34.4	92	33.3	100	30.29
FGS1	Far Gosford St	Façade	Y	Single	92	**43.9**	92	**45.0**	92	**41.39**
FGS2	Far Gosford St	Façade	Y	Single	92	39.7	92	**43.4**	100	37.97
FGS3	Far Gosford St	Façade	Y	Single	92	**44.0**	92	**47.4**	100	38.18
GR1	Gulson Rod	Façade	Y	Single	92	37.7	92	**40.8**	100	37.25
Grange 2	Grange Rd	Roadside	Y	Single	83	38.2	92	37.6	/	/
AGR1	Aldermans Green Rd	Roadside	Y	Single	92	33.7	92	**40.7**	75	**40.31**

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
AGR2	Aldermans Green Rd	Roadside	Y	Single	83	29.7	83	37.9	83	38.70
CT1	Oakworth Close	Façade	Y	Single	/	/	83	20.87	/	/
CT2	Clifford Bridge Rd	Façade	Y	Single	/	/	75	26.70	/	/
CT3	Gerard Ave	Façade	Y	Single	/	/	67	14.95	/	/
CT4	100 Seneschal Rd	Façade	Y	Single	/	/	100	22.14	/	/
CT5	Swan Lane	Façade	Y	Single	/	/	100	**41.90**	/	/
CT6	Rowley's Green Lane	Façade	Y	Single	/	/	100	23.66	/	/
CT7	Stubbs Grove	Façade	Y	Single	/	/	100	21.80	/	/
CT8	Wychwood Avenue	Façade	Y	Single	/	/	100	17.02	/	/
CT9	Broad Lane	Façade	Y	Single	/	/	83	3.42	/	/
CT10	Milbourne Rd	Façade	Y	Single	/	/	75	24.95	/	/
CT11	Jacob Drive	Façade	Y	Single	/	/	67	18.45	/	/

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
CT12	Alderminster Rd	Façade	Y	Single	/	/	92	16.09	/	/
CT14	Holbrook Lane	Façade	Y	Single	/	/	100	28.77	/	/
CT15	Middlemarch Rd	Façade	Y	Single	/	/	100	19.99	/	/
CT17	Wilson Green	Façade	Y	Single	/	/	67	18.24	/	/
CT18	Tutbury Ave	Façade	Y	Single	/	/	83	7.43	/	/
CT19	Clayton Rd	Façade	Y	Single	/	/	100	17.05	/	/
CT20	Bennett's Rd South	Façade	Y	Single	/	/	75	21.70	/	/
CT22	Greens Rd	Façade	Y	Single	/	/	83	10.69	/	/
CT23	Belgrave Rd	Façade	Y	Single	100	10.84	/	/	/	/
CT24	Knoll Drive	Façade	Y	Single	83	17.24	/	/	/	/
CT25	Mayflower Drive	Façade	Y	Single	92	24.94	/	/	/	/
CT26	Dersingham Drive	Façade	Y	Single	83	18.13	/	/	/	/
CT27	St James Lane	Façade	Y	Single	83	33.90	/	/	/	/

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.95	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.96	Full Calendar Year Data Capture 2011 (%)	2011 Annual Mean Concentration (µg/m^3) - Bias Adjustment factor = 0.90
CT29	Green Lane	Façade	Y	Single	92	12.24	/	/	/	/
CT30	Gosford St	Façade	Y	Single	100	**56.02**	/	/	/	/
CT31	Omar Rd	Façade	Y	Single	92	21.03	/	/	/	/
CT33	West Avenue	Façade	Y	Single	67	22.85	/	/	/	/
CT34	South Avenue	Façade	Y	Single	83	12.65	/	/	/	/
CT35	Bray's Lane	Façade	Y	Single	100	23.52	/	/	/	/
CT36	North Avenue	Façade	Y	Single	100	16.48	/	/	/	/
CT38	South Avenue	Façade	Y	Single	83	19.74	/	/	/	/

The monthly raw data is available on request. Please contact:

Env.protection@coventry.gov.uk

Table 2.6 Results of NO_2 Diffusion Tubes (2009 to 2013)

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.90)	2010 (Bias Adjustment Factor = 0.92)	2011 (Bias Adjustment Factor = 0.90)	2012 (Bias Adjustment Factor = 0.96)	2013 (Bias Adjustment Factor = 0.95)
6Nd	Roadside	Y	33.56	34.62	39.01	/	/
6Ndd	Roadside	Y	/	34.62	**41.03**	/	/
6N*	Roadside	Y	35.31	/	39.01	/	/
CCO1*/1N	Roadside	Y	36.34	33.89	38.15	**41.7**	32.5
CCO3/3N*	Background	Y	18.71	**40.16**	39.11	28.8	/
HR1	Façade	Y	/	/	**48.67**	**63.5**	**60.4**
HR2	Façade	Y	/	**41.05**	**/**	**49.3**	**49.2**
HR2a	Façade	Y	/	**44.71**	**/**	**47.9**	**47.8**
HR2b	Facade	Y	/	**47.86**	**/**	**47.3**	/
BH1	Roadside	Y	33.43	/	**48.34**	**52.8**	**41.2**
BH2a	Façade	Y	**44.34**	29.02	29.47	**77.4**	**53.8**
BH4	Roadside	Y	**40.10**	**43.88**	**45.21**	**56.1**	**46.2**
BH6i	Roadside	Y	**41.19**	**44.71**	**48.47**	/	**44.7**
BH6ii	Roadside	Y	**43.31**	**47.86**	**46.12**	/	**47.8**
BH6iii	Roadside	Y	/	/	**48.34**	/	/
BH9	Roadside	Y	31.02	29.02	29.47	/	/
BH10	Roadside	Y	32.89	**43.88**	**45.21**	**53.7**	**45.3**
BH11	Roadside	Y	31.82	**43.39**	**45.38**	**46.9**	39.2
BH12	Roadside	Y	32.56	**41.84**	**45.10**	**42.5**	38.2

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.90)	2010 (Bias Adjustment Factor = 0.92)	2011 (Bias Adjustment Factor = 0.90)	2012 (Bias Adjustment Factor = 0.96)	2013 (Bias Adjustment Factor = 0.95)
BH13	Façade	Y	/	/	37.28	**42.9**	**41.2**
BH14	Roadside	Y	/	/	/	**43.9**	36.2
BGH1	Background	Y	33.16	38.34	39.58	35.5	31.9
BUR2i	Roadside	Y	/	39.14	35.39	/	/
BUR4i	Roadside	Y	28.98	37.01	37.11	/	/
BUR4ii	Roadside	Y	30.69	35.00	37.92	/	/
BUR4iii	Roadside	Y	/	/	**40.82**	/	/
BUR6	Roadside	Y	33.44	38.34	39.58	/	/
BUR7		Y	/	/	**45.52**	/	/
HS1	Roadside	Y	37.93	**43.06**	39.98	/	/
HS2	Roadside	Y	32.22	33.58	29.47	37.2	33.2
TS1	Roadside	Y	**44.57**	**50.68**	**51.27**	**70.5**	/
TS2	Roadside	Y	**44.30**	**48.38**	**49.51**	**54.1**	**54.3**
CL1	Facade	Y	31.79	32.83	36.31	30.8	31.5
FS1	Roadside	Y	**47.04**	**57.07**	**68.26**	**60.0**	**49.6**
CR4	Roadside	Y	39.87	39.72	**40.71**	**47.7**	**42.9**
CR4a	Roadside	Y	39.18	37.61	39.32	**43.5**	/
CR4b	Roadside	Y	/	/	**40.65**	**42.5**	**49.8**
High1	Roadside	Y	/	/	**47.44**	39.8	36.2
ES1	Roadside	Y	/	/	30.15	**47.8**	38.0
LPS1	Roadside	Y	/	/	**40.52**	**46.0**	**41.5**

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.90)	2010 (Bias Adjustment Factor = 0.92)	2011 (Bias Adjustment Factor = 0.90)	2012 (Bias Adjustment Factor = 0.96)	2013 (Bias Adjustment Factor = 0.95)
CS1	Roadside	Y	/	/	36.26	**40.5**	39.8
CS2	Roadside	Y	/	/	**46.34**	**49.1**	**45.9**
LON4	Roadside	Y	32.06	29.96	31.44	39.7	38.7
LON5	Roadside	Y	32.79	30.00	31.63	**40.1**	39.2
LON6	Roadside	Y	32.61	30.12	31.23	**40.4**	35.3
LON7i	Façade	Y	**41.85**	32.99	35.11	**47.9**	/
LON7ii	Façade	Y	**/**	27.65	27.21	40.0	/
LON8a	Façade	Y	34.31	26.51	26.58	39.9	/
LON12	Façade	Y	39.40	38.34	**44.01**	**45.8**	**44.0**
LON13	Façade	Y	/	/	33.36	36.1	33.5
STL1	Roadside	Y	29.22	/	37.55	**53.8**	**68.1**
STL2	Roadside	Y	31.21	31.11	37.28	**53.7**	/
STL3	Roadside	Y	/	/	37.53	**52.8**	/
SE1	Roadside	Y	/	37.86	38.55	38.1	37.0
SE1d	Roadside	Y	/	**41.53**	**41.09**	35.4	34.8
SE1dd	Roadside	Y	/	/	**42.14**	38.7	35.0
SE3	Facade	Y	35.16	36.81	38.73	**46.4**	**42.5**
QAV01	Roadside	Y	**42.82**	**41.05**	**43.37**	39.1	38.1
QAV01d	Roadside	Y	**43.60**	**41.49**	**44.30**	39.8	/
QAV01dd	Roadside	Y	/	/	**45.14**	39.8	/
QAV6	Roadside	Y	31.73	37.90	24.65	33.7	**43.9**

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.90)	2010 (Bias Adjustment Factor = 0.92)	2011 (Bias Adjustment Factor = 0.90)	2012 (Bias Adjustment Factor = 0.96)	2013 (Bias Adjustment Factor = 0.95)
QAV7	Roadside	Y	29.44	37.15	25.66	33.1	31.2
QAV8	Roadside	Y	28.08	25.84	25.53	**44.5**	30.7
QAV12	Facade	Y	**42.33**	26.13	38.26	**41.6**	39.4
QAV13	Facade	Y	38.84	26.19	**41.92**	**46.0**	**43.1**
R1	Roadside	Y	30.36	29.37	27.80	33.9	31.3
R2	Roadside	Y	29.73	29.92	27.50	33.8	32.8
R3	Roadside	Y	29.93	29.32	28.51	33.3	32.5
R4	Façade	Y	32.95	36.77	36.77	39.5	**40.1**
R5	Façade	Y	**43.78**	**42.15**	**42.15**	**53.4**	**48.8**
R6	Façade	Y	**48.91**	**48.98**	**48.98**	**58.5**	**55.7**
R6a	Façade	Y	**46.30**	**48.30**	**48.30**	**56.7**	**48.3**
R6b	Façade	Y	**/**	/	**/**	**57.2**	**48.7**
R8	Façade	Y	**47.69**	38.30	38.30	**41.5**	**43.0**
R9	Roadside	Y	38.70	34.63	34.63	**46.6**	**45.8**
LR1	Façade	Y	/	**42.85**	**42.18**	**47.6**	**42.6**
LR2	Façade	Y	/	**42.60**	**44.85**	**47.2**	**47.4**
LR3	Facade	Y	34.72	**40.63**	**41.56**	**64.7**	**46.5**
LP1	Background	Y	/	/	23.47	34.0	31.5
BR1	Facade	Y	35.62	37.23	39.56	**43.5**	**42.6**
HL1		Y	**41.91**	37.98	**40.53**	**44.7**	**43.8**

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.90)	2010 (Bias Adjustment Factor = 0.92)	2011 (Bias Adjustment Factor = 0.90)	2012 (Bias Adjustment Factor = 0.96)	2013 (Bias Adjustment Factor = 0.95)
BRN2	Façade	Y	37.01	36.47	38.84	**44.7**	38.9
BRN2a	Façade	Y	35.78	36.39	**40.92**	**41.7**	**40.8**
BRN2b	Facade	Y	/	/	39.22	**42.7**	39.9
BA1	Roadside	Y	33.49	34.89	39.99	**59.8**	32.9
BA1d	Roadside	Y	32.59	36.30	**42.14**	**55.6**	/
BA1dd	Roadside	Y	/	/	**45.16**	**59.5**	/
SS1	Façade	Y	34.79	38.39	37.55	**42.7**	37.3
SS2	Façade	Y	38.46	38.76	37.53	**43.2**	39.0
SS3	Façade	Y	36.61	37.74	38.68	**40.9**	39.0
SS5	Façade	Y	/	**40.06**	**42.67**	**51.8**	**50.7**
AUN1	Background	Y	38.36	21.82	17.06	21.3	19.3
AUN2	Background	Y	16.96	20.46	17.67	20.7	25.1
AUN3	Background	Y	17.17	21.72	16.71	18.8	24.4
EH1	Façade	Y	/	37.23	35.19	**40.8**	37.6
EH2	Roadside	Y	/	34.96	34.68	39.5	**40.7**
EH3	Façade	Y	/	30.02	28.53	33.6	35.1
EH4	Roadside	Y	/	32.90	30.92	34.6	34.9

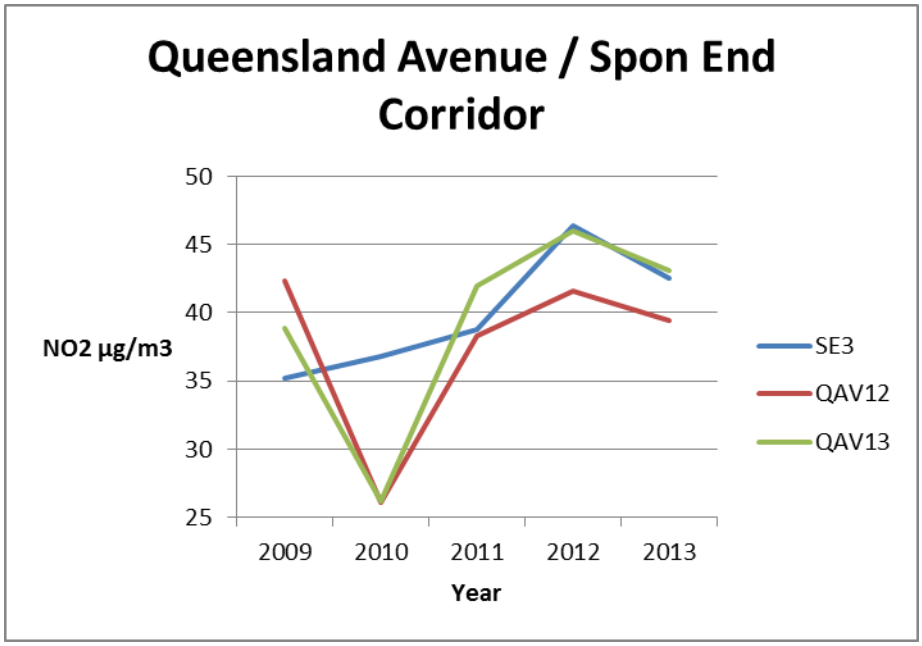
Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.90)	2010 (Bias Adjustment Factor = 0.92)	2011 (Bias Adjustment Factor = 0.90)	2012 (Bias Adjustment Factor = 0.96)	2013 (Bias Adjustment Factor = 0.95)
BELL1	Façade	Y	/	/	39.98	**44.1**	**42.3**
BELL2	Façade	Y	/	/	39.18	**42.9**	39.5
WL1		Y	/	/	34.37	/	/
CH1	Facade	Y	/	/	30.29	33.3	34.4
FGS1	Façade	Y	/	/	**41.39**	**45.0**	**43.9**
FGS2	Façade	Y	/	/	37.97	**43.4**	39.7
FGS3	Façade	Y	/	/	38.18	**47.4**	**44.0**
GR1	Façade	Y	/	/	37.25	**40.8**	37.7
Grange 2	Roadside	Y	/	/	/	37.6	38.2
AGR1	Roadside	Y	/	/	**40.31**	**40.7**	33.7
AGR2	Roadside	Y	/	/	38.70	37.9	29.7

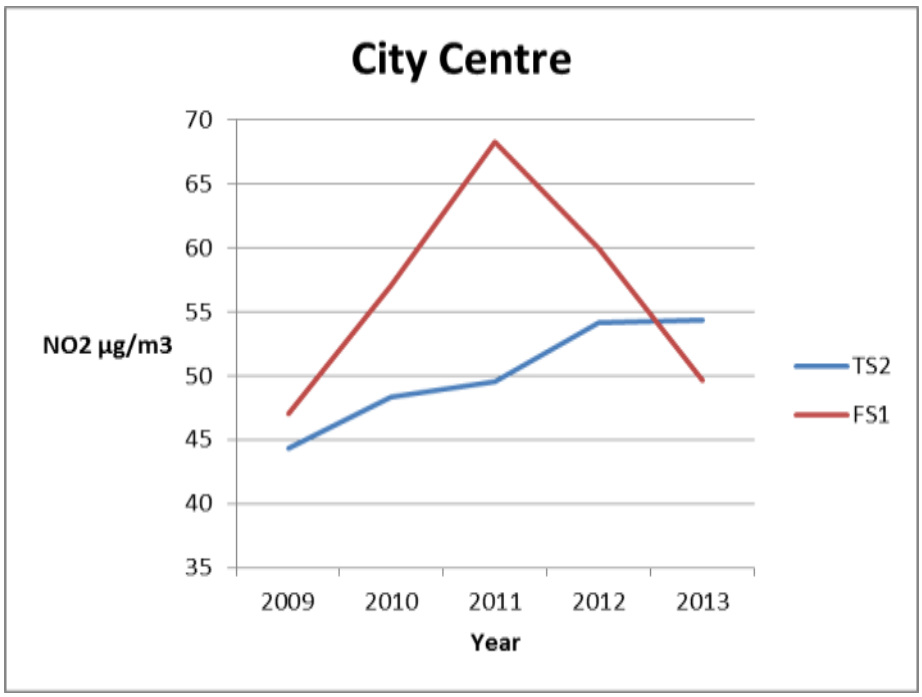
Figure 2.4 Trends in Annual Mean Nitrogen Dioxide Concentrations Measured at Diffusion Tube Monitoring Sites

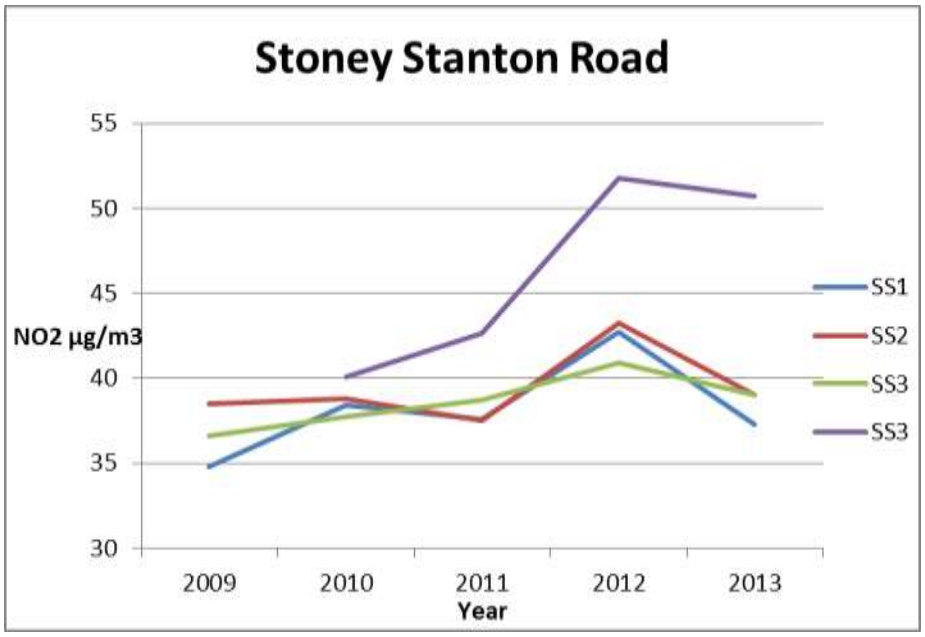
There is no overall trend in the results of diffusion tubes across the city, although all results show a peak in nitrogen dioxide concentrations in 2012.

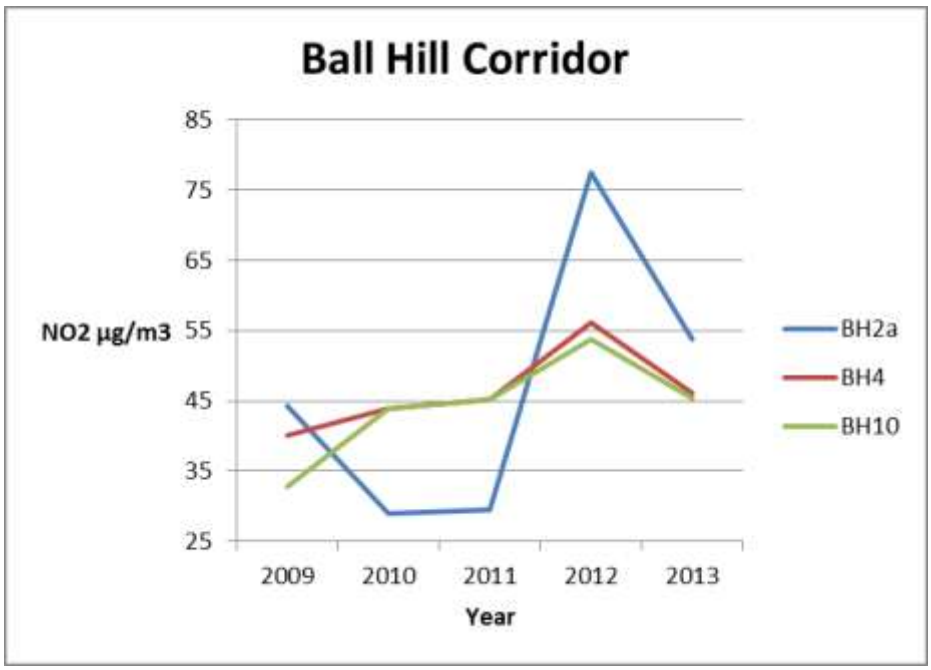
As no specific actions were taken between 2009 and 2013 to reduce the levels of nitrogen dioxide, no significant reductions were anticipated.

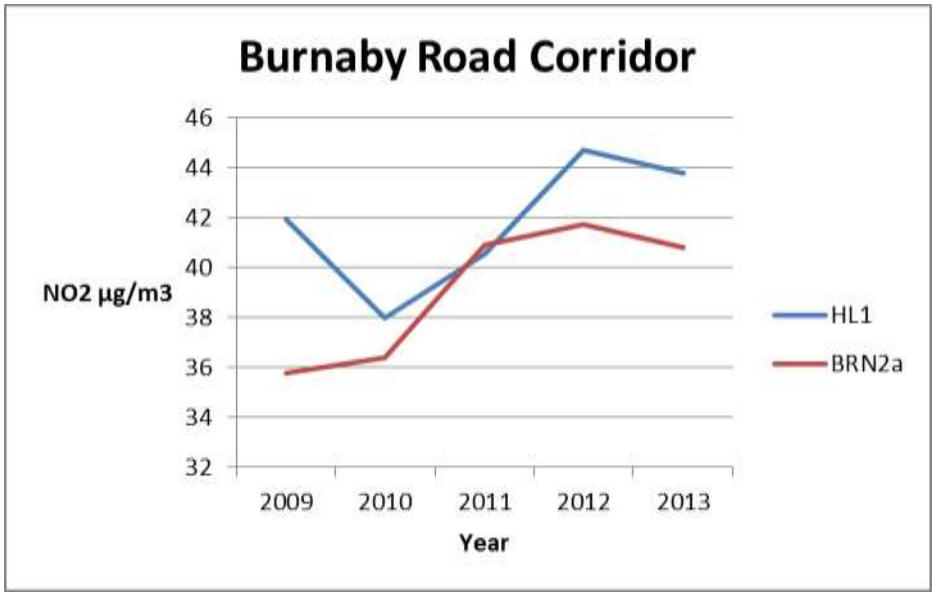
In 2013, there were 39 tubes with exceedences of the annual mean from a total of 83 results. Of these 2 tubes exceeded 60 µg/m^3.

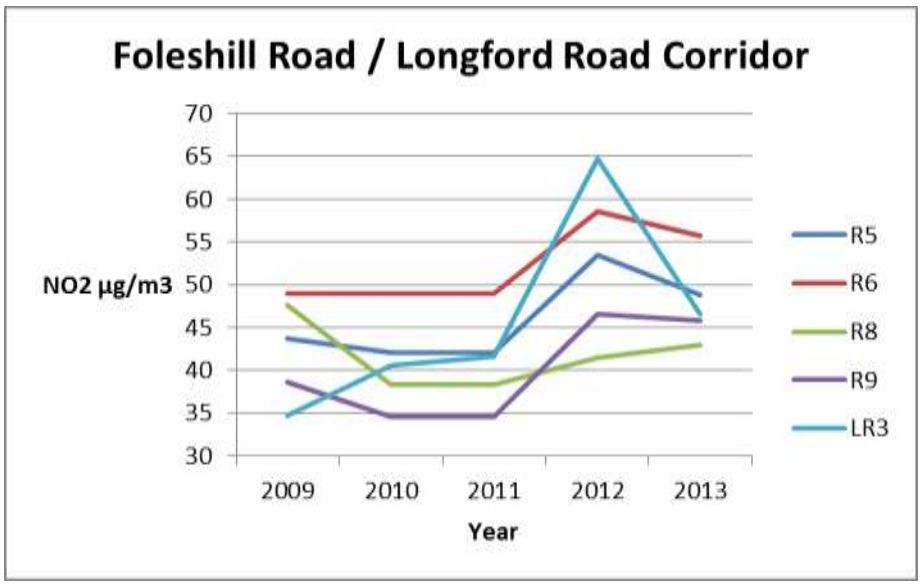



City Centre
70
65
60
55
50
45
40
35
NO2 µg/m3
2009
2010
2011
2012
2013
Year
TS2
FS1


Stoney Stanton Road
55
50
45
40
35
30
NO2 µg/m3
2009
2010
2011
2012
2013
Year
SS1
SS2
SS3
SS3


Ball Hill Corridor
85
75
65
55
45
35
25
NO2 µg/m3
2009
2010
2011
2012
2013
Year
BH2a
BH4
BH10


Burnaby Road Corridor
46
44
42
40
38
36
34
32
NO2 µg/m3
2009
2010
2011
2012
2013
Year
HL1
BRN2a



2.2.2 Particulate Matter (PM_{10})

Three of Coventry's five continuous monitoring stations monitor for PM_{10}. The Foleshill Road and Queensland Avenue stations monitor PM_{10} using a Tapered Element Oscillating Microbalance (TEOM), whereas the Tollbar End station used a TEOM with Filter Dynamics Measurement System (FDMS) which measures the volatile component of atmospheric particles.

As previously discussed, due to data capture issues and technical problems with the analysers, we have been unable to produce any robust data within the preferred data capture limits (>75%) for the years 2011 and 2012 and therefore we are unable to report any concentrations for either the annual mean or the 24 hour mean for PM_{10} for this period. In the 2013 period, reliable data is available for the Queensland Avenue station only. This gives an annual mean of 22 µg/m^3 with the 24-hour mean value of 50 µg/m^3 being exceeded 13 times. These values are well below the both the annual or 24 hour mean.

Based on the limited amount of data and local knowledge of traffic flows and topography, it is unlikely that either the annual or 24 hour mean for PM_{10} has been exceeded in other areas.

2.2.3 Sulphur Dioxide (SO_2)

Sulphur dioxide is not currently monitored by Coventry City Council

2.2.4 Benzene

Benzene is not currently monitored by Coventry City Council

2.2.5 Summary of Compliance with AQS Objectives

Coventry City Council has examined the results from monitoring in the City.

Concentrations within the AQMA still exceed the objective for nitrogen dioxide and the AQMA should remain.

Concentrations outside of the AQMA are all below the objectives at relevant locations, therefore there is no need to proceed to a Detailed Assessment.

3 New Local Developments

Coventry is undergoing a concentrated phase of regeneration with increased pedestrianisation of the city centre and improvements to major traffic routes (assisted by funding from the 2012 Olympics). There is also continuing development of residential and commercial sites, including mixed uses which are both having positive and negative effects on air quality.

3.1 Road Traffic Sources

Coventry is surrounded by sections of the strategic road network which is operated and managed by the Highways Agency. Main routes affecting Coventry include the M6 along the northern city boundary, the A46 along the eastern boundary and the A45/A46 along the southern boundary. These routes suffer from high levels of delay at peak times which can increase levels of poor air quality. Tollbar Island forms a critical part of the network, and this junction is currently being upgraded at a cost of £106m to reduce queuing which should improve air quality. The City Council is actively lobbying for further enhancements along the A46 corridor which will support further improvements to traffic flows and air quality.

There have been changes to road traffic layouts and the following schemes have been commenced or completed during 2010-2013 and may have a cumulative impact on air quality measurements.

- Broadgate Square (City Centre); Pedestrian scheme and forming a public open square completed in 2012. Closed off to traffic, buses and taxis.
- Pedestrian access improvements from Railway Station to Bull Yard (through Greyfriars Green urban park); including reduction in traffic lanes and narrowing of Warwick Row and closure of pedestrian subway on Warwick Row, completed in 2012.
- Changes and pedestrianisation of city centre shared spaces, removal of traffic lights (junction of Jordan Well/Cox St.) completed in 2012.

- Change to White Street junction going towards Stoney Stanton Rd, from junction 2 ring road, now T-junction, previously was a feeder road.
- Works on the A46 (off Brandon Road) by TGI Friday's 2012-13
- Binley Shopping Park opened 2013.
- There are no longer any football matches at the Ricoh from August 2013 so 600 plus people are no longer inflowing to North Coventry.
- Court House Green, closure of the park & ride scheme in 2013.

3.2 Other Transport Sources

Coventry Airport stopped running passenger flights in December 2009, but continues to operate cargo services. This may have had a benefit on local air quality.

In 2013 planning approval was granted for development and expansion of the existing Daventry International Rail Freight Terminal at Clifton on Dunsmore on the outskirts of Rugby, Warwickshire. Although this lies outside the Coventry boundary the rail links connect directly between Coventry to Rugby and increased rail traffic could impact on air quality. Additionally expansion of this scheme has the potential for increasing HGV traffic and affecting air quality along the M6 corridor through Coventry and surrounding routes whilst traffic is en route to the freight terminal.

There is also a rail station planned at the Ricoh Arena to provide an additional travel option for those attending events/conferences as part of the NUCKLE scheme. This has not been formally approved and is still under discussion – see section 7 of this report.

3.3 Industrial Sources

The Council can confirm that there have been no new or significantly changed developments in terms of industrial sources since the completion of the last progress report.

3.4 Commercial and Domestic Sources

In terms of mitigation and carbon reduction the Coventry Heatline Project commenced and came online in September 2013 transferring heat produced at the waste-to-energy plant in Whitley to a number of city centre buildings including the Council House, Herbert Art Gallery and Museum and Coventry Cathedral. This saves 2000 tonnes of CO_2 per year (previously lost as waste heat) from the Whitley Efw plant (Energy from waste).

A second stage will be put in place to extend the scheme to other parts of the City Centre and future developments such as Friargate and potentially Coventry Transport Museum, The Belgrade Theatre and other city development sites. The potential is not just limited to commercial sites as district heating schemes can connect to Heatline to residential uses benefiting tenants in social housing and other residential developments that want to connect to the scheme. The scheme will reduce the need for heating plant in those areas where it can be utilized.

The major redevelopment of the hospital site on Stoney Stanton Road has initially proposed installation of CHP for a mixed use site comprising housing and a new school. There is potential for this site to connect to the Heatline Project as the network is extended to that area of the City from the Cathedral to the Transport Museum and Belgrade Theatre. This would assist in mitigating significant levels of NOx from gas-fuelled CHP and provide carbon offsetting.

Existing and new CHP and biomass applications could have significant impacts in terms of PM10's and levels of NOx.
A new biomass plant was commissioned and operational in 2012 at Coventry University (Faculty of Engineering and Computing) comprising a 1.5 MW biomass (wood pellet) plant (with a stack height of 33 metres).

The Stivichall School biomass boiler which was operational in 2012 is no longer being used due to difficulties with smoke generation.

It is highly likely that the increase in the number of domestic wood burners in recent years may have had an adverse cumulative impact on local air quality. However, as

these do not require planning permission it will prove difficult to quantify any possible level of emissions. It may be possible that information can be sought through the Building Regulations process to record the number of burners being installed, this is currently being investigated.

3.5 New Developments with Fugitive or Uncontrolled Sources

Coventry City Council confirms that there are no new or newly identified local developments (or changes to existing developments) with fugitive or uncontrolled sources which may have an adverse impact on air quality within the Local Authority area.

4 Local / Regional Air Quality Strategy

The Council does not have a local Air Quality Strategy. It sites within the West Midlands conurbation and has been working with its colleagues in this area to develop a West Midlands LES (Low Emissions Strategy).

In addition the project will improve regional air quality through more air quality focused procurement and planning development control advocating the improvement of the low emission vehicle infrastructure, as well as encouraging sustainable modes of Proposing changes in modal shift/ sustainable transport / cycling / walking and LTP3 implementation plan requirement.

- Accelerates uptake of cleaner fuels / technologies
- Discourages high emission vehicle use
- Evaluation of damage (costs) / evidence base, e.g. whole-life costs, development scheme compensation
- LEV strategies inc. buses, freight, taxis
- Low Emission infrastructure, including EV charging points provision
- Public-Private Partnerships

5 Planning Applications

1. Planning applications approved & schemes completed 2011-2013

The following residential, commercial and mixed use schemes have had planning approval granted and the schemes were completed between 2011 and 2013 and could impact on air quality. No air quality assessments have been requested or provided through the planning control process.

Development Description	Use Type & Capacity (No. of Units)	Completion Date 2011-2013
Land between 34 Howard Street and 44 Harnall Lane West	Residential 16	2011
Hillfields Health Centre and Russell Street Car Park Howard Street	Healthcare Not known	2011-12
Henley College	Education	2012
Severn Trent Offices (low carbon design)	Commercial Office Not known	Opened 2012
Hawthorne Tree Public House Broad Lane	Residential 14	2012
Land at Former Green Man Public House Hall Green Road	Residential 24	2012
Jaguar Cars Browns Lane Site 1	Residential 12	2012
Land at Wood End, Henley Green, Manor Farm and Deedmore Road demolition commenced 2010 and regeneration of new housing on site, first 150 homes started May 2010. Planed 3,000 homes over 15 years.	Residential 154	2012
Windmill Road Windmill Depot	Residential 70	2012

Midlands sports centre for the disabled	Residential 113	2013
Technical training college The Maxwell Centre Upper York St	Residential 137	2013
Land to West of Wickmans Drive (RO Fow Oak)	Residential 45	2013
Land to East of Morrisons Brandon Road	Residential 12	2013
Land between Humber Road and Aldermoor Lane Stoke	Residential 164	2013
Phase 2 East Humber Road Peugeot	Residential 142	2013
45 Templar Aveune	Residential 11	2013
Land at corner of Exhall Road and Bennetts Road	Residential 59	2013
Land at Whitley Village	Residential 45	2013
The Courthouse 47 Blackberry Lane	Residential 32	2013
31 Clarendon Street Earlsdon	Residential 14	2013
Newlands House Bennetts Road	Residential 14	2013
Charterhouse Works Northfield Road	Residential 21	2013
Land at Stretton Avenue/Chace Avenue	Residential 26	2013
Stoke Ex-servicemens Club Clay Lane Stoke	Residential 20	2013
56-66 Cambridge Street	Residential 14	2013

2. New developments with planning applications approved during 2011-2013 that could impact on air quality but progress of development is ongoing or unknown

The following schemes have all received planning approval during the period 2011 to 2013. However, some schemes are yet to be commenced, in others works are in progress and some schemes may have been completed. All of these developments are regarded as possibly having an impact on air quality and air quality assessments have been requested or provided.

Planning Application Ref. & Year Approved	Application Site	Description of Development Proposal
DC/2011/0574 2011	University Of Warwick, (Academic Rd adj to Academic Sq) Gibbet Hill Road	Development Master plan for the University
FUL/2011/0270 2011	Land on the corner of Wickmans Drive and Banner Lane Wickmans Drive	Erection of a 106 bedroomed Care Home and associated facilities
FUL/2011/0584 2011	165, St Georges House Corporation Street	Change of use of redundant offices to student accommodation comprising 133 residential units, gymnasium, cycle parking and associated external alterations.
FUL/2011/1435 2011	Lyons Park Coundon Wedge Drive	Construction of new storage and distribution warehouse (B8 use) with new access, parking and service yard.
OUT/2010/1704	Land To The West of Wilsons Lane	Residential development: Outline application including means of access.

OUT/2011/0326 2011	Bishop Gate / Ringway St Nicholas, Tower Street, Bishop Street	Proposed redevelopment including demolition of former Royal Mail sorting office and public car park to provide food superstore, health & fitness club, multi-storey car park. Stopping up public highway, removal of footbridge over Ring Road and creation of at-grade crossing
RM/2011/2152 2012	New Century Park Allard Way	Mixed use redevelopment of the site
CON/2013/0173 2013	18 Far Gosford Street	Demolition of existing buildings at 18 to 21 Far Gosford Street, Coventry.
OUT/2013/0041 2013	Acordis Acetate Chemicals Foleshill Road (previous Courtalds Chemical Works)	Development of mixed use site, 344 dwellings, car de-fleet processing centre comprising business (Class B1), general industry (Class B2), distribution and storage (Class B8) and motor vehicles sales. Provision of public open space, sports pitches, play areas, associated roads, footpaths, cycle routes, car parking and landscaping.
DC/2013/1520 2013	Land off Burnaby Road	Demolition of existing building and erection of 94 houses with access road, amenity spaces, parking and landscaping.
FUL/2013/0849 2013	Former St. Mary's School site Lansdowne Street	Erection of 56 bedroomed independent hospital, including supported living units car parking, landscaping and additional recreational/amenity space and associated works
INF/2013/0683 2013 (Outside Coventry area but with potential for impact)	Former Rugby Radio Station Daventry International Rail Freight estate Between M1 and A5 Watling Street	Development and expansion of the existing Daventry International Rail Freight

OUT/2013/0473 2013	Land to the Rear Of The Boat Inn Shilton Lane	Development of land for new housing and associated areas of new landscaping and open space, Formation of new vehicular access on to Shilton Lane with provision for an access to land to rear of the Boat Inn. Extensions to the rear gardens of properties 35-77 (inclusive) Shilton Lane.
OUT/2013/1498 2013	Coventry University Much Park Street Car Park Much Park Street	Proposed erection of new science building to provide up to 11,175m² floorspace for education use; demolition of existing extension to the Richard Crossman Building; associated landscaping, parking and means of access

1. 2014 Schemes approved for development which could impact on future air quality levels

In 2014 the forthcoming major redevelopment of the hospital site on **Stoney Stanton Road** has initially proposed installation of CHP for a mixed use site comprising housing and a new school. There is potential for this site to connect to the Heatline Project as the network is extended to that area of the City from the Cathedral to the Transport Museum and Belgrade Theatre. This would assist in mitigating significant levels of NOx from gas-fuelled CHP and provide carbon offsetting.

The **Friargate master plan** was approved in 2011, 37 acres of land around Coventry Railway Station (bounded by the railway station, Grosvenor Rd., Manor Road and including Greyfriars Green, Station Square). Including demolition of existing buildings and erection of multi storey buildings in low carbon design mixed use development including highway and pedestrian alterations and enhancements. When completed the scheme will provide a new business district for the city of up to 300,000m2 of new development, of which 185,000m2 will comprise high quality office accommodation. A total of 25 new buildings are planned for the site, including 14 Grade A offices, two hotels, homes, retail and leisure facilities. The project includes re-designing the ring road adjacent to the station area (Junction 6) to remove the

roundabout and to build a Bridge Deck across the ring road itself to allow the creation of a new public boulevard to link into the city centre and extend the Greyfriars Green parkland setting to Friargate. The entire development is due for staged completion over the next 15 years.

Bishop Gate, Ringway St Nicholas, Tower Street, Bishop Street. Proposed redevelopment including demolition of a former Royal Mail sorting office, and public car park to provide a food superstore, a health and fitness club and multi-storey car park. Stopping up of public highway, removal of footbridge over Ring Road and creation of at-grade crossing. Scheme approved in 2011 but not yet commenced.

New Century Park, Allard Way. Major scheme: mixed use business, general industry, storage and distribution, hotel, residential, education and associated car parking. Demolition phase completed in 2010 and scheme now in progress.

The following **residential schemes** are new developments which have had planning approvals granted but were completed in 2014 and not during the 2011-2013 period. However, they help to give a picture where changes in air quality may occur.

Residential developments approved 2014	**Capacity (No. of Units)**
Phase 2 West Humber Road Peugeot	92
Land Bounded by Railway Line, Dunster Place and Lythalls Lane	138
Part of Peugeot Phase 3	39
Phase 5 (part) Banner lane	102
Phase 6 Banner Lane	37
Former industrial unit between Alma Street and Lower Ford Street	99
Jaguar Heritage Centre Browns Lane	19
R/O Browns Lane adjoining Heritage Centre	11
Lady Lane Longford	16

Bannerbrook Park Phase 6A	57
Trafalgar Foundry Broad Street Jetty, Broad Street	20
9 Bright Street Foleshill	15
Land between Humber Road and Aldermoor Lane	179

6 Air Quality Planning Policies

Supplementary Planning Documents

Coventry City Council's 2009 'Delivering a Sustainable City' SPD, requires 10% of energy requirements to be from renewable sources or as an alternative developments can be insulated to a higher standard such that they generate 10% less energy than required under Building Regs.

Low Emissions Towns and Cities Programme (LETCP)

Together with other West Midlands partners Coventry has helped develop the West Midlands Low Emissions Towns & Cities (LETCP) Planning Good Practice Guide. This guidance forms part of the development of an overarching Low Emission Strategy for the West Midlands aimed at helping regional authorities to achieve UK Air Quality Objectives and EU Air Quality Limit Values, by providing a simplified approach to dealing with air quality within the planning system.

It outlines how local authorities in the West Midlands will work with the public and the private sector, and with other stakeholders, to implement measures which reduce the impact of emissions from traffic and development on public health and air quality, whilst simultaneously contributing to the regeneration of our economy.

The guidance covers developments ranging from schools, housing, large supermarkets, industrial/commercial sites and others. This ensures protection of people from dust during construction, assessing the impact of emissions from traffic and heating sources and getting developers to look at better alternatives. This includes improved design of buildings and green spaces, reducing traffic levels, greener modes of transport and heating, electric vehicle charging and increased cycling. These all make a difference in improving air quality, protecting people using these sites and those who live nearby.

Copies of the Low Emissions Town and Cities Programme documents can be viewed on the LETCP website:
www.walsall.gov.uk/low_emissions_towns_and_cities_programme

7 Local Transport Plans and Strategies

Land-use and transport planning can have a major influence on air quality, and it is important therefore that these plans recognise and proactively address air quality management issues.

The West Midlands Local Transport Plan (LTP3) sets out a long term transport strategy for the West Midlands metropolitan area. Key objective 5 (KO5) aims to improve Quality of Life and the Local Environment though the promotion of sustainable modes of travel such as walking and cycling.
http://centro.org.uk/media/2556/LTP-appendices.pdf

The emerging Coventry Core Strategy will set out a long term plan for the future development of the city. This will include site allocations for housing and employment land uses and include transport policies which support new development proposals.

The Centro Transport Prospectus (Towards A World Class Integrated Transport Network) sets out Centro's proposals for improving the transport network. The plans include the promotion of public transport walking and cycling which are beneficial to air quality.
http://centro.org.uk/about-us/corporate-publications/prospectus/

The Draft West Midlands Rail Vision sets out a strategy for rail travel in the wider West Midlands region. This includes proposals for enhanced rail services in the Coventry area such as the NUCKLE rail project between Nuneaton and Coventry through to Leamington. Rail travel is an efficient and less polluting mode of travel than single occupancy car use.
http://test.centro.org.uk/consultation/rail_vision.aspx

There are plans to implement a Coventry Cycle Strategy sets out an ambitious plan for encouraging more people to take up cycling though the development of a comprehensive cycle network. The strategy will build on the successful Cycle Coventry project which will see £7m of investment in cycle infrastructure and training opportunities by March 2015.

8 Climate Change Strategies

Coventry's Climate Change Strategy

Coventry City Council is committed to tackling climate change and to making a major contribution to reducing greenhouse gas emissions for the city. Coventry was one of the first cities to produce a climate change strategy in collaboration with its Local Strategic Partnership, Coventry Partnership and has set a carbon reduction commitment target to reduce carbon dioxide emissions by 27.5% by the year 2020 (using 2005 as the baseline year).

https://www.coventry.gov.uk/downloads/download/1640/climate_change_strategy_for_coventry

The Coventry Climate Change Strategy specifies the short and medium term actions the Council is undertaking to enable the city to begin its journey to a low carbon economy. A number of major projects are underway that will significantly reduce the city's carbon emissions over the coming decade these include:

An **aerial thermal survey** of the city was carried out early 2010 using an advanced infra-red camera which took images of the whole city from a plane, to spot areas where buildings are losing heat and require additional thermal insulation.

The use of **low carbon vehicles** has now begun and Coventry now has 18 rechargeable points in 6 locations for electric vehicles. Coventry City Council has won awards for its 79 low emission "**Green Fleet**" vehicles, being either electric or hybrid vehicles and Coventry has been recognised nationally for its commitment to having a cleaner vehicle fleet. The University is also involved in key research into low emission technology and low carbon vehicles.

Street Lighting PFI: Coventry is the UK's first city with centrally controlled dimming street lighting. The installation of 28,700 new lighting columns (of its 32,000 street lights) began in 2010. This has the potential to save 4,000 tonnes of carbon.

De-illumination of keep left bollards and street signs will save almost 500 tonnes of CO2 over the next five years and make significant energy savings as new high technology reflective materials replace lighting units.

Heatline: In its first phase the Coventry Heatline Project will save 2000 tonnes of CO2 per year (previously lost as waste heat) from the Whitley Efw plant (Energy from waste) providing heat to the Cathedral, Art Gallery and Council Buildings.

9 Implementation of Action Plans

The Council's last Action Plan was published in 2007. Progress with the 2007 Action Plan has been given in the 2010 Progress Report. No significant changes have been made since this time other than that listed below:

- The declaration of a Traffic Regulation Order (TRC) to prohibit Euro I and Euro II buses from passing through the AQMA from 2011 onwards. Some of these buses remain and their elimination has been estimated to deliver a 2% reduction in emissions

As a result of the city wide AQMA declaration and the poor air quality highlighted in this report, the Action Plan requires significant re-drafting or starting afresh with a new Action Plan.

10 Conclusions and Proposed Actions

10.1 Conclusions from New Monitoring Data

Despite actions implemented in the 2007 Air Quality Action Plan there are significant numbers of exceedance of the nitrogen dioxide air quality objective in the city. Whilst these results have been obtained from diffusion tubes and should therefore be treated as indicative, they do reflect a worsening picture of air quality. The nitrogen dioxide levels at some of the automatic units have remained below the air quality objective, for example at Foleshill Road; however, diffusion tubes elsewhere on these road corridors indicate higher levels.

The automatic unit at Ball Hill has shown no reduction in levels of nitrogen dioxide since 2011despite focused attention in the 2007 Air Quality Action Plan. It can only therefore be concluded that despite some initial success the improvement in air quality has not been sustained, and the reasons for this would needed further investigation as part of the on-going Action Plan review.

It may therefore be a timely opportunity to investigate the re-location of the automatic units to these areas of known exceedance, which will provide more conclusive data and support action planning.

As the whole city is an AQMA none of the exceedance fall outside the AQMA and as such no detailed assessment is needed.

10.2 Conclusions relating to New Local Developments

Any local developments that require further air quality assessment are dealt with through the planning control process, with air quality assessments being requested as appropriate in line with the LETC Planning Guidance.

10.3 Proposed Actions

The 2007 Air Quality Action Plan needs significant redrafting to reflect the changing picture of air quality across the city. This will require working with our partners to ensure that the plan is appropriate and realistic given the task required. A meeting is planned in July 2014 with Senior Management of the Environmental Health, Public Health and Transport/Planning teams to establish who will take responsibility for the action planning work going forward. It is anticipated that there will be a draft Action Plan by the end of 2014, depending on the timescales involved with public consultation.

11. References

Low Emissions Town and Cities Programme, LETCP website:
www.walsall.gov.uk/low_emissions_towns_and_cities_programme

Coventry's Climate Change Strategy

https://www.coventry.gov.uk/downloads/download/1640/climate_change_strategy_for_coventry

Cofely District Energy and Coventry City Council launches the Coventry District Energy Scheme, 14/11/13
http://www.coventry.gov.uk/news/article/926/cofely_district_energy_and_coventry_city_council_launches_the_coventry_district_energy_scheme

Appendices

Appendix A: Short-term to Long-term Data adjustment

Appendix A:

Short-term to Long-term Data adjustment

Diffusion tube results were annualised using the process set out in TG(09).

2011			
Jan - May			
Long term site	**Annual mean (AM)**	**Period mean (PM)**	**Ratio (AM/PM)**
COV	23.7	27.6	0.856
LEAM	28.6	32.3	0.886
NOTT	59.5	66.7	0.891
MKTH	12.3	13.1	0.942
		Average (Ra)	**0.894**
Jan - July			
COV	23.7	22.9	1.032
LEAM	28.6	28.1	1.019
NOTT	59.5	59.0	1.009
MKTH	12.3	11.3	1.089
		Average (Ra)	**1.037**
Sept - Dec			
COV	23.7	26.8	0.881
LEAM	28.6	31.8	0.899
NOTT	59.5	64.4	0.924
MKTH	12.3	14.0	0.881
		Average (Ra)	**0.896**
Jan - June			
COV	23.7	24.7	**0.959**
LEAM	28.6	29.65484247	**0.964**
NOTT	59.5	62.12876648	**0.957**
MKTH	12.3	12.11167072	**1.016**
		Average (Ra)	**0.974**

2012			
Jan - May			
Long term site	**Annual mean (AM)**	**Period mean (PM)**	**Ratio (AM/PM)**
COV	19.3	21.4	0.899
LEAM	20.6	24.7	0.834
NOTT	37.04	39.28	0.943
MKTH	25.1	14.5	1.723
		Average (Ra)	**1.100**
Jan - July			
COV	19.3	19.0	1.012
LEAM	20.6	20.4	1.009
NOTT	37.0	35.6	1.040
MKTH	25.1	15.4	1.629
		Average (Ra)	**1.172**
Sept - Dec			
COV	19.3	20.9	0.924
LEAM	20.6	23.0	0.895
NOTT	37.0	41.1	0.901
MKTH	25.1	41.5	0.604
		Average (Ra)	**0.831**
Jan - June			
COV	19.3	20.0	0.963
LEAM	20.6	22.1	0.933
NOTT	37.0	37.09	0.999
MKTH	25.1	15.21	1.647
		Average (Ra)	**1.135**

2013			
Jan - May			
Long term site	**Annual mean (AM)**	**Period mean (PM)**	**Ratio (AM/PM)**
COV	20.5	23.1	0.9
NORTHM	13.9	13.2	1.1
NOTT	37.1	39.9	0.9
MKTH	13.1	13.3	1.0
		Average (Ra)	**1.0**
Jan - July			
COV	20.5	20.0	1.0
NORTHM	13.9	11.4	1.2
NOTT	37.1	36.5	1.0

MKTH	13.1	9.4	1.4
		Average (Ra)	**1.2**
Sept - Dec			
COV	20.5	22.6	0.9
NORTHM	13.9	18.9	0.7
NOTT	37.1	40.1	0.9
MKTH	13.1	17.7	0.7
		Average (Ra)	**0.8**
Jan - June			
COV	20.5	22.6	0.9
NORTHM	13.9	12.1	1.1
NOTT	37.1	37.5	1.0
MKTH	13.1	10.6	1.2
		Average (Ra)	**1.1**
June-Sep			
	Annual mean (AM)	**Period mean (PM)**	**Ratio (AM/PM)**
COV	20.5	16.1	1.3
NORTHM	13.9	10.3	1.3
NOTT	37.1	29.2	1.3
MKTH	13.1	9.0	1.5
		Average (Ra)	**1.3**
Jan-Mar	**Annual mean (AM)**	**Period mean (PM)**	**Ratio (AM/PM)**
COV	20.5	29.7	0.7
NORTHM	13.9	15.6	0.9
NOTT	37.1	44.6	0.8
MKTH	13.1	11.0	1.2
		Average (Ra)	**0.9**

Automatic Unit Results were annualised using the process set out in TG(09).

2013			
Jul/Dec	**NO2 Correction as per TG09**		
Long term site	**Annual mean (AM)**	**Period mean (PM)**	**Ratio (AM/PM)**
BHX	25	25.8	0.97
Background			
Sept - Dec			
Bham Moor Str	45	43	1.046
Roadside			
Jan/Jul			
Bham Moor Str	45	44	1.02