



***West Lindsey District Council
Annual Status Report 2016***

Bureau Veritas

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2016 Air Quality Annual Status Report (ASR)

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

January, 2017

West Lindsey District Council

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Executive Summary: Air Quality in Our Area

Air pollution is an issue that can affect everyone with varying levels of severity. The air that we breathe is essential for health and wellbeing and it shouldn't have to be a cause of detrimental health effects. Where we live, where we work, our travel choices and journeys made can affect the concentrations of certain air pollutants that we are exposed to.

Local authorities have an obligation through the LAQM regime to review and assess the air quality within their administrative regions. Specific measures are implemented by way of an Air Quality Action Plan (AQAP) for areas where poor air quality has been determined, but community engagement led action through education and promotion also helps improving air quality at a local level. Good air quality begins at a local level, with actions being replicated on regional and national scales benefitting wider scale air quality and helping to meet the Air Quality Strategy (AQS) objectives that are set out in EU and UK law.

Air Quality in West Lindsey

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

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³.

The main source of air pollution in the District is road traffic emissions from vehicles using major roads, notably the A15 that runs from Lincoln to the M180, the A631 east of Gainsborough, and the A46 running from Lincoln to Caistor. There are currently no Air Quality Management Areas (AQMAs) declared in the West Lindsey District Council area.

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

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

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

Actions to Improve Air Quality

A monitoring network of nitrogen dioxide (NO₂) diffusion tubes is in place within the District and currently does not show any exceedences of the annual mean AQS objective for NO₂ at any relevant locations. In addition there is an automatic monitoring station at Gainsborough Cemetery operated by EDF Energy that monitors real-time concentrations of NO₂ and sulphur dioxide (SO₂). This monitoring network is set to continue acting as a system to monitor changes in concentration of NO₂ and SO₂ and to identify any changes in concentration trends.

Being a rural District, air quality within West Lindsey has historically been in compliance with the AQS objectives. With continued levels of development being experienced across the country, an emphasis on air quality is important to ensure areas of poor air quality are identified and acted upon. Across the District air quality continues to be assessed through the current monitoring network, whereby any areas of poor air quality would be identified.

Local Priorities and Challenges

There are currently no AQMAs designated within West Lindsey, and it is a priority for this to remain. Although monitoring has shown NO₂ concentrations to be below the AQS objectives within the District there are still a number of challenges in relation to air quality within the District.

Any new developments within the District will continue to be assessed on an individual basis to ensure that it is not detrimental to local air quality. In addition any new industry will be permitted in line with The Environmental Permitting (England and Wales) Regulations 2010.

How to Get Involved

A number of initiatives can be completed by everyone to help reduce air pollution concentrations on a local scale, these include:

- Using alternative modes of transport to the car, walking, cycling or using public transport;
- Changes in transport mode can bring added health benefits through walking and cycling exercise; and

West Lindsey District Council

- Asking your employer, school or college about the possibility of developing a green travel plan.

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1 Local Air Quality Management

This report provides an overview of air quality in West Lindsey during 2015. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by West Lindsey to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England can be found in Table E.1 in Appendix E.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority must prepare an Air Quality Action Plan (AQAP) within 12-18 months setting out measures it intends to put in place in pursuit of the objectives.

Currently there are no AQMAs designated within West Lindsey.

Based on the NO₂ monitoring results from 2015 and previous years being consistently below the relevant AQS objectives (see monitoring section, Appendix A), it is not proposed to declare any new AQMAs within the District.

2.2 Progress and Impact of Measures to address Air Quality in West Lindsey

Air quality within West Lindsey, as in previous years, remains significantly below the AQS objectives. Regardless, the Council is committed to improving air quality within its boundaries. The Central Lincolnshire Local Plan is currently at the final consultation stage and is set to be adopted in December 2016. Once the new Local Plan is in place developments will be required to demonstrate that they do not have any adverse impacts upon local air quality.

There are currently no designated AQMAs within West Lindsey and therefore an AQAP has not been required. The general air quality within the District is considered to be good, and as such West Lindsey has not been required to implement any direct or specific measures related to the control and mitigation of sources of local air pollution.

The priorities for West Lindsey for the coming year are to continue with the current NO₂ diffusion tube monitoring network to identify any potential exceedances of the AQS objectives, to continue to assess any planning applications received in relation to air quality and to ensure that any development do not have a detrimental effect upon local air quality.

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

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

There is currently no ongoing monitoring of PM₁₀ or PM_{2.5} within West Lindsey. Due to this, and the fact that there are currently no specific concerns regarding the air quality within the District there are no specific measures in place to address PM_{2.5} concentrations.

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

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

This section sets out what monitoring has taken place and how it compares with objectives.

West Lindsey undertook automatic (continuous) monitoring at 1 site during 2015. Table A.1 in Appendix A shows the details of the sites. The Gainsborough Cemetery site is operated by EDF Energy as part of a monitoring network to monitor emissions from the 'North Trent' group of power stations.

A map showing the location of the monitoring site is provided in Figure D.1 in Appendix D.

3.1.2 Non-Automatic Monitoring Sites

West Lindsey undertook non-automatic (passive) monitoring of NO₂ at 11 sites during 2015. Table A.3 in Appendix A shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Figure D.2 and Figure D.3 in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) and bias adjustment for the diffusion tubes are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for "annualisation" and bias. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.3 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past 4 years with the air quality objective of 40µg/m³. All monitoring locations continue to be well below the annual mean AQS objective for NO₂. The highest concentration was 26.8µg/m³ recorded at the diffusion tube monitoring location WL7 which is located at 3 Lea Road, Gainsborough.

Concentration trend graphs are presented in Figure A.1 and Figure A.2. The majority of diffusion tube concentrations, as shown in Figure A.1 present a downward trend in concentrations. There were a number of locations where 2015 concentration results were the highest recorded between 2012 and 2015; WL1, WL2, WL7, WL9 and WL11. All of these results were still far below the NO₂ AQS annual mean objective of 40µg/m³.

The concentrations at the Gainsborough Cemetery monitoring site have decreased every year from 2012 to 2015, and therefore the concentration results present a downward trend. This downward trend is presented in Figure A.2.

For the diffusion tubes, the full 2015 dataset of monthly mean values is provided in Table B.1 in Appendix B.

Table A.4 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past 4 years with the air quality objective of 200µg/m³, not to be exceeded more than 18 times per year. For the past 4 years there has not been a single exceedence of the AQS hourly objective at the Gainsborough Cemetery monitoring location.

3.2.2 Sulphur Dioxide (SO₂)

Table A.5 in Appendix A compares the ratified continuous monitored SO₂ concentrations for year 2015 with the air quality objectives for SO₂ presented in Table E.1.

The results presented in Table A.5 show that all AQS objectives for SO₂ continue to be met at the Gainsborough Cemetery monitoring location.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
Gainsborough Cemetery (GC)	Urban Background/Industrial	482021	289974	NO ₂ , SO ₂	No	Chemiluminescent and UVF analysers	N/A	N/A	3

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

(2) N/A if not applicable.

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

Site ID	Site Location	Site Type	X OS Grid Ref	Y OS Grid Ref	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube collocated with a Continuous Analyser?	Height (m)
WL1	19 Spring Gardens, Gainsborough	R	481721	389935	N	7.8	2.9	N	2.75
WL2	58 Etherington Street, Gainsborough	R	481688	389770	N	20.1	1.6	N	2.75
WL3/4/5	Gainsborough Cemetery, Gainsborough	B	482021	389974	N	N/A	13.8	Y	3
WL6	Cherry Tree Road, Gainsborough	K	482483	390014	N	1.7	0.2	N	2.75
WL7	3 Lea Road, Gainsborough	R	481526	389077	N	0	8.6	N	2.75
WL8	Marshall Way, Gainsborough	R	483062	389224	N	11.2	15.9	N	2.75
WL9	Lamas Leas Lane, Market Rasen	R	510840	388610	N	32.4	10.2	N	2.75
WL10	Beeches Way, Market Rasen	R	510851	388475	N	1.2	6.9	N	2.75
WL11	53 Caistor Rd/ Gallimore Lane, Market Rasen	R	510681	389675	N	15.1	1.7	N	2.75
WL12	Walkerith	B	479811	392738	N	51	2.0	N	2.75
WL13	Heaton Street	R	481555	389891	N	5.9	2.22	N	2.75

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

(2) N/A if not applicable.

NB R – Roadside, B – Background, K - Kerbside

Table A.3 – Annual Mean NO₂ Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture 2015 (%) ⁽¹⁾	NO ₂ Annual Mean Concentration (µg/m ³) ⁽³⁾			
				2012	2013	2014	2015
GC	B/I	Automatic	96.2	16.0	15.2	13.8	13.6
WL1	R	Passive	100	23.4	21.7	19.5	24.7
WL2	R	Passive	100	16.1	15.1	14.1	19.9
WL3/4/5	B	Passive	100/100/100	20.2	18.8	17.7	13.4
WL6	K	Passive	100	31.8	29.4	26.9	16.8
WL7	R	Passive	91.7	22.3	19.4	19.0	26.8
WL8	R	Passive	100	19.7	18.6	17.4	18.1
WL9	R	Passive	100	15.7	15.8	12.8	18.1
WL10	R	Passive	100	19.8	19.1	18.2	13.7
WL11	R	Passive	100	17.0	15.1	13.7	18.8
WL12	B	Passive	100	27.1	25.4	23.7	12.7
WL13	R	Passive	100	27.7	28.9	24.6	24.7

Notes: Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

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

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

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

Site ID	Site Type	Monitoring Type	Valid Data Capture 2015 (%) ⁽¹⁾	NO ₂ 1-Hour Means > 200µg/m ³ ⁽³⁾			
				2012	2013	2014	2015
GC	Urban Background/Industrial	Automatic	13.6	0	0	0	0

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

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

(2) If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

Table A.5 – SO₂ Monitoring Results

Site ID	Site Type	Valid Data Capture for monitoring Period (%) ⁽¹⁾	Valid Data Capture 2014 (%) ⁽²⁾	Number of Exceedances (percentile in bracket) ⁽³⁾		
				15-minute Objective (266 µg/m ³)	1-hour Objective (350 µg/m ³)	24-hour Objective (125 µg/m ³)
GC	Urban Background/Industrial	95.7	95.7	0	0	0

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

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

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

(3) If the period of valid data is less than 85%, the relevant percentiles are provided in brackets.

Figure A.1 – Trends in Annual Mean NO₂ Concentrations Measured at the Diffusion Tube Monitoring Sites

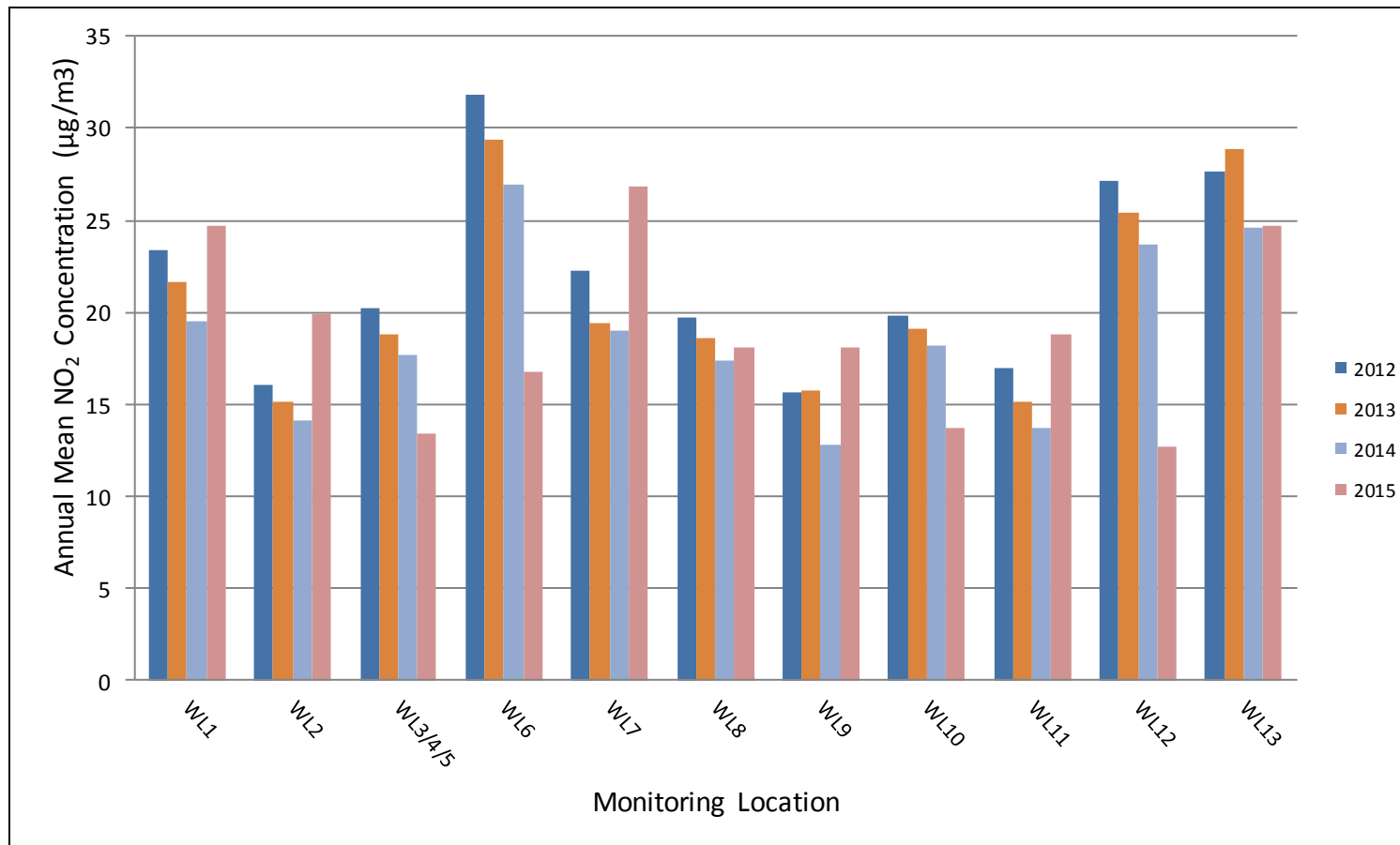
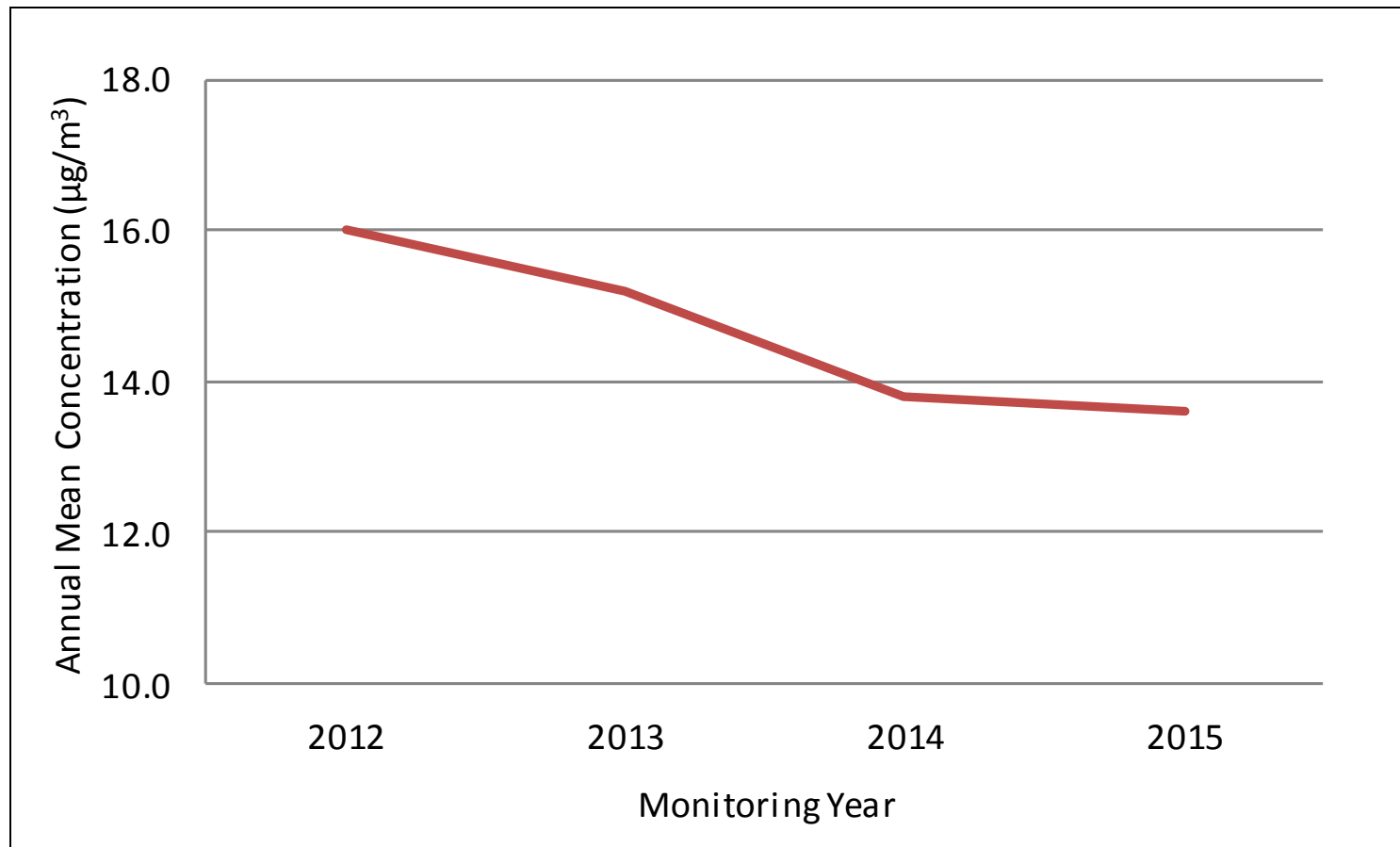


Figure A.2 – Trends in Annual Mean NO₂ Concentrations Measured at Gainsborough Cemetery Automatic Monitor



Appendix B: Full Monthly Diffusion Tube Results for 2015

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

Site ID	NO ₂ Mean Concentrations (µg/m ³)												Annual Mean	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted ⁽¹⁾
	WL1	32.7	31.3	13.6	23.2	17.7	23.8	16.5	18.4	19.6	21.7	25.1		
WL2	23.5	24.8	9.3	17.8	14.2	13.9	14.0	15.8	16.7	18.9	24.2	22.1	17.9	19.9
WL3	16.7	17.0	8.5	12.3	6.9	7.6	9.4	9.7	10.7	15.7	15.8	16.4	12.2	13.6
WL4	18.1	19.5	6.7	11.5	8.1	7.1	9.0	9.2	11.3	13.4	15.6	13.9	11.9	13.3
WL5	15.3	21.5	6.5	12.4	7.5	7.3	9.2	9.4	12.0	14.1	17.2	12.8	12.1	13.4
WL6	20.6	22.7	8.4	13.4	9.5	9.3	14.0	12.3	13.6	17.3	22.2	18.6	15.2	16.8
WL7	27.7	28.7	15.6		19.5	21.6	20.1	22.9	27.8	34.1	26.9	21.1	24.2	26.8
WL8	23.0	24.5	9.1	13.7	14.6	11.7	12.7	13.7	14.3	19.8	21.7	16.9	16.3	18.1
WL9	20.1	24.6	9.1	16.1	13.5	12.2	13.4	13.5	16.2	21.0	19.7	16.1	16.3	18.1
WL10	20.0	20.4	6.8	11.0	8.3	8.0	9.0	10.0	11.7	14.3	15.3	13.2	12.3	13.7
WL11	19.4	23.1	9.5	16.9	17.4	14.8	16.8	15.0	19.4	21.1	16.8	13.2	16.9	18.8
WL12	15.4	17.4	5.6	11.8	7.0	6.9	8.4	9.4	8.9	11.9	19.0	15.7	11.5	12.7
WL13	29.7	33.3	12.2	22.4	18.4	16.0	18.9	18.6	20.1	25.9	26.2	24.7	22.2	24.7

(1) See Appendix C for details on bias adjustment

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

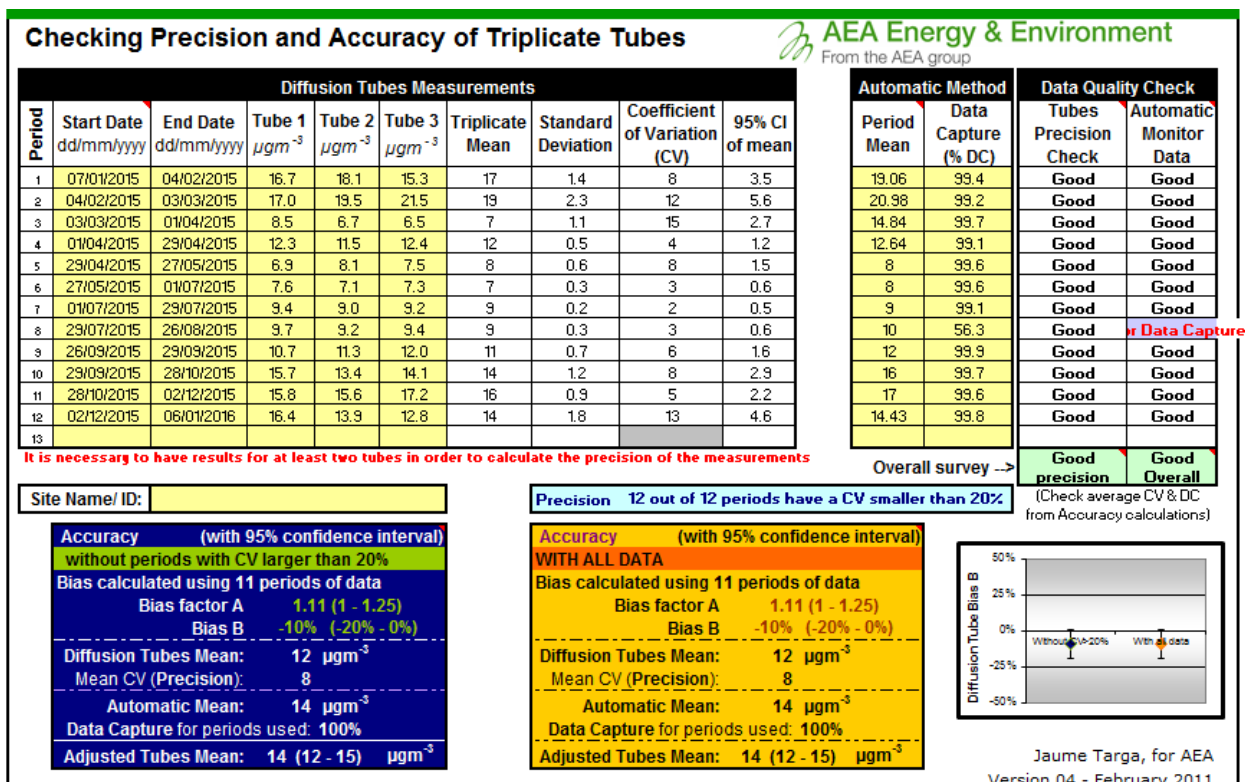
Sources of Pollution

West Lindsey have identified no **new sources** within the District as described in Chapter 7, Section 1 of the Defra Technical Guidance LAQM.TG16.

Diffusion Tube Local Bias Adjustment Factor

There is a triplicate co-located diffusion tube monitoring site within West Lindsey located at the Gainsborough Cemetery automatic monitoring station. A local bias adjustment factor has been calculated from the Precision and Bias Adjustment spreadsheet (v04)⁴, the output is shown below in Figure C.1.

Figure C.1 – Local Bias Correction Output: Gainsborough Cemetery



Diffusion Tube National Bias Adjustment Factors

Diffusion tube data for West Lindsey District Council is supplied and analysed by Gradko International Ltd. The tubes were prepared using the 50% TEA in acetone preparation method. The national bias adjustment factor for Gradko 50% TEA in

⁴ AEA_DifTPAB_v04.xls, available at <http://laqm.defra.gov.uk/bias-adjustment-factors/local-bias.html>

acetone is 0.96 for the year 2015 (based on 15 studies, version 09/16) as derived from the national bias adjustment factor spreadsheet⁵.

Discussion of Choice of Factor to Use

The diffusion tube data has been corrected using a bias adjustment factor, which is an estimate of the difference between the diffusion tube concentration and the continuous monitoring concentration, the latter assumed to be a more accurate method of monitoring. The Defra Technical Guidance LAQM.TG16 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

With regard to the application of a bias adjustment factor for diffusion tubes, the Defra Technical Guidance LAQM.TG16 and the LAQM Helpdesk⁶ recommend the use of a local bias adjustment factor where available and relevant to diffusion tube sites.

The local bias adjustment factor calculated for 2015 is 1.11. The triplicate monitoring site had a good data capture for the co-location study period (100% for diffusion tubes and 96.29% for the automatic monitor) with good precision recorded for all monthly monitoring periods. It was decided to use the local bias adjustment factor for the 2015 diffusion tube data. For comparison, the national bias adjustment factor for 2015 was 0.96 based on 15 studies.

For previous years data (2012 to 2014) presented in Table A.3 the bias adjustment factors have been taken from previous LAQM reports. The factors used were 0.82 (2012), 0.80 (2013) and 0.79 (2014). From 2012 a local bias adjustment factor derived from the co-location study at Gainsborough Cemetery has been used to bias adjust the diffusion tube results, previously to this the national bias adjustment figure had been used.

⁵ National Diffusion Tube Bias Adjustment Factor Spreadsheet version 09/16 available at <http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>

⁶ [Laqm.defra.gov.uk](http://laqm.defra.gov.uk)

QA/QC of Diffusion Tube Monitoring

The diffusion tubes for the year 2015 were supplied and analysed by Gradko International Ltd, the tubes were prepared using the 50% TEA in acetone preparation method. All results have been bias adjusted and annualised where required before being presented in Table A.3.

Gradko International Ltd is a UKAS accredited laboratory and participates in laboratory performance and proficiency testing schemes. These provide strict performance criteria for participating laboratories to meet, thereby ensuring NO₂ concentrations reported are of a high calibre. The laboratory follows the procedures set out in the Harmonisation Practical Guidance and participates in the AIR proficiency-testing (AIR-PT) scheme. Previously to the Air-PT scheme, Gradko participated in the Workplace Analysis Scheme for Proficiency (WASP) for NO₂ diffusion tube analysis.

Defra and the Devolved Administrations advise that diffusion tubes used for LAQM should be obtained from laboratories that have demonstrated satisfactory performance in the AIR-PT scheme. Laboratory performance in the AIR-PT is also assessed by the National Physical Laboratory (NPL), alongside laboratory data from the monthly NPL Field Inter-Comparison Exercise carried out at for Gradko at Marylebone Road, central London. A laboratory is assessed and given a 'z' score, a score of ± 2 or less indicates satisfactory laboratory performance.

Gradko International Ltd's performance for 2015 is covered by rounds AR006, AR007, AR009 and AR010 of the AIR-PT scheme, for each round 100% of the laboratories results were deemed to be satisfactory based upon a z score of $\leq \pm 2$. In 2015, the tube precision for NO₂ Annual Field Inter-Comparison for Gradko International using the 50% TEA in acetone method was 'good' for the results of all 14 participating local authorities.

Appendix D: Maps of Monitoring Locations

Figure D.1 – Map of Automatic Monitoring Location



Figure D.2 – Map of Non-Automatic Monitoring Sites: Gainsborough

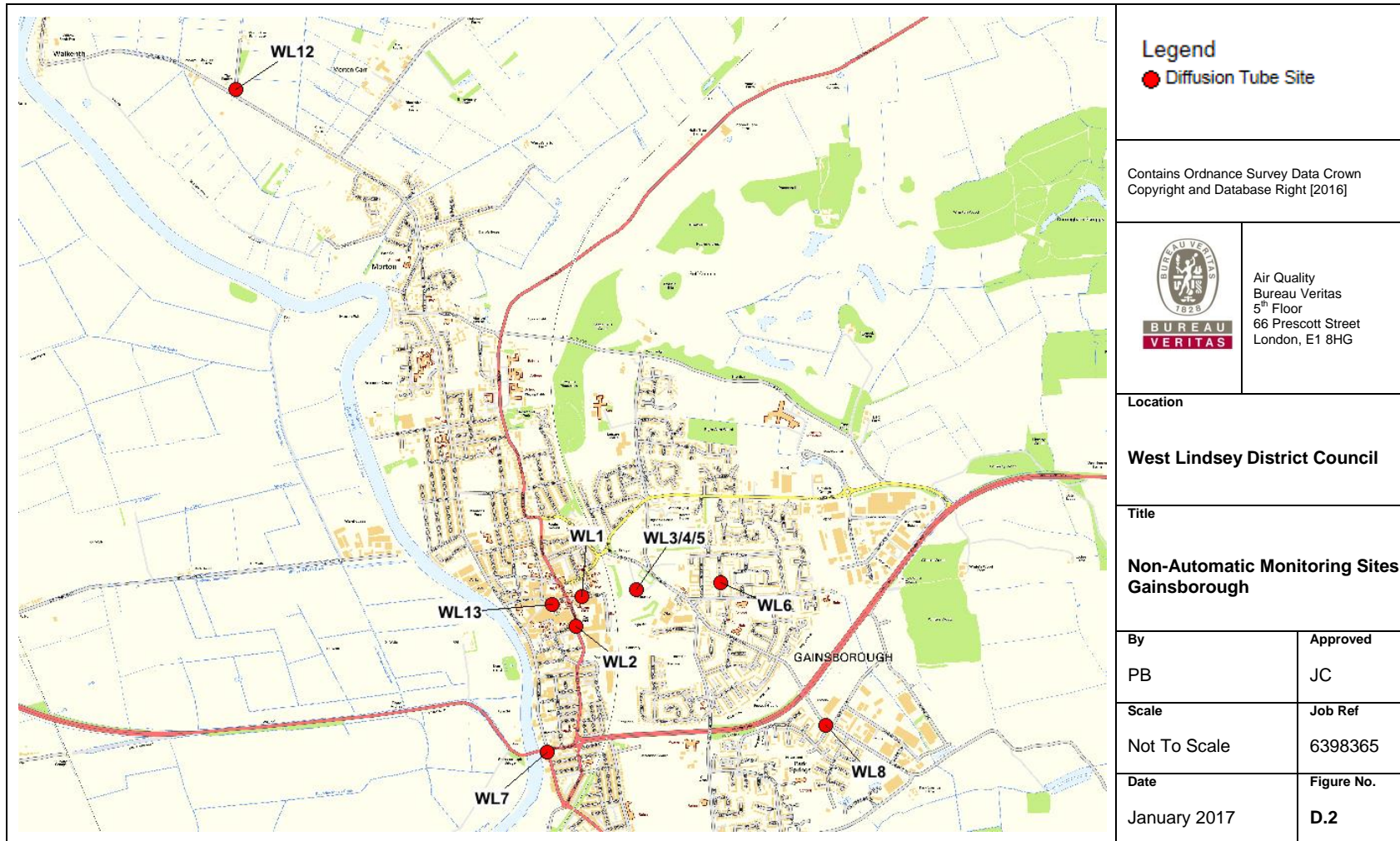


Figure D.3 – Map of Non-Automatic Monitoring Sites: Market Rasen



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

Pollutant	Air Quality Objective ⁷	
	Concentration	Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

⁷ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

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

References

- Local Air Quality Management Technical Guidance LAQM.TG(16). May 2016. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG(16). May 2016. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- West Lindsey District Council 2015 Updating and Screening Assessment.
- West Lindsey District Council 2014 Annual Progress Report.
- West Lindsey District Council 2013 Annual Progress Report
- West Lindsey District Council 2012 Updating and Screening Assessment.
- Central Lincolnshire Local Plan, Proposed Submission, April 2016.