2019 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the

Environment Act 1995

Local Air Quality Management

Date (24 December, 2019)

Local Authority Officer	Gareth Rees
Department	Environmental Protection Community Services
Address	North West Leicestershire District Council, Council Offices, Whitwick Road, Coalville, Leicestershire, LE67 3FJ
Telephone	01530 454545
E-mail	Environmental.protection@nwleicestershire.gov.uk
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Executive Summary: Air Quality in Our Area

Air Quality in North West Leicestershire District Council

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 billion[3].

Six AQMAs were designated in North West Leicestershire during the first round of review and assessment for the level of nitrogen dioxide concentrations. After Further Assessments it was determined that only two of these locations required AQMA designations and the remaining four were revoked. The Update and Screening Assessment (USA) undertaken in 2006 [5] concluded that these two sites should remain AQMAs and identified three additional locations where Detailed Assessments should be undertaken to determine whether new AQMAs were required for nitrogen dioxide concentrations. The two AQMAs designated during the first round are presented in Figure F.1 and Figure F.2 in Appendix F: .

The Detailed Assessment [6] undertaken in September 2007 of the three locations identified as possible areas for AQMAs in the USA 2006 [5], the three locations were High Street/Bondgate in Castle Donington, Broom Leys Road, Coalville and Bardon Road, Coalville, found that exceedences of the nitrogen dioxide objective were occurring in Castle Donington at properties located next to the carriageway along High Street and Bondgate due to traffic emissions. Monitoring at both locations in Coalville

[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

identified nitrogen dioxide concentrations that exceeded the mean annual objective during 2005, 2006 and 2007. The Detailed Assessment concludes that AQMAs should be designated at all three locations. As a result of these reports, two additional AQMAs were designated; the first in Castle Donington, presented in Figure F.3 in Appendix F:, and the second covering Broom Leys Road and Bardon Road in Coalville, presented in Figure F.4 in Appendix F:

The Air Quality Progress Report conducted in April 2008 [7] recommended that a detailed assessment of the village of Copt Oak and the area surrounding East Midlands airport be undertaken to determine if AQMAs should be determined at these locations.

The Detailed Assessment of Copt Oak published in January 2009 [9] found that an AQMA should be declared and that the area should cross the district boundary to include an area within the borough of Hinckley and Bosworth as shown in Figure F.5. in Appendix F:.

The Detailed assessment of East Midlands airport published in March 2009 [8] concluded that the Air quality objective for NO_2 would not be exceeded within 1000m of the airport as a result of air traffic emissions.

The further assessment of Bardon Road, Coalville published in February 2009 [10] supported the original declaration of the AQMA comprising the four residential properties at Broom Leys Junction and the one hundred and seventy two residential properties on Bardon Road.

The further assessment of High Street Castle Donington published in April 2009 [11] supported the original declaration of the AQMA comprising ninety one residential properties on High Street and Bondgate, Castle Donington.

The update and screening assessment published October 2009 [11] found that a detailed assessment for SO_2 was required in some areas of the district in relation to the burning of solid fuel, to which this report relates. The report also recommended that the M1 AQMA is expanded to include

an exceedence of the 1-hour mean objective for NO_2 as the yearly mean has exceeded 60µg.m^{-3}.

The Progress Report published in April 2010 [12] found no significant change in the district.

A Detailed Assessment for SO_2 was conducted in 2010 [13]. This found that solid fuel usage within off-gas areas of the district was insufficient to warrant further investigation.

A Detailed assessment of the M1 AQMA conducted in 2011 [15] found that most of the declared area could be revoked as there is either no relevant receptor or the annual mean air quality standard for NO_2 is not being exceeded.

A Detailed Assessment of the Coalville AQMA conducted in 2011 [14] found that the declared area could be reduced to the declared area of Stephenson Way as the annual mean air quality standard for NO_2 is not being exceeded along Bardon Road.

The 2011 progress report [16] found that Broomleys junction in the Coalville AQMA exceeded the 1-hour mean air quality standard for NO_2 and recommended that a detailed assessment be undertaken.

The progress report also found that the current air quality action plan is insufficient and needs to be updated.

The 2011 detailed assessment of 1-hour Mean Air Quality Standard at Broomleys junction Coalville[17] found that the 1-hour mean air quality standard was being exceeded and the AQMA should be amended.

The 2012 detailed assessment of Castle Donington[19] found that a large proportion of the AQMA was not exceeding the air quality standard and recommended the AQMA be amended.

The 2012 Further assessment of Copt Oak [20] found that a large proportion of the AQMA was not exceeding the Air Quality Standard and recommended the AQMA be amended.

The 2012 Detailed assessment of Kegworth [21] found that it was likely that most of the AQMA was exceeding the Air Quality Standard and recommended a new monitoring location was installed in the north of the AQMA.

The 2013 Further assessment of Coalville AQMA[22] found that some of its area was not exceeding the annual mean or hourly mean air quality standards for NO_2. The report recommended that a traffic survey be undertaken to further inform action planning

Actions to Improve Air Quality

- The construction of the Kegworth Bypass started May 2017 as part of the East Midlands Gateway Project https://slp-emg.com/
- The construction of the North and South of Park Lane Castle Donington development approved under planning permission 09/01226/OUTM which includes a relief road https://plans.nwleics.gov.uk/public-access/applicationDetails.do?activeTab=summary&keyVal=KUG0XPLR0DD00 was started.

Conclusions and Priorities

The ASR concludes that

- there are no new areas likely to be exceeding air quality objectives
- that the Coalville exceeding the annual mean air quality standard for NO_2 but that the 1-hour mean objective has been maintained for the last 8 years.
- That the receptor for the M1 AQMA has been removed

In 2019 the council plans to

- Develop, publish and implement AQMA action plans
- Amend the declaration of the Coalville AQMA to remove the exceedence of the 1 hour-mean air quality standard

- Revoke the M1 AQMA

Local Engagement and How to get Involved

The main contributions that our community can make to improving air quality are around minimising emissions from traffic and other sources and limiting exposure at times of poor air quality. Specifically that means avoiding unnecessary car use for short journeys, utilising public transport where possible, buying and maintaining low emissions vehicles and being linked in to the national alert system for predicted episodes of poor air quality.

The public can get further information on Air Quality from the following websites

- North West Leicestershire District Council Air quality website http://www.nwleics.gov.uk/pages/air_quality
- DEFRAs UK-AIR: Air information Resource website https://uk-air.defra.gov.uk/
- DEFRAs Local Air Quality Management (LAQM) Support website http://laqm.defra.gov.uk/
- Environmental Protection UK Air Pollution website http://www.environmental-protection.org.uk/policy-areas/air-quality/about-air-pollution/

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1 Local Air Quality Management

This report provides an overview of air quality in North West Leicestershire District Council during 2017. 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 exceedence 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 North West Leicestershire District Council to improve air quality and any progress that has been made.

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

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedence or likely exceedence 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 compliance with the objectives.

A summary of AQMAs declared by North West Leicestershire District Council can be found in Table 2.1. Further information related to declared or revoked AQMAs, including maps of AQMA boundaries are available online at https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=184 .

Table 2.1 Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)				Action Plan (inc. date of publication)		
						At Declaration		Now				
Kegworth	26/07/2004	NO_2 Annual Mean	Kegworth	Busy trunk road fronted by residential properties	NO				$\mu g.m^{-3}$			
M1	26/07/2004	NO_2 Annual Mean	Kegworth	Motorway with selected close properties.	YES	51.9	$\mu g.m^{-3}$		$\mu g.m^{-3}$			
	11/07/2001	NO_2 1 Hour Mean	Kegworth		YES	64.7	$\mu g.m^{-3}$		$\mu g.m^{-3}$			
Castle Donington	09/01/2008	NO_2 Annual Mean	Castle Donington	An area encompassing the High Street and Bondgate area of Castle Donington.	NO	47.98	$\mu g.m^{-3}$		$\mu g.m^{-3}$			
Coalville	09/01/2008	NO_2 Annual Mean	Coalville	An area encompassing parts of Stephenson Way, Broom Leys Road and Bardon Road in Coalville.	NO							
	08/02/2012	NO_2 1 Hour Mean	Coalville		NO							
Copt oak	30/07/2009	NO_2 Annual Mean	Copt Oak	An area of the village of Copt Oak that lies within the boundaries of NW Leicestershire District Council.	YES							

☒ **North West Leicestershire District Council confirm the information on UK-Air regarding their AQMA(s) is up to date (confirm by selecting in box)**

2.2 Progress and Impact of Measures to address Air Quality in North West Leicestershire District Council

North West Leicestershire District Council is working with Leicestershire County Council Highways department in drafting a new air quality action plan

The construction of the Kegworth Bypass started May 2017 as part of the East Midlands Gateway Project https://slp-emg.com/

The construction of the North and South of Park Lane Castle Donington development approved under planning permission 09/01226/OUTM which includes a relief road https://plans.nwleics.gov.uk/public-access/applicationDetails.do?activeTab=summary&keyVal=KUG0XPLR0DD00 was started.

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.

The Public Health Outcomes Framework (PHOF) (http://www.phoutcomes.info/) is a Department of Health data tool for England, intended to focus public health action on increasing healthy life expectancy and reducing differences in life expectancy between communities. The tool uses indicators to assess improvements. Recognising the significant impact that poor air quality can have on health, the PHOF includes an indicator relating to fine particulate matter ($PM_{2.5}$).

The indicator in the PHOF reports the estimates fraction of all-cause adult mortality attributable to anthropogenic particulate air pollution (measured as fine particulate matter).

Based on the latest available figures the position in North West Leicestershire district can be compared to the situation across the rest of England, East Midlands and nearby districts as shown in Appendix C. North West Leicestershire has:

- the second lowest fraction of attributable deaths to particulate air pollution in Leicestershire;
- is slightly lower than the mean for Leicestershire; and
- is slightly higher than the mean for England.

$PM_{2.5}$ background air quality data published by DEFRA shows the district has background concentrations between 1.29µg.m^{-3} and 10.76µg.m^{-3} with a mean of 5.83 µg.m^{-3}.

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.

North West Leicestershire District Council undertook automatic (continuous) monitoring at 1 sites during 2018. Monitoring ceased in September 2018.

Table A.1 in Appendix A:shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Appendix E:. Further details on how the monitor is calibrated and how the data has been adjusted are included in Appendix H:

3.1.2 Non-Automatic Monitoring Sites

North West Leicestershire District Council undertook non- automatic (passive) monitoring of NO_2 at 31 sites during 2018.

Table A.2 in Appendix A: shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Appendix E:

Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. “annualisation” and/or distance correction), are included in Appendix H:

3.2 Individual Pollutants

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

3.2.1 Nitrogen Dioxide (NO_2)

Table A.3 in Appendix A compares the ratified and adjusted monitored NO_2 annual mean concentrations for the past 5 years with the air quality objective of 40µg.m^{-3}.

For diffusion tubes, the full 2018 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 NO_2 hourly mean concentrations for the past 5 years with the air quality objective of 200µg.m^{-3}, not to be exceeded more than 18 times per year.

3.2.1.1 Coalville AQMA

The automatic monitor was removed in September. No exceedences of the 1hour air quality standard have been recorded in the last 8 years. It is therefore likely that this air quality standard is being achieved. There was a high loss of diffusion tubes on the monitor and they were removed at the same time as the monitor. After animalisation 1 of the diffusion tubes (36N) exceeded the annual mean air quality standard and the other diffusion tube (35N) was marginally within the standard.

All other locations were lower than the air quality standard

3.2.1.2 Castle Donington AQMA

The location on the facade of 34 Bondgate (18N) exceeded the air quality standard.

The monitoring location at 18 High Street (41N) exceeded the annual mean air Quality Standard however following Façade correction the standard was not being exceeded at the façade of the nearest property.

All other locations were below the air quality objective.

3.2.1.3 Kegworth AQMA

All locations were substantially lower than the air quality standard

3.2.1.4 Copt Oak AQMA

All receptor locations were substantially lower than the air quality standard.

A location on the kerb of the M1 exceeded however there are no relevant receptors linked to this location

3.2.1.5 M1 AQMA

The receptor (MoleHill House) has been demolished during the construction of the Kegworth Bypass.

3.2.1.6 Other locations

No locations outside of AQMAs exceeded the air quality standards

4 Appendices

Appendix A: Monitoring Results

Table A.1 Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	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)
			X	Y						
1A	Coalville	Roadside	443660	314002	NO NO_2 NO_x	Y	Chemiluminescence	5.8	2	2

0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).
N/A if not applicable.

Table A.2 Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	OS Grid Ref		Tube No.	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube collocated with a Continuous Analyser?	Worst Case Location	Height (m)
			X	Y								
06N	Broomleys junction (1)	Roadside	443632	314026	6	NO_2	Y	5.8	2	N	Y	2
08N	End Cottage Copt Oak	Rural	448138	313012	8	NO_2	Y	0	N/A	N	N	2
12N	AEROPARK Castle Donington	Other	444161	326355	12	NO_2	N	N	N/A	N	N	2
14N	69 HIGH Street Castle Donington	Roadside	444216	326788	14	NO_2	N	0	2.9	N	Y	2
16N	Bondgate crossroads Castle Donington	Roadside	444450	327233	16	NO_2	N	7.53	1	N	Y	2
17N	13 Bondgate Castle Donington	Roadside	444512	327335	17	NO_2	Y	2	2.5	N	Y	2
18N	34 Bondgate Castle Donington	Roadside	444580	327411	18	NO_2	Y	0	2.3	N	Y	2
19N	94 Bondgate Castle Donington	Roadside	444707	327603	19	NO_2	Y	0.8	1.4	N	Y	2
20N	Derby Road Kegworth	Roadside	448523	326885	20	NO_2	Y	3.2	1	N	Y	2
22N	Kegworth A6 2	Roadside	448817	326621	22	NO_2	Y	0	2.3	N	Y	2
23N	120 Whatton Road Kegworth	Suburban	448108	326305	23	NO_2	N	N	N/A	N	Y	2
26N	Molehill House	Roadside	447457	326420	26	NO_2	Y	0	50	N	Y	2
31N	Sinope	Roadside	440167	315264	31	NO_2	N	7.8	3.2	N	Y	2
32N	M1 Bridge Copt Oak	Other	448082	313100	30	NO_2	N	N	N/A	N	Y	2
35N	Monitoring station Coalville (1)	Roadside	443660	314002	7	NO_2	Y	5.8	2	Y	Y	2
36N	Monitoring station Coalville (2)	Roadside	443660	314002	27	NO_2	Y	5.8	2	Y	Y	2
37N	Monitoring station Castle Donington (1)	Roadside	444534	327365	24	NO_2	Y	0	1	Y	Y	2
38N	Monitoring station Castle Donington (2)	Roadside	444534	327365	25	NO_2	Y	0	1	Y	Y	2
39N	NEW M1 LW	Other	446935	323744	11	NO_2	Y	N	N/A	N	N	2
40N	35 High Street Castle Donington	Roadside	444323	326975	13	NO_2	N	3	0.9	N	Y	2
41N	18 High Street Castle Donington	Roadside	444474	327171	15	NO_2	N	4	1	N	Y	2

Site ID	Site Name	Site Type	OS Grid Ref		Tube No.	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube collocated with a Continuous Analyser?	Worst Case Location	Height (m)
			X	Y								
43N	Direction Sign Bardon Rd/A511 RBT Coalville	Roadside	443675	313642	2	NO_2	Y	2.4	3	N	N	2
45N	Outside corner farm Copt Oak	Roadside	448119	312920	4	NO_2	Y	27	4.3	N	N	2
46N	PO Derby Road Kegworth	Roadside	448724	326702	21	NO_2	Y	0	1.3	N	Y	2
47N	12 Derby Rd Kegworth	Roadside	448639	326805	28	NO_2	Y	4.7	2.5	N	Y	2
48N	28 London Road Kegworth	Roadside	448792	326533	29	NO_2	Y	0.8	1.5	N	Y	2
49N	Hugglescote crossroads	Roadside	442578	312871	5	NO_2	N	4.1	2.5	N	Y	2
50N	10 Central Road Hugglescote	Roadside	442562	312823	10	NO_2	N	5.4	1	N	Y	2
51N	40mph sign N of petrol station	roadside	448361	326997	3	NO_2	Y	9.6	3.2	N	Y	2
52N	lamppost 65 Derby Road Kegworth	roadside	448436	326931	9	NO_2	Y	5.9	2.5	N	Y	2
53N	20mph sign outside 10 Greenhill Road	roadside	448436	326931	24	NO_2	N	5.9	2.5	N	y	2
54N	Parking restrictions sign adj drive 12 & 20 Park Lane Castle Donington	roadside	444331	327257	25	NO_2	N	8.8	2.0	N	y	2
56N	lampost adjacent 27 Broomleys road	Roadside	443649	314040	1	NO2	Y	1.8	1.2	N	y	2

0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).
N/A if not applicable.

Table A.3 Annual Mean NO_2 Monitoring Results

Site ID	Site Name	Monitoring Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2018 (%) (28	NO_2 Annual Mean Concentration ($\mu g.m^{-3}$) (3)				
					2014	2015	2016	2017	2018
					BAF= 0.98	BAF= 0.95	BAF= 1.01	BAF= 0.97	BAF=
1A	Coalville	Automatic	84.3	84.3	**46.9**	**45.1**	**50.0**	**43.2**	**36.8**
06N	Broomleys junction (1)	Diffusion Tube	100.0%	100.0 %	**38.06**	35.32	35.53	**36.16**	34.05
08N	End Cottage Copt Oak	Diffusion Tube	91.7%	91.7%	26.82	23.67	25.85	24.79	23.39
12N	AEROPARK Castle Donington	Diffusion Tube	66.7%	66.7%	21.27	18.06	19.01	18.48	19.14
14N	69 HIGH Street Castle Donington	Diffusion Tube	91.7%	91.7%	26.69	21.18	22.96	22.16	23.93
16N	Bondgate crossroads Castle Donington	Diffusion Tube	100.0%	100.0 %	**37.22**	31.64	34.19	34.39	35.86
17N	13 Bondgate Castle Donington	Diffusion Tube	100.0%	100.0 %	**37.06**	31.58	31.07	32.42	36.97
18N	34 Bondgate Castle Donington	Diffusion Tube	91.7%	91.7%	**53.04**	**45.66**	**49.77**	**47.81**	**51.93**
19N	94 Bondgate Castle Donington	Diffusion Tube	100.0%	100.0 %	32.92	25.93	32.56	28.59	30.67
20N	Derby Road Kegworth	Diffusion Tube	91.7%	91.7%	31.28	27.32	29.13	29.91	25.37
22N	Kegworth A6 2	Diffusion Tube	91.7%	91.7%	35.69	28.66	33.50	29.23	28.43
23N	120 Whatton Road Kegworth	Diffusion Tube	75.0%	75.0%	20.66	14.48	20.84	20.54	19.81
26N	Molehill House	Diffusion Tube	0.0%	0.0%	34.24	29.41	29.45	31.70	0.00
31N	Sinope	Diffusion Tube	75.0%	75.0%	31.49	20.31	30.75	27.61	22.31
32N	M1 Bridge Copt Oak	Diffusion Tube	100.0%	100.0 %	**53.61**	**56.49**	**55.02**	**58.09**	**59.47**
35N	Monitoring station Coalville (1)	Diffusion Tube	33.3%	33.3%	**38.17**	32.54	**37.56**	32.09	38.38

Site ID	Site Name	Monitoring Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2018 (%) (28	NO_2 Annual Mean Concentration ($\mu g.m^{-3}$) (3)				
					2014	2015	2016	2017	2018
					BAF= 0.98	BAF= 0.95	BAF= 1.01	BAF= 0.97	BAF=
36N	Monitoring station Coalville (2)	Diffusion Tube	33.3%	33.3%	37.52	32.12	**36.46**	33.48	**40.74**
39N	NEW M1 LW	Diffusion Tube	33.3%	33.3%	29.87	26.03	27.28	19.76	24.38
40N	35 High Street Castle Donington	Diffusion Tube	100.0%	100.0 %	27.81	22.18	23.51	34.80	25.72
41N	18 High Street Castle Donington	Diffusion Tube	100.0%	100.0 %	42.24	35.64	**38.43**	**39.85**	**42.67**
43N	Direction Sign Bardon Rd/A511 RBT Coalville	Diffusion Tube	91.7%	91.7%	25.83	23.77	29.09	28.72	28.76
45N	Outside corner farm Copt Oak	Diffusion Tube	100.0%	100.0 %	33.84	29.67	33.51	31.29	30.71
46N	PO Derby Road Kegworth	Diffusion Tube	91.7%	91.7%	40.60	32.09	**36.72**	31.95	31.59
47N	12 Derby Rd Kegworth	Diffusion Tube	91.7%	91.7%	39.29	31.48	35.73	34.44	29.58
48N	28 London Road Kegworth	Diffusion Tube	83.3%	83.3%	42.22	33.37	35.19	33.56	34.07
49N	Hugglescote crossroads	Diffusion Tube	75.0%	75.0%	33.34	32.13	34.39	33.66	36.52
50N	10 Central Road Hugglescote	Diffusion Tube	75.0%	75.0%	34.66	29.29	35.06	**36.97**	33.06
51N	40mph sign N of petrol station Kegworth	Diffusion Tube	91.7%	91.7%	36.10	30.60	30.67	32.66	26.46
52N	lamppost 65 Derby Road Kegworth	Diffusion Tube	91.7%	91.7%	37.31	30.58	32.16	32.12	28.85
53N	20mph sign outside 10 Greenhill Road	Diffusion Tube	91.7%	91.7%	26.94	18.75	21.87	22.48	21.89
54N	Parking restrictions sign adj drive 12 & 20 Park Lane Castle Donington	Diffusion Tube	75.0%	75.0%	34.82	22.70	22.82	23.69	27.39
56N	lamppost adjacent 27 Broomleys road	Diffusion Tube	83.3%	83.3%		36.75	35.88	35.74	

Notes: Exceedances of the NO_2 annual mean objective of 40µg.m^{-3} are shown in **bold**.

NO_2 annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined.**

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

(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) Means for diffusion tubes have been corrected for bias. means in green cells 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 NO_2 Monitoring Results

Site ID		Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2018 (%) (2)	NO2 1-Hour Means > 200µg.m^{-3} (3)								
						2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Coalville	Roadside		84.3	84.3	29 (270.44)	20	3	2	7	0	4	0	0 (128.7)

Notes: Exceedances of the NO_2 1-hour mean objective (200µg.m^{-3} not to be exceeded more than 18 times/year) are shown in **bold.**

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

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

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

(4) Boxes shade green indicate the result has been annualised inline with Box 7.9 – Example: Annualising Continuous Monitoring Data of LAQM.TG(16)

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Appendix B: Full Monthly Diffusion Tube Results for 2018

Table B.1 NO_2 Monthly Diffusion Tube Results - 2018

Site ID		NO_2 Mean Concentrations ($\mu g.m^{-3}$)												Annual Mean		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (1)	Distance Corrected to Nearest Exposure (2)
06N	Broomleys junction (1)	42.1	36.0	36.0	33.1	32.2	29.6	38.8	41.5	39.5	38.8	35.7	40.8	37.01	34.05	26.94105902
08N	End Cottage Copt Oak	29.7	29.5	28.6	23.4	21.9	18.7	24.5	26.3	24.9	25.4	26.7		25.42	23.39	
12N	AEROPARK Castle Donington	19.3	25.4		19.8		12.4			17.6	19.8	26.1	26.1	20.80	19.14	
14N	69 HIGH Street Castle Donington	28.3	29.2	31.3	27.6	26.1	22.3	29.8	21.7	20.7		19.7	29.4	26.01	23.93	
16N	Bondgate crossroads Castle Donington	35.1	38.1	35.6	39.0	39.3	43.2	41.0	36.2	35.8	48.2	39.3	37.1	38.98	35.86	26.3
17N	13 Bondgate Castle Donington	40.2	39.8	46.5	43.4	35.1	39.7	44.5	37.2	37.5	40.1	37.3	41.0	40.19	36.97	33.6
18N	34 Bondgate Castle Donington	57.7	79.3	59.6	55.1	57.7		64.9	44.3	44.5	54.4	53.2	50.1	56.45	51.93	
19N	94 Bondgate Castle Donington	33.3	39.7	34.3	32.4	29.3	31.3	35.2	28.6	28.0	35.6	36.9	35.6	33.34	30.67	29.0
20N	Derby Road Kegworth		36.7	29.8	25.1	19.3	20.7	23.5	25.9	27.4	31.5	27.7	35.8	27.57	25.37	24.6
22N	Kegworth A6 2	33.7	33.4	28.1	32.1	28.7	28.1	29.8	28.4	29.3	32.5		35.9	30.90	28.43	
23N	120 Whatton Road Kegworth			22.4	18.5	14.5		18.1	21.7	23.8	27.2	20.2	27.4	21.53	19.81	
26N	Molehill House															
31N	Sinope				22.9	21.5	19.4	25.4	22.0	25.4	27.2	25.9	28.5	24.25	22.31	18.1

Site ID		NO_2 Mean Concentrations ($\mu g.m^{-3}$)												Annual Mean		
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (1)	Distance Corrected to Nearest Exposure (2)
32N	M1 Bridge Copt Oak	70.2	58.8	59.0	68.1	56.8	63.3	69.9	69.1	67.6	62.9	58.5	71.5	64.64	59.47	
35N	Monitoring station Coalville (1)		43.1	40.1			48.4		35.3					41.71	38.38	29.9
36N	Monitoring station Coalville (2)		44.8	42.6			51.5		38.3					44.29	40.74	31.5
39N	NEW M1 LW									28.9	28.2	23.7	25.2	26.50	24.38	
40N	35 High Street Castle Donington	21.9	32.5	26.6	28.9	28.5	26.7	29.3	22.5	23.7	29.6	33.7	31.5	27.96	25.72	22.3
41N	18 High Street Castle Donington	43.0	46.7	49.1	42.2	25.3	55.1	56.1	48.2	48.6	50.1	43.9	48.3	46.38	42.67	33.3
43N	Direction Sign Bardon Rd/A511 RBT Coalville	28.4	34.0	33.8	25.3	30.6	27.7	32.4	27.0		34.1	36.4	34.3	31.26	28.76	26.2
45N	Outside corner farm Copt Oak	36.0	33.4	30.3	32.1	32.0	31.0	35.3	35.4	29.8	37.3	31.0	36.8	33.38	30.71	24.0
46N	PO Derby Road Kegworth	32.2		37.3	36.6	35.9	40.6	35.7	30.3	27.2	37.9	30.6	33.3	34.34	31.59	
47N	12 Derby Rd Kegworth	34.3	39.6	35.7	34.2	30.0	23.3	29.9	30.3	30.6	35.7	30.1		32.15	29.58	26.2
48N	28 London Road Kegworth	39.2	51.9	32.4	40.3	30.4	29.0	33.9	38.3	37.2			37.8	37.04	34.07	32.2
49N	Hugglescote crossroads		37.9		40.5	39.4	37.8	44.7	36.7		40.1	41.5	38.8	39.69	36.52	30.2
50N	10 Central Road Hugglescote		34.9		40.8	36.5	37.3	38.2	25.5		38.0	33.0	39.2	35.94	33.06	24.6
51N	40mph sign N of petrol station Kegworth		32.8	31.3	31.4	23.1	21.7	27.0	26.4	29.7	31.5	28.6	32.8	28.76	26.46	25.2
52N	lamppost 65 Derby Road Kegworth	38.2	36.7	32.1	32.5	25.5	25.4	28.0	32.6	31.6	33.0	29.2		31.35	28.85	27.1

Site ID		NO_2 Mean Concentrations ($\mu g.m^{-3}$)														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean		
														Raw Data	Bias Adjusted (1)	Distance Corrected to Nearest Exposure (2)
53N	20mph sign outside 10 Greenhill Road	26.2	30.4	27.5	24.0	22.0	22.8	19.0	16.6	20.2	26.5	26.5		23.79	21.89	22.2
54N	Parking restrictions sign adj drive 12 & 20 Park Lane Castle Donington	24.8		29.1	31.4	51.5	26.0		23.3	24.5	27.9	29.5		29.77	27.39	22.0
56N	lamppost adjacent 27 Broomleys road	38.7	39.8	39.0	37.7		33.1		37.8	37.5	41.5	40.9	51.6	39.76	36.58	

Appendix C: Details of Annualisation and Façade Correction

This appendix includes the data that has been gathered and used to formulate the ASR report which can be seen by following the link below.

Details of Annualisation and Facade Correction

Table C.1 Diffusion Tube Annualisation and façade correction

Site Code	location	Grid Reference		Our Tube No.	Pollutant monitored	In AQMA ?	Is monitoring collocated with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case Location ?	Measurement Period (ug.m^{-3})												MEAN	BIAS =	0.92	length of monitoring period (months)	annualisation (see Box 3.2 pg 3-4 of TG(09) where annual data coverage for a site is <75% site has been excluded						façade correction - fall-off in nitrogen dioxide concentrations with distance from road See Box 2.3 pg 2-6 of LAQM.TG(09)			
		X	Y								1	2	3	4	5	6	7	8	9	10	11	12		Bias Adjusted Mean	No of results		period mean		Ratio (annual mean / period mean)		annualised bias adjusted mean (Bias adjusted mean x R_a)		background concentration grid reference		relevant background concentration	receptor correction for roadside tubes (Bias adjusted mean used)
																										jan-AUG	SEPT-DEC	jan-AUG	SEPT-DEC	jan-mar	apr - dec	X	Y		
06N	Broomleys junction (1)	443632	314026	6	NO_2	Y	n	5.8	2	Y	42	36	36	33	32	30	39	41	39	39	36	41	37.01	34.05	12	12	36.18	38.69	1.023	0.957			443500	313500	11.75	26.94
08N	End Cottage Copt Oak	448138	313012	8	NO_2	N	n	0	N/A	N	30	29	29	23	22	19	25	26	25	25	27		25.42	23.39	11	12	25.33	25.67	1.004	0.990			447500	312500	18.84	
12N	Aeropark	444161	326355	12	NO_2	N	n	N	N/A	N	19	25		20		12			18	20	26	26	20.80	19.14	8	12							443500	325500	13.69	
14N	69 High St CD	444216	326788	14	NO_2	N	n	0	2.9	Y	28	29	31	28	26	22	30	22	21		20	29	26.01	23.93	11	12	27.03	23.27	0.962	1.118			443500	326500	13.80	
16N	crossroads CD	444450	327233	16	NO_2	Y	n	7.53	1	Y	35	38	36	39	39	43	41	36	36	48	39	37	38.98	35.86	12	12	38.42	40.10	1.015	0.972			443500	326500	13.80	26.33
17N	13 Bondgate CD	444512	327335	17	NO_2	Y	n	2	2.5	Y	40	40	46	43	35	40	45	37	37	40	37	41	40.19	**36.97**	12	12	40.80	38.97	0.985	1.031			443500	326500	13.80	33.61
18N	34 Bondgate CD	444580	327411	18	NO_2	Y	n	0	2.3	Y	58	79	60	55	58		65	44	45	54	53	50	56.45	**51.93**	11	12	59.80	50.57	0.944	1.116			444500	326500	15.31	
19N	94 Bondgate CD	444707	327603	19	NO_2	Y	n	0.8	1.4	Y	33	40	34	32	29	31	35	29	28	36	37	36	33.34	30.67	12	12	33.00	34.03	1.010	0.980			444500	327500	13.58	29.00
20N	Derby Rd Kegworth (Benny's Hill)	448523	326885	20	NO_2	Y	n	3.2	1	Y		37	30	25	19	21	24	26	27	31	28	36	27.57	25.37	11	12	25.85	30.58	1.067	0.902			447500	326500	22.88	24.65
22N	Keg A6 2	448817	326621	22	NO_2	Y	n	0	2.3	Y	34	33	28	32	29	28	30	28	29	32		36	30.90	28.43	11	12	30.28	32.56	1.021	0.949			448500	326500	16.85	
23N	120 Whatton road Kegworth	448108	326305	23	NO_2	N	n	N	N/A	Y			22	19	15		18	22	24	27	20	27	21.53	19.81	9	12	19.04	24.65	1.131	0.874			447500	325500	20.75	
26N	Molehill House	447457	326420	26	NO_2	Y	n	0	50	Y															0	12							446500	325500	19.42	
31N	Sinope	440167	315264	31	NO_2	N	n	7.8	3.2	Y				23	22	19	25	22	25	27	26	29	24.25	22.31	9	12	22.25	26.76	1.090	0.906			439500	314500	9.26	18.07
32N	M1 Bridge Copt Oak	448082	313100	30	NO_2	N	n	N	N/A	Y	70	59	59	68	57	63	70	69	68	63	58	72	64.64	**59.47**	12	12	64.40	65.12	1.004	0.993			447500	312500	18.84	
35N	monitoring station Coalville (1)	443660	314002	7	NO_2	Y	y	5.8	2	Y		43	40			48		35					41.71	**38.38**	4	12					39.0		443500	313500	11.75	29.89
36N	monitoring station Coalville (2)	443660	314002	27	NO_2	Y	y	5.8	2	Y		45	43			51		38					44.29	**40.74**	4	12					41.4		443500	313500	11.75	31.50
39N	LW new M1	446935	323744	11	NO_2	N	n	N	N/A	N									29	28	24	25	26.50	24.38	4	12						23.9	446500	323500	16.26	
40N	35 High Street castle Donington	444323	326975	13	NO_2	N	n	3	0.9	Y	22	33	27	29	28	27	29	23	24	30	34	32	27.96	25.72	12	12	27.13	29.60	1.030	0.944			443500	326500	13.80	22.27
41N	18 High Street castle Donington	444474	327171	15	NO_2	N	n	4	1	Y	43	47	49	42	25	55	56	48	49	50	44	48	46.38	**42.67**	12	12	45.72	47.71	1.014	0.972			443500	326500	13.80	33.31
43N	Direction Sign Bardon Rd/A511	443675	313642	2	NO_2	Y	n	2.4	3	N	28	34	34	25	31	28	32	27		34	36	34	31.26	28.76	11	12	29.89	34.91	1.046	0.895			443500	313500	11.75	26.17

Site Code	location	Grid Reference		Our Tube No.	Pollutant monitored	In AQMA ?	Is monitoring collocated with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case Location ?	Measurement Period (ug.m^{-3})												MEAN	BIAS =	0.92	length of monitoring period (months)	annualisation (see Box 3.2 pg 3-4 of TG(09) where annual data coverage for a site is <75% site has been excluded)						façade correction - fall-off in nitrogen dioxide concentrations with distance from road See Box 2.3 pg 2-6 of LAQM.TG(09)			
		X	Y								1	2	3	4	5	6	7	8	9	10	11	12		Bias Adjusted Mean	No of results		period mean		Ratio (annual mean / period mean)		annualised bias adjusted mean (Bias adjusted mean x R_a)		background concentration grid reference		relevant background concentration	receptor correction for roadside tubes (Bias adjusted mean used)
																										jan-AUG	SEPT-DEC	jan-AUG	SEPT-DEC	jan-mar	apr - dec	X	Y		
	RBT																																			
45N	outside corner farm Copt oak	448119	312920	4	NO_2	Y	n	27	4.3	N	36	33	30	32	32	31	35	35	30	37	31	37	33.38	30.71	12	12	33.20	33.73	1.005	0.990			447500	312500	18.84	23.98
46N	Kegworth PO Derby Road	448724	326702	21	NO_2	Y	n	0	1.3	Y	32		37	37	36	41	36	30	27	38	31	33	34.34	31.59	11	12	35.52	32.27	0.967	1.064			448500	326500	16.85	N/A
47N	12 Derby Rd Kegworth	448639	326805	28	NO_2	Y	n	4.7	2.5	Y	34	40	36	34	30	23	30	30	31	36	30		32.15	29.58	11	12	32.16	32.13	1.000	1.001			448500	326500	16.85	26.25
48N	28 London road Kegworth	448792	326533	29	NO_2	Y	n	0.8	1.5	Y	39	52	32	40	30	29	34	38	37			38	37.04	34.07	10	12	36.93	37.48	1.003	0.988			448500	325500	14.00	32.19
49N	10 Central Road Hugglescote	442578	312871	5	NO_2	N	n	4.1	2.5	y		38		40	39	38	45	37		40	41	39	39.69	**36.52**	9	12	39.47	40.13	1.006	0.989			442500	312500	10.32	30.23
50N	Hugglescote Cross Roads	442562	312823	10	NO_2	N	n	5.4	1	y		35		41	37	37	38	25		38	33	39	35.94	33.06	9	12	35.54	36.73	1.011	0.978			442500	312500	10.32	24.55
51N	40mph sign N of petrol station	448361	326997	3	NO_2	Y	n	9.6	3.2	y		33	31	31	23	22	27	26	30	32	29	33	28.76	26.46	11	12	27.67	30.68	1.040	0.938			447500	326500	22.88	25.15
52N	lamppost 65 Derby Road	448436	326931	9	NO_2	Y	n	5.9	2.5	y	38	37	32	33	26	25	28	33	32	33	29		31.35	28.85	11	12	31.39	31.27	0.999	1.003			447500	326500	22.88	27.06
53N	20mph sign outside 10 Greenhill Road	448436	326931	24	NO_2	N	N	5.9	2.5	y	26	30	28	24	22	23	19	17	20	27	26		23.79	21.89	11	12	23.56	24.39					447500	326500	22.88	22.18
54N	parking restrictions sign adj drive 12 & 20 park lane	444331	327257	25	NO_2	N	N	8.8	2.0	y	25		29	31	51	26		23	24	28	29		29.77	27.39	9	12	31.01	27.28					443500	326500	13.80	22.02
56N	lampost adjacent 27 Broomleys road	443649	314040	1	NO_3	N	N			y	39	40	39	38		33		38	37	41	41	52	39.76	**36.58**	10	12	37.70	42.86					443500	313500	11.75	N/A
																											average annuallisation ratio		1.017	0.980						

Table C2 Automatic Monitor Annualisation

	Period	Leicester A594 Roadside	Leicester University	Nottingham Centre	Nottingham Western Boulevard	Stephenson's Way Coalville
period mean	19/02/2018 16:00 to 24/09/2018 00:00	31.894	20.017	24.256	30.277	41.83
annual mean		35.784	23.245	27.513	34.133	
ratio		0.891	0.861	0.882	0.887	
				annualised value		36.82
			mean ratio	0.880		

Raw data obtained from https://uk-air.defra.gov.uk/data/data_selector

A copy of the data is included with the attached spreadsheet Appendix C2 automatic monitor annualisation

Appendix D: Public Health Outcomes Framework

Data is taken from https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/3/gid/1000043/pat/102/par/E10000018/ati/101/are/E07000129/iid/30101/age/230/sex/4

Appendix E: Map(s) of Monitoring Locations

Figure E.1 Map of Automatic Monitoring Sites

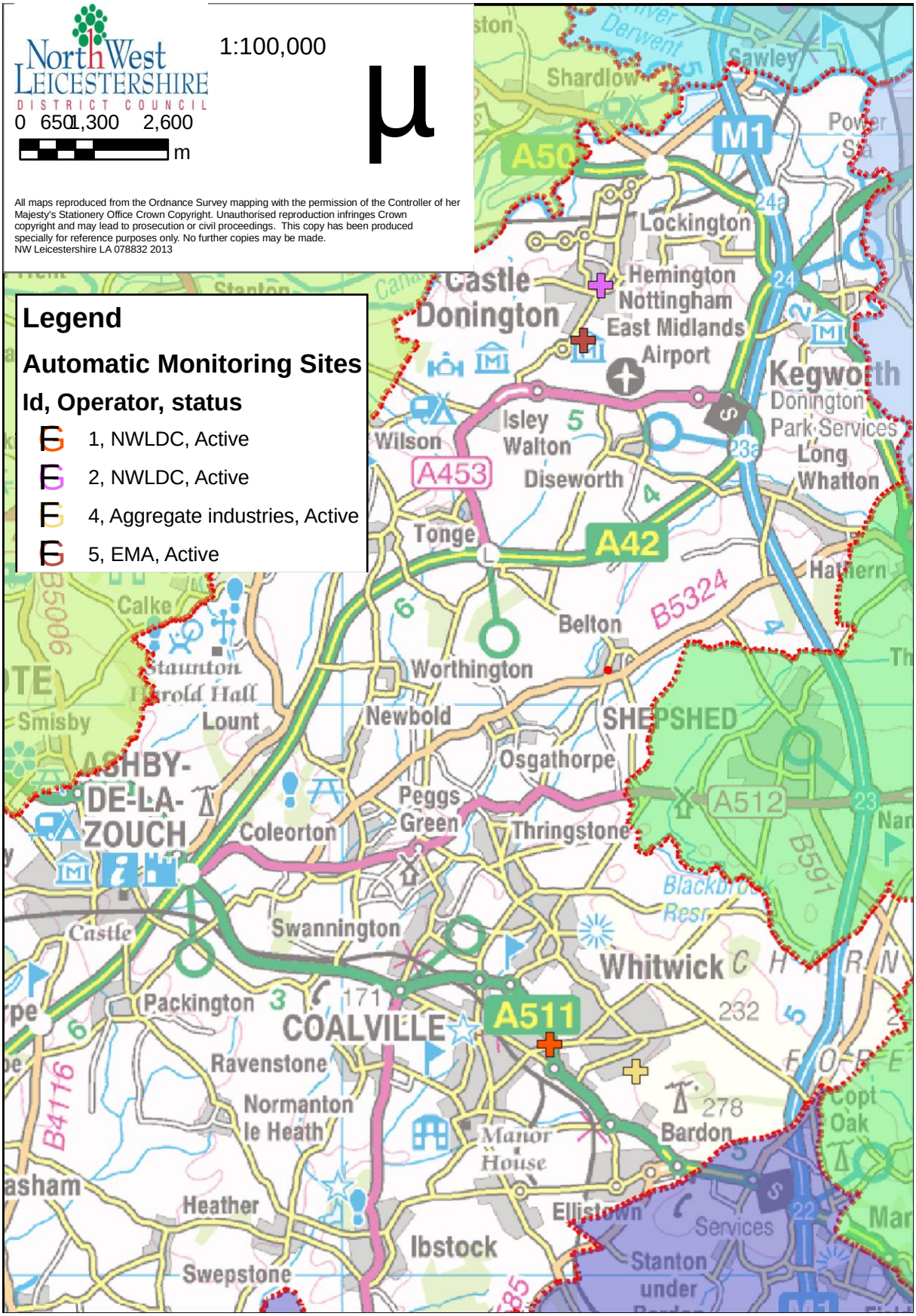
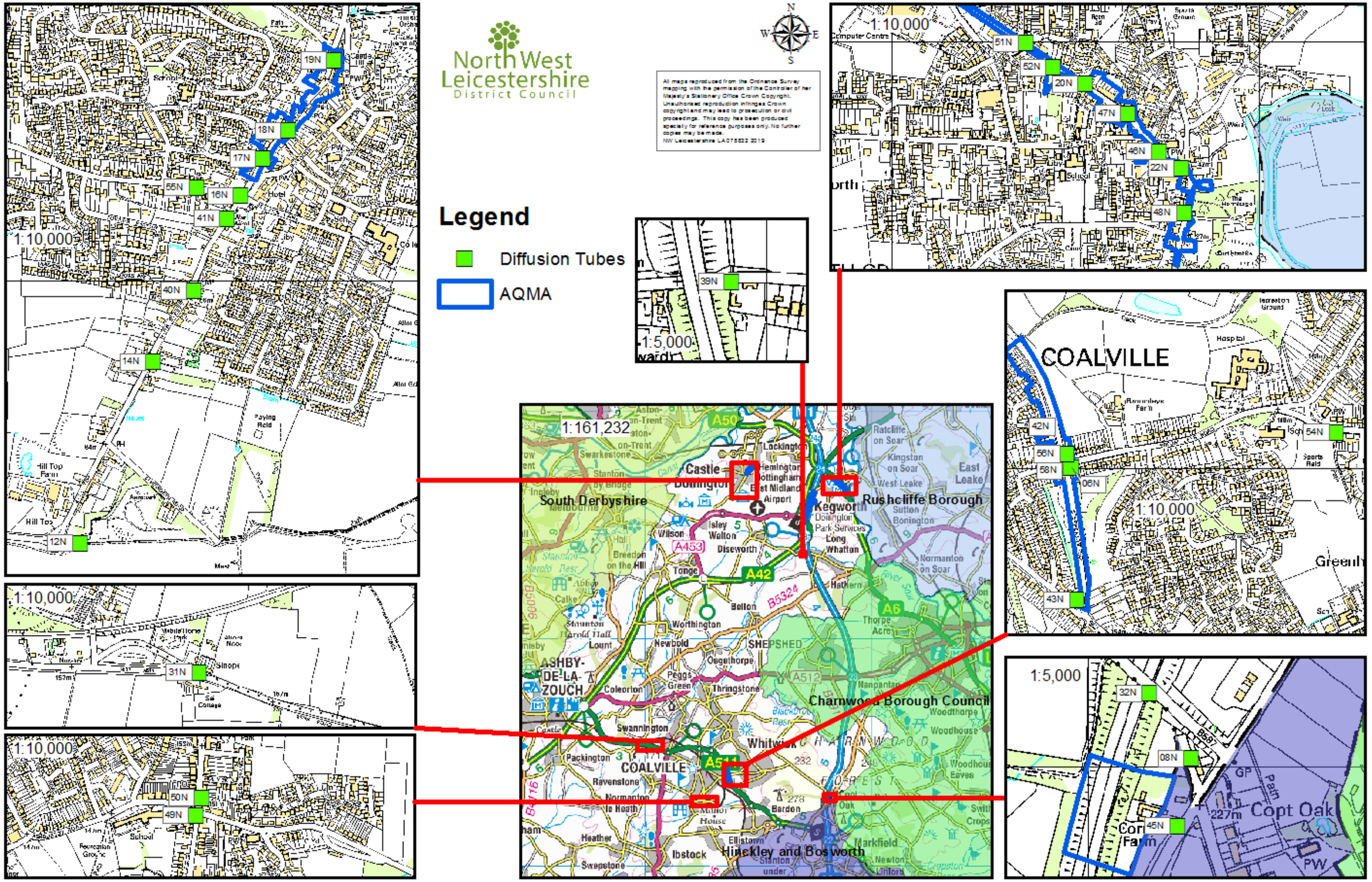


Figure E.2 Map of Non-Automatic Monitoring Sites



Appendix F: Maps of AQMA's

Figure F.1 Kegworth AQMA (highlighted in blue).

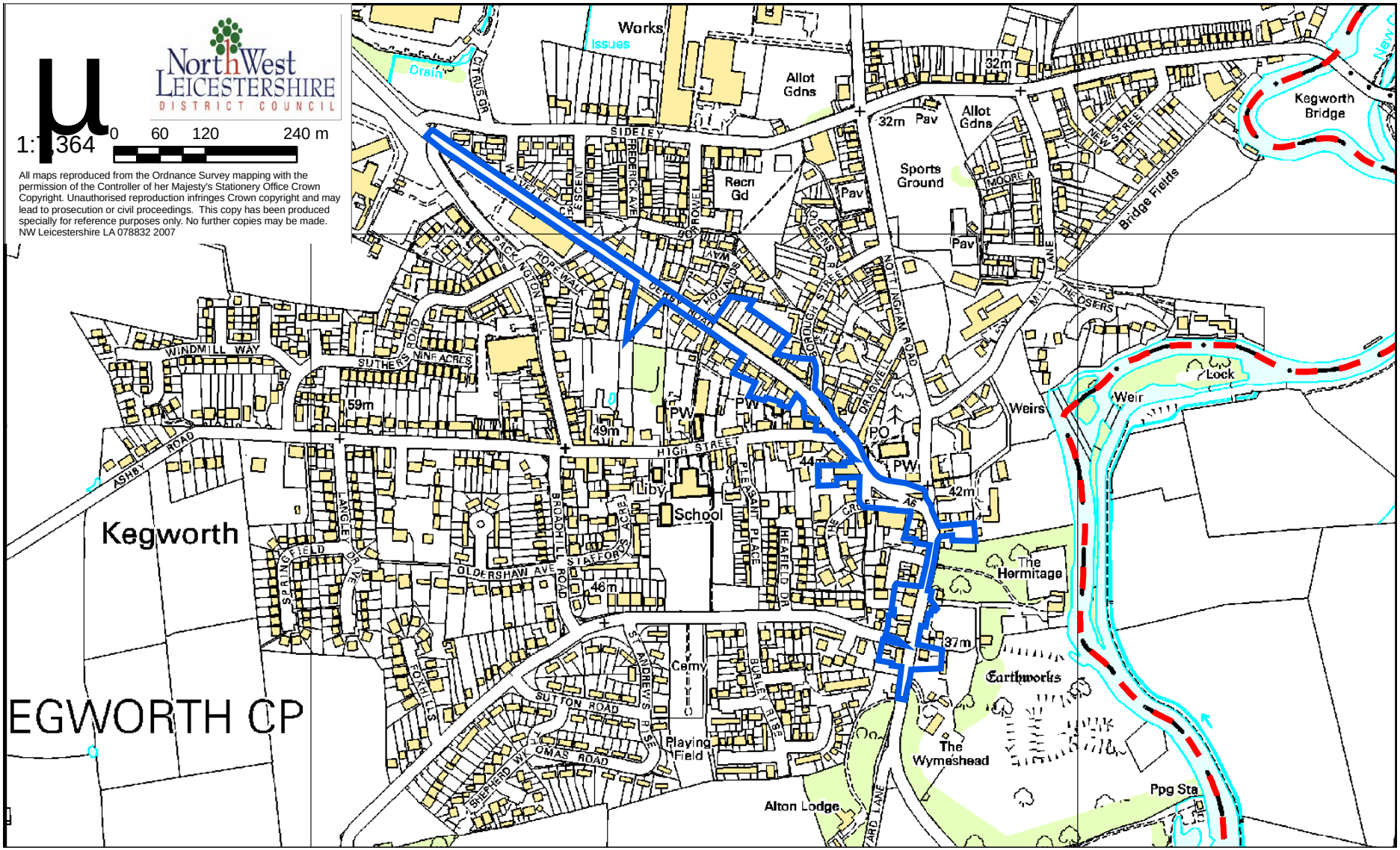


Figure F.2 M1 AQMA (Outlined in Dark Blue)

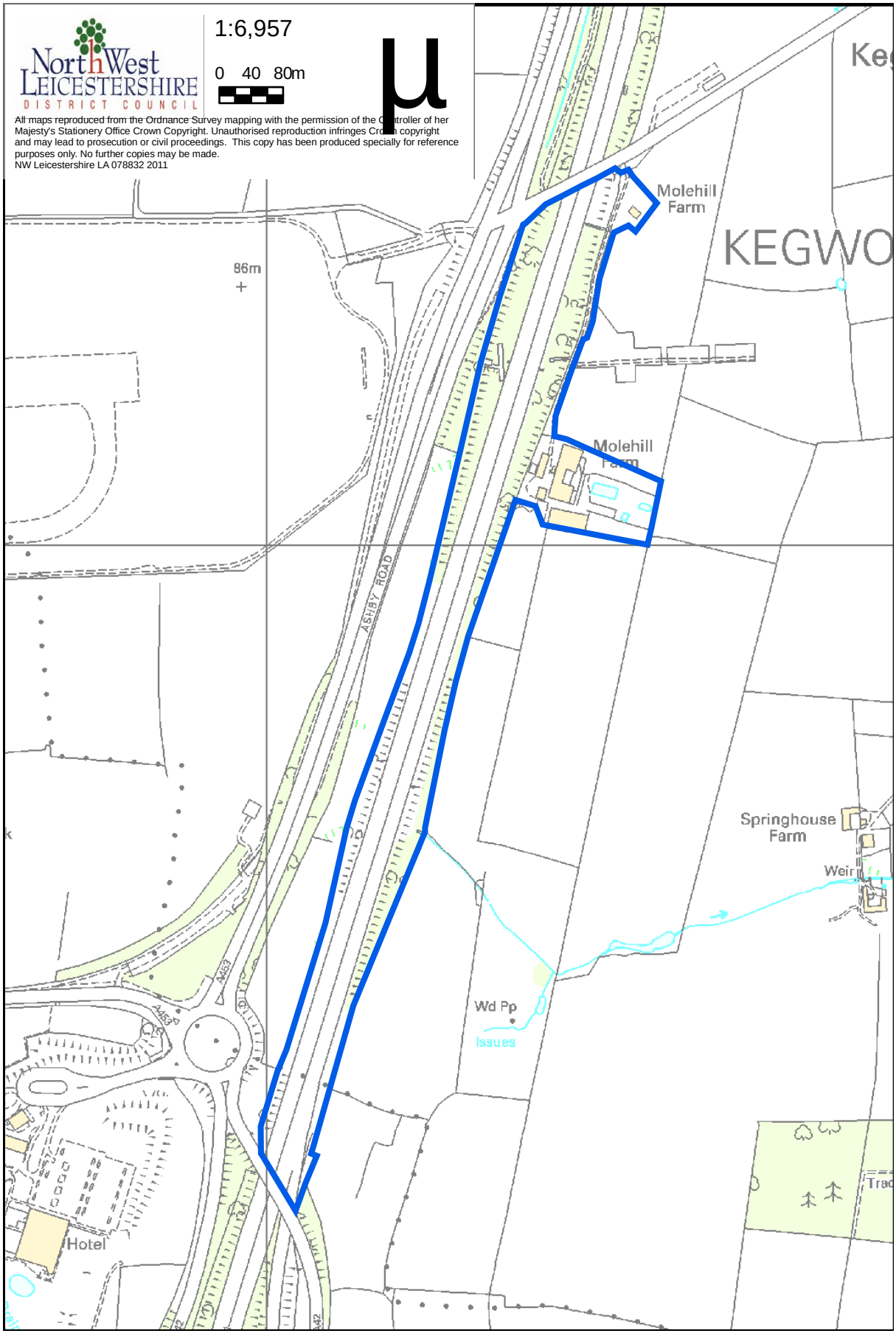


Figure F.3 Castle Donington Air Quality Management Area

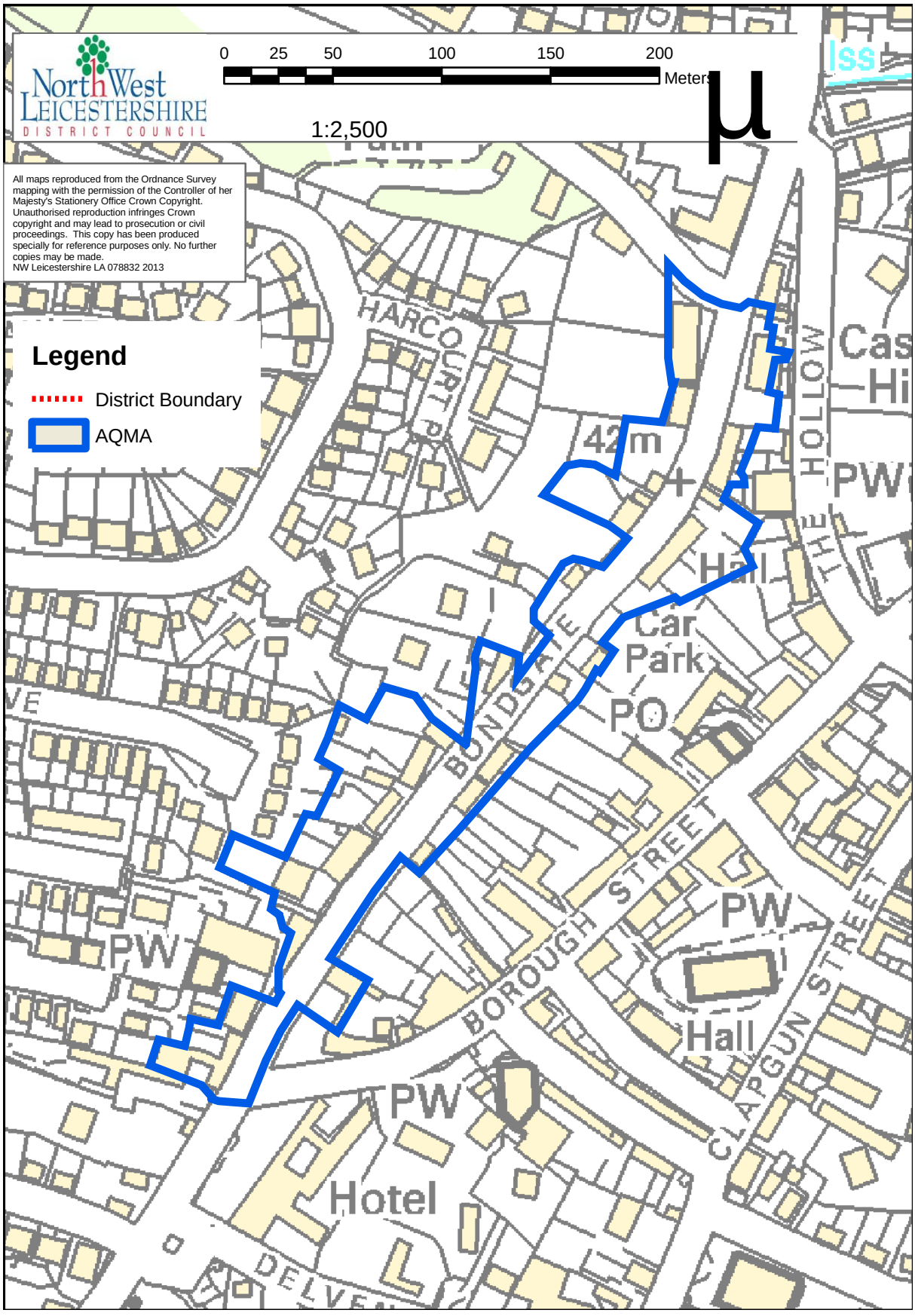


Figure F.4 Coalville Air Quality Management Area (Broom Leys Junction)

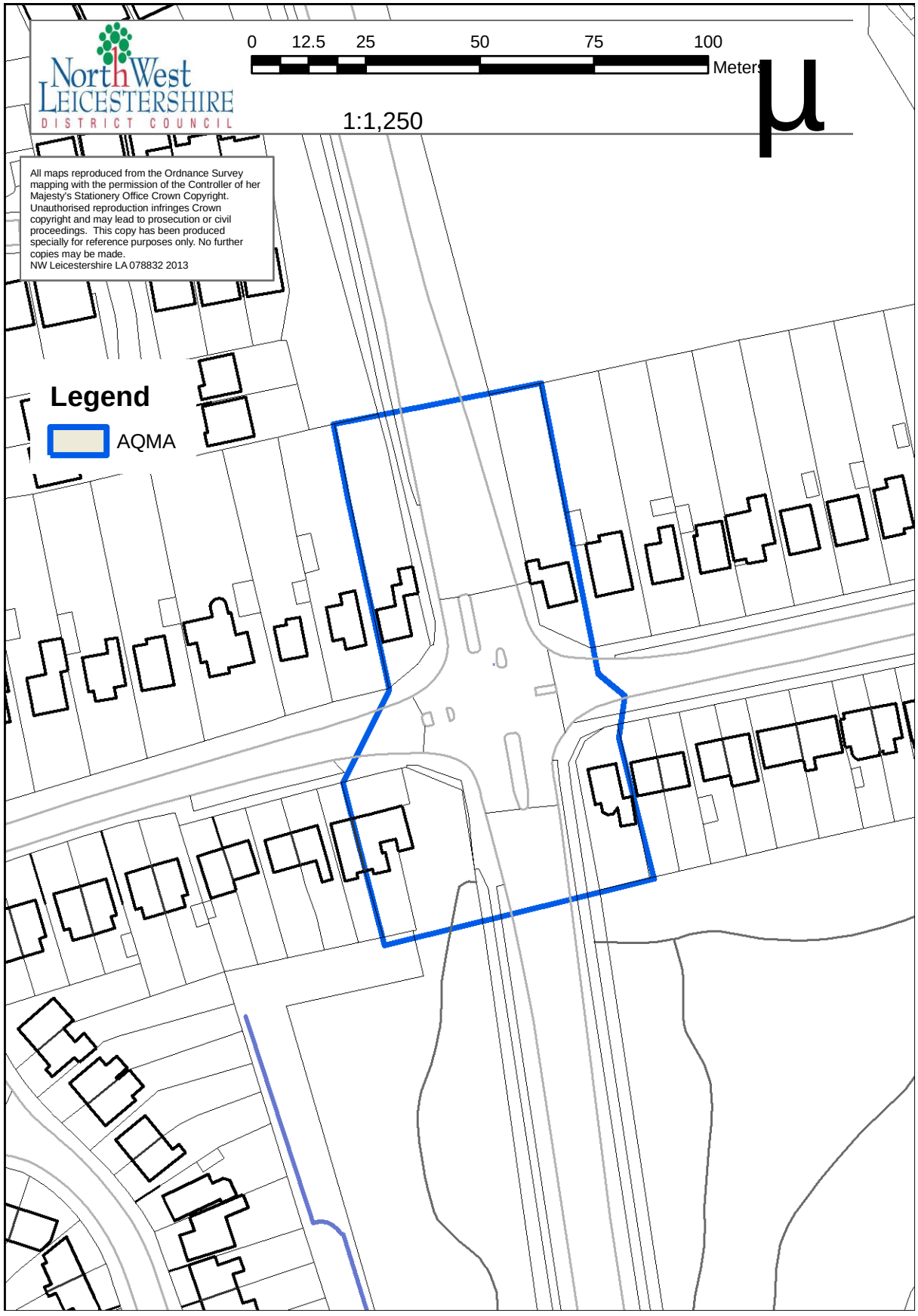
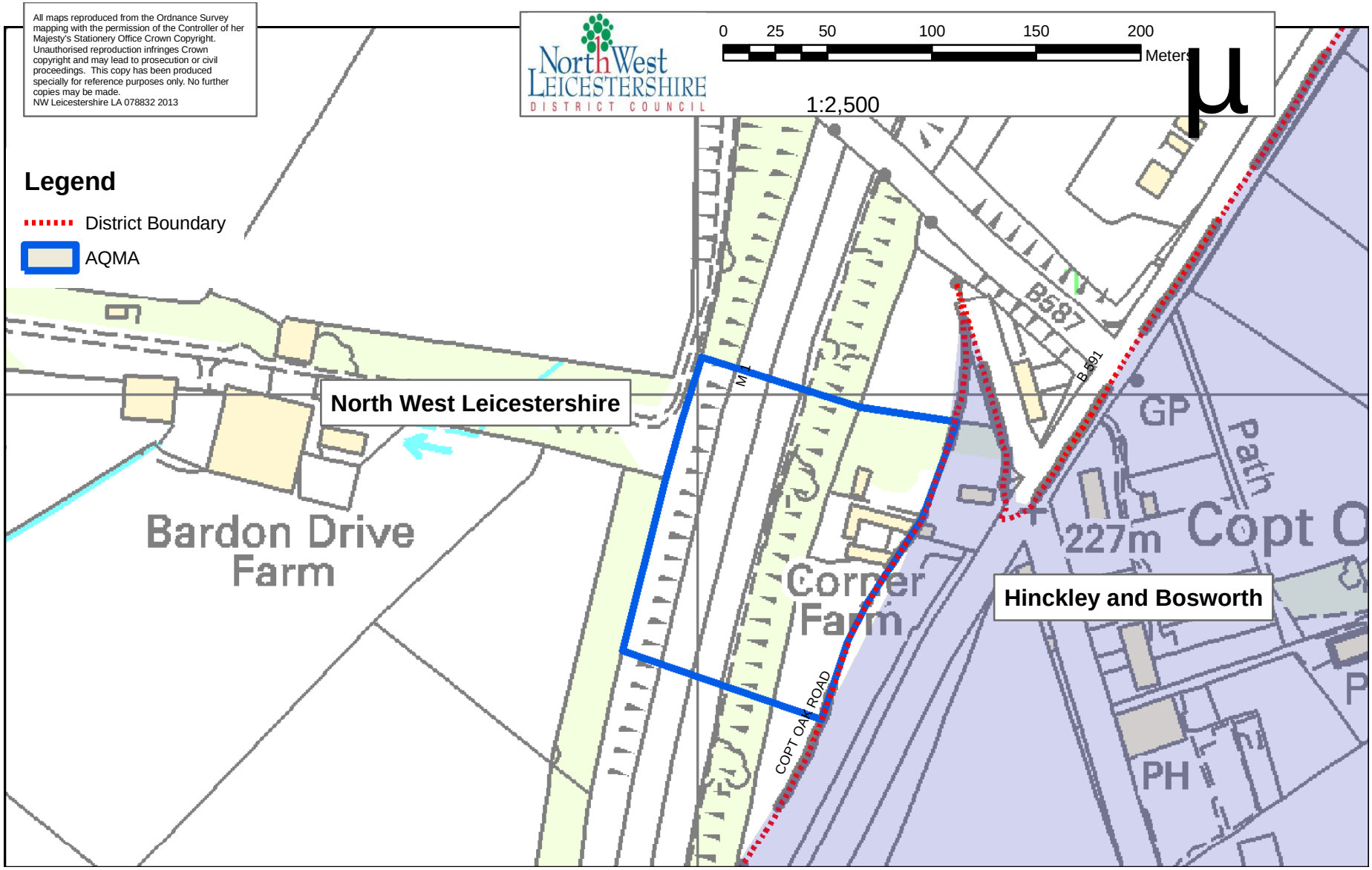


Figure F.5 Copt Oak AQMA



Appendix G: Summary of Air Quality Objectives in England

Table G.1 Summary of Air Quality Objectives in England

Pollutant	Air Quality Objective4	
	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

[4] The units are in microgrammes of pollutant per cubic metre of air (µg/m^3).

Appendix H: QA/QC Data

QA/QC of automatic monitoring

The analyser at Coalville is an API 200 chemiluminescence analyser,

Routine instrument calibrations are conducted once per month, which involve zero and span checks, a written record of the gas analyser diagnostics and a general visual inspection of all equipment is undertaken.

Data retrieval and daily data checking

Data from the monitoring station is retrieved and processed on a data logger as 15-minute mean data. The logger is interrogated via a Siemens TC35i GSM modem at 8-hourly intervals by the ENVIEW 2000 software hosted at TRL. This is used to retrieve, check and archive data.

TRLs internal QA/QC procedures require all data to be backed up on a secure server and all documentation associated with each site to be uniquely identified and securely stored to provide an audit trail.

Daily data inspections are undertaken during office hours using the facilities of the Data Management System. Initial observations of the Management System indicate whether the site has been contacted during its nominated ‘poll time’ overnight. If this has not been successful a manual poll of the site may be required. If this is not successful further investigation of the communications integrity will be required to establish contact with the site modem and data logger.

Three day plots of recorded data are viewed for the requested site, and these are inspected and assessed for continuity, validity, minimum and maximum values, date and time, power failures and general integrity. All anomalies are recorded on the Daily Check sheet, as required. Any anomalies or queries arising from daily inspection of data, or system operation, are brought to the attention of the Project Manager who will evaluate the situation, and initialise any necessary action. In the event that the PM is not available, contact will be made with the next available senior

person within the monitoring team. Any issues identified with equipment operation will be referred to the client for attention within 24 hours (excluding weekends).

On a weekly basis, data are examined using summary statistics and outlier analysis to establish data validity. In the event that unusual data episodes are recorded, these would be routinely examined over longer data periods to establish their impact on trends, but would also be cross referenced with data peaks and troughs recorded at other national monitoring stations. In addition, integrity and validity of data logger clock times are checked, and any significant errors recorded in the Data Management System logbook.

All site data recorded through the Data Management System is archived on TRLs Network. The data is backed up daily, and the TRL IT Department maintains these data within their long-term and secure archives. This secures all data in the event of any system failure.

Data calibration and ratification

Data is ratified as per AURN recommended procedures. The calibration and ratification process for automatic gas analysers corrects the raw dataset for any drift in the zero baseline and the upper range of the instrument. This is done using a Microsoft Excel-based calibration and ratification file which incorporates the zero and span check information from the calibration visits. The zero reading recorded during the calibration visits is used to adjust any offset of the baseline of the data. The difference between the span value obtained between one calibration visit and the next visit is used to calculate a factor. This change is assumed to occur at the same rate over the period between calibrations and as such the factor is used as a linear data scaler. This effectively results in the start of the period having no factor applied and the end of the period being scaled with the full factor with a sliding scale of the factor in-between. After applying the calibration factors, it is essential to screen the data, by visual examination, to see if they contain any unusual

measurements or outliers. Errors in the data may occur as a result of equipment failure, human error, power failures, interference or other disturbances. Data validation and ratification is an important step in the monitoring process. Ratification involves considerable knowledge of pollutant behaviour and dispersion, instrumentation characteristics, field experience and judgement.

On completion of this data correction procedure, these data were converted to hourly means and a summary of these data were provided to North West Leicestershire District Council.

Appendix I: Glossary of Terms

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

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide
…	…

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