

2009 Air Quality Updating and Screening Assessment for

North West Leicestershire

District Council

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

5th October 2009

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Executive Summary

This Air Quality Update and Screening Assessment 2009 fulfils North West Leicestershire District Council's commitment to the Local Air Quality Management (LAQM) process. This report follows the requirements of the DEFRA guidance LAQM.TG(09) [11] and is part of the fourth round of Review and Assessment undertaken by the District Council.

This Updating and Screening Assessment reviews the changes which may have occurred within the district which may affect air quality, and any improvements that have been made in the methods of predicting air quality. If areas are identified as not meeting the Air Quality Objectives and there is relevant exposure, then it will be necessary to proceed to a Detailed Assessment for that particular pollutant in the area identified.

The report indicates that the annual mean objective for NO₂ will not be achieved within the four previously declared AQMA's and at the newly declared AQMA at Copt Oak. There is also a possibility that the air quality objective for SO₂ may be being exceeded at several locations within the district due to the burning of solid fuel in off-gas properties. The report therefore concludes that Detailed Assessments must be conducted at the locations identified in Section 6.3 to identify the number of properties within a 500m×500m area that are burning solid fuel as their primary source of heating and should it be found that more than 100 properties within the 500m×500m area it will be necessary to undertake monitoring for SO₂.

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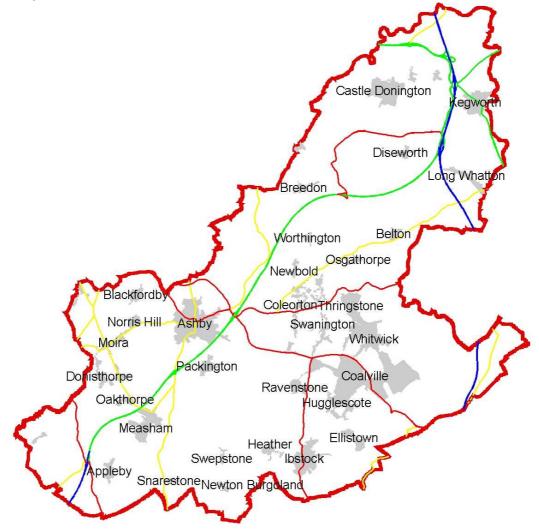
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1 Introduction

1.1 Description of Local Authority Area

Figure 1 Map of North West Leicestershire District



North West Leicestershire lies in the East Midlands Region and is both the name and geographical location. The district is situated in the heart of the National Forest and lies between Leicester, Burton-on-Trent, Derby and Nottingham, covering 105 square miles. The district is mostly rural with a large extent of industry historically from coal mining, but more recently with Nottingham East Midlands Airport and large quarries. The population of 88,800 live mainly in the principle towns of Coalville and Ashby-de-la-Zouch; and the large villages of Castle Donington, Kegworth and Ibstock. Three established main roads run through the district, the M42/A42

between Birmingham and Nottingham, the M1 and the A50/A511 from Leicester to Burton-on-Trent.

1.2 Purpose of Report

This report fulfils the requirements of the Local Air Quality Management 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 exceedances 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.

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 microgrammes per cubic metre $\mu g/m^3$ (milligrammes per cubic metre, mg/m³ for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Pollutant	Air Quality Objective					
Foliatant	Concentration			Measured as	achieved by	
Benzene	16.25	µgm⁻³		Running annual mean	31.12.200	
Delizene	5.00	µgm ⁻³		Running annual mean	31.12.201	
1,3-Butadiene	2.25	µgm⁻³		Running annual mean	31.12.200	
Carbon monoxide	10.0	mgm ⁻³		Running 8-hour mean	31.12.200	
Lead	0.5	µgm ⁻³		Annual mean	31.12.200	
Leau	0.25	µgm ⁻³		Annual mean	31.12.200	
Nitrogen	200	µgm⁻³	not to be exceeded more than 18 times a year	1-hour mean	31.12.200	
dioxide	40	µgm ⁻³		Annual mean	31.12.200	
Particles PM ₁₀)	50	µgm⁻³	not to be exceeded more than 35 times a year	24-hour mean	31.12.200	
(gravimetric)	40	µgm⁻³		Annual mean	31.12.200	
	350	µgm⁻³	not to be exceeded more than 24 times a year	1-hour mean	31.12.200	
Sulphur dioxide	125	µgm⁻³	not to be exceeded more than 3 times a year	24-hour mean	31.12.200	
	266	µgm ⁻³	not to be exceeded more than 35 times a year	15-minute mean	31.12.200	

 Table 1.
 Air Quality Objectives included in Regulations for the purpose of Local Air Quality Management in England.

1.4 Summary of Previous Review and Assessments

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 USA undertaken in 2006 [18] 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 2 and Figure 3.

The Detailed Assessment [19] undertaken in September 2007 of the three locations identified as possible areas for AQMAs in the USA 2006 [18] was The three locations were High Street/Bondgate in Castle Donington, Broom Leys Road, Coalville and Bardon Road, Coalville. The Detailed Assessment 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 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 4, and the second covering Broom Leys Road and Bardon Road in Coalville, presented in Figure 5.

The Air Quality Progress Report conducted in April 2008 [1] recommended that a detailed assessment of the village of Copt Oak and the area surrounding East midlands airport be undertaken to determine if AQMA's should be determined at these locations.

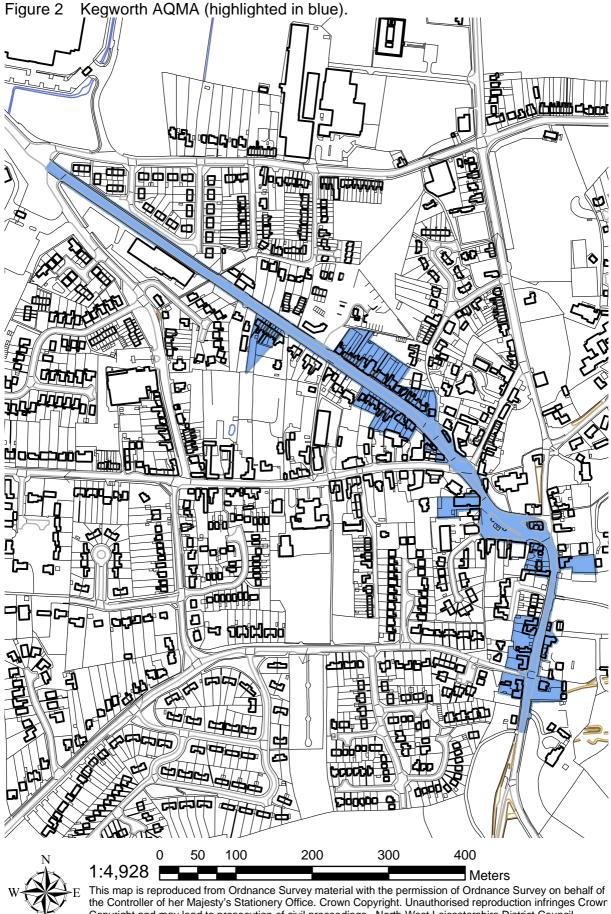
The Detailed Assessment of Copt Oak published in January 2009 [3] found that an AQMA should be declared and that the area should cross

the district boundary to include an area within the borough of Hinckley and Bosworth as shown in Figure 6.

The Detailed assessment of East midlands airport published in March 2009 [2] concluded that the Air quality objective for NO2 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 [4] 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 [5] supported the original declaration of the AQMA comprising ninety one residential properties on High Street and Bondgate, Castle Donington.



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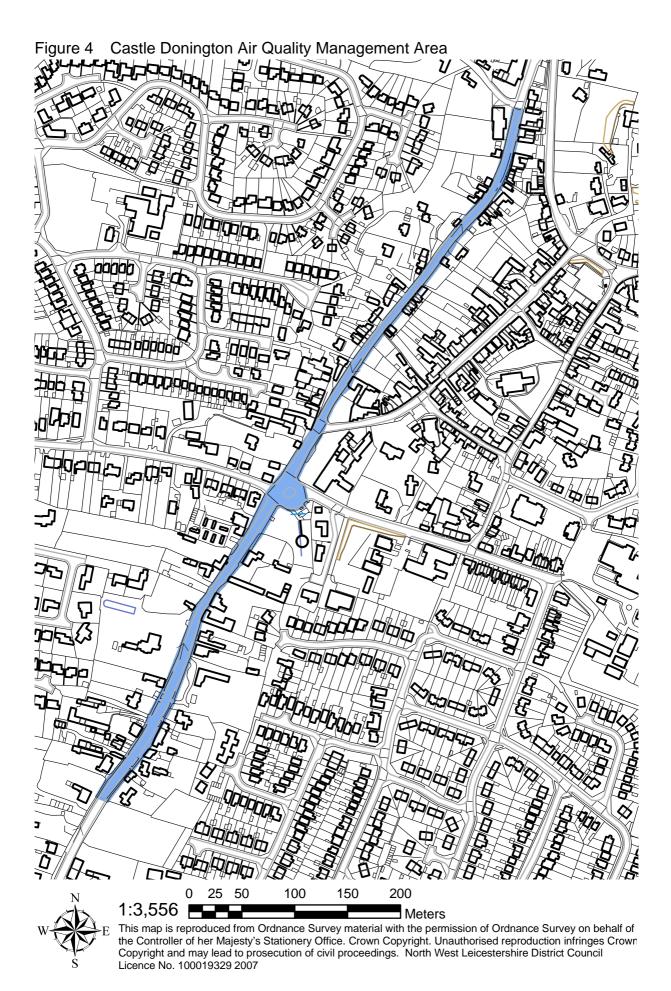
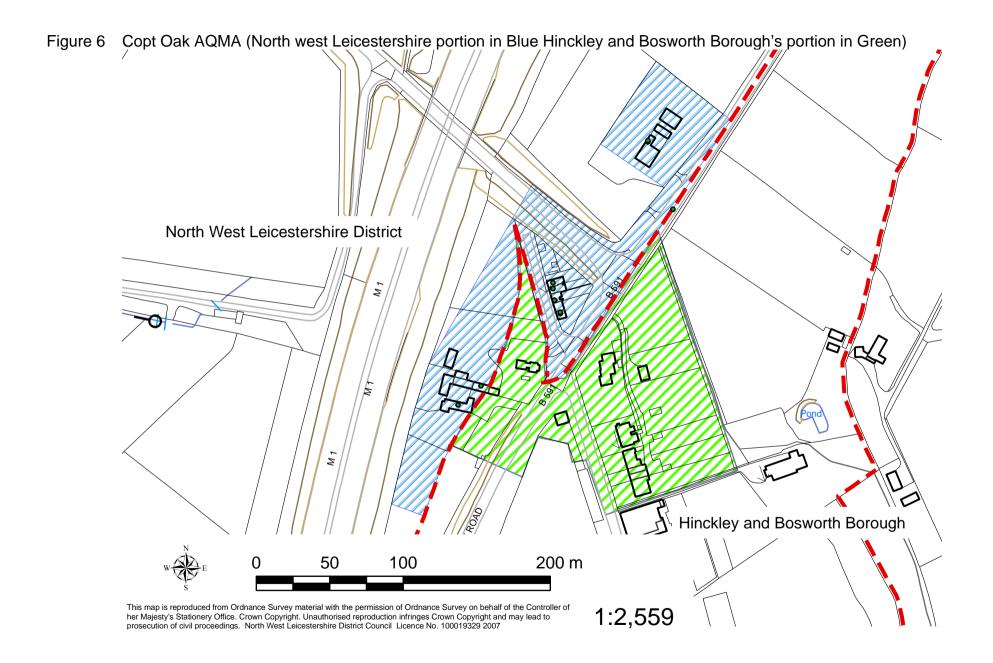




Figure 5 Coalville Air Quality Management Area (Bardon Road and Broom Leys Junction)



2 New Monitoring Data

2.1 Automatic Monitoring Sites

This Authority does not currently have an operational real time monitor

2.2 Non-Automatic Monitoring

This Authority has 49 NO_x monitoring tubes throughout the district. See Appendix A for the QA:QC Data on the NOx Tubes. The position of these tubes is given in Table 2 and shown on the map in Appendix B.

Table 2.	Details of Non- Automatic Monitoring Sites
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Site Name	Site Type	OS Grid Ref		Pollutants Monitored	In AQMA	(Y/IN WITH	Distance to kerb of nearest road	Worst- case Location
		х			?	distance (m) to relevant exposure)	(N/A if not applicable)	?
Belvoir	Urban Background	442351	314291	NO ₂	Ν	N	N/A	Ν
Jackson	Urban Centre	442308	314205	NO ₂	Ν	N	N/A	N
Oxford	Urban Background	443276	314114	NO ₂	Ν	N	N/A	N
Abbotts	Suburban	444837	314687	NO ₂	Ν	N	N/A	N
Bardon	Roadside	444136	313213	NO ₂	Y	7.5m	1m	Y
Derby Rd Keg	Roadside	448521	326887	NO ₂	Y	3.2m	1m	Y
Measham	Roadside	433457	312213	NO ₂	Ν	2.3m	1.6m	Y
Boundary	Roadside	433358	318972	NO ₂	Ν	N	N	Y
Keg A6 2	Roadside	448786	326654	NO ₂	Y	2.3m	0m	Y
Mi Mole	Roadside	447436	326456	NO ₂	Y	N	N/A	Y
Ash A42	Roadside	436340	315837	NO ₂	Ν	Ν	N/A	Y
Cd High	Roadside	444474	327285	NO ₂	Y	2	2.5m	Y
Cd Ema	Other	444477	327285	NO ₂	Y	Ν	N/A	N
Cd Stat	Roadside	444784	328125	NO ₂	Y	5.2m	2m	Y
Cd Dise	Other	444355	326311	NO ₂	Ν	Ν	N/A	Y
Keg A6	Roadside	448814	326630	NO ₂	Y	4.5m	1m	Y
Keg Ema	Suburban	448066	326246	NO ₂	Ν	Ν	N/A	Y
Keg Mole	other	447437	326477	NO ₂	Y	Ν	N/A	Y
Lw Mi	other	446941	323768	NO ₂	Y	Ν	N/A	N
Lw West	other	446941	323768	NO ₂	Ν	N	N/A	Ν
Copt Oak	rural	448113	313073	NO ₂	Ν	N	N/A	Ν
Charley	Roadside	448513	313572	NO ₂	Ν	0	2.2m	Y
Broom	Roadside	443659	313997	NO ₂	Y	5.8	2m	Y
Sinope	Roadside	440169	315266	NO ₂	Ν	7.8	3.2m	Y

Site Name	Site Type			Pollutants Monitored	In AQMA 2	(Y/IN WITH	Distance to kerb of nearest road	Worst- case Location
		х	Y		?	distance (m) to relevant exposure)	(N/A if not applicable)	?
Mole Hill House	Roadside	447456	326421	NO ₂	Y	0	50m	Y
Aeropark	Other	444172	326393	NO ₂	Ν	N	N/A	N
Bardon Rd W	Roadside	443840	313485	NO ₂	Y	5.5m	6.9m	Y
Mi Mole 2	Other	447436	326456	NO ₂	Y	N	N/A	N
Broomleys	Roadside	443659	313997	NO ₂	Y	5.8m	2m	Y
155 Bardon Rd	Roadside	444067	313275	NO ₂	Ν	6.7m	2.5m	Y
242 Bardon Rd	Roadside	444294	313051	NO ₂	Ν	8.5m	5.7m	Y
66 Bardon Rd	Roadside	443759	313528	NO ₂	Ν	6m	7.1m	Y
104 Hill Top Castle Donington	Roadside	444084	326614	NO ₂	Y	0m	29m	Y
44 High St Castle Donington	Roadside	444291	326945	NO ₂	Y	9.1m	4m	Y
Crossroads Castle Donington	Roadside	44448	327227	NO ₂	Y	7.53m	1m	Y
34 Bondgate Castle Donington	Roadside	444581	327415	NO ₂	Y	2.3m	0m	Y
61-74 Bondgate Castle Donington	Roadside	444624	327486	NO ₂	Y	0m	3m	Y
94 Bondgate Castle Donington	Roadside	444706	327609	NO ₂	Y	0.8m	1.4m	Y
Wilson	Rural	440535	324691	NO ₂	Ν	N	N/A	N
New Brickyard Lane Keg	Sub-urban	448734	326283	NO ₂	Ν	Ν	N/A	N
Shepherd Walk Keg	Other	448207	326260	NO ₂	Ν	Ν	N/A	N
Kirby Dr Keg	Other	448272	326264	NO ₂	Ν	Ν	N/A	N
Thomas Rd Keg	Other	448438	326295	NO ₂	Ν	N	N/A	N
Springfield Keg	Other	447970	326480	NO ₂	Ν	Ν	N/A	N
End Cottage Copt Oak	Rural	448148	312986	NO ₂	Ν	N	N/A	Ν
62 Bardon Rd	Roadside	443748	313529	NO ₂	Y	0	13.9m	Y
87 Bardon Rd	Roadside	443845	313487	NO ₂	Y	0	11m	Y
134 Bardon Rd	Roadside	444033	313274	NO ₂	Y	0	13m	Y
181 Bardon Rd	Roadside	444135	313218	NO ₂	у	0	10m	Y

2.3 Comparison of Monitoring Results with AQ Objectives

2.3.1 Nitrogen Dioxide (NO₂) Diffusion Tube Monitoring Data

Generally across the district the levels of NO₂ do not exceed the National Air Quality Objectives; however exceedences occurred at sites within the Coalville and Castle Donington AQMA's. There where also an exceedance at a site in Copt Oak which following the results of a Detailed Assessment [3] is to be declared as an AQMA.

At Mole Hill the level of NO_2 is above $60\mu gm^{-3}$ and also exceeded $60\mu gm^{-3}$ in 2007 as such the authority, in line with Paragraph 5.17 of the technical guidance [11], assumes that the 1-hour mean objective is being exceeded and will amend the scope of the current AQMA order to reflect an exceedance of the 1-hour mean objective.

The annual averages are given in Table 3. The raw monthly data is given in Appendix C. Comparisons of the 2008 data with data from 2006 and 2007 are shown in Table 4 and Figure 7.

Site ID	Location	Within	Data Capture	Annual mean concentrations
Site ID	Eocation	AQMA?	2008 %	2008 (μ gm ⁻³) Adjusted for bias (x0.93)
1	Belvoir	Ν	25%	33.21
2	Jackson	N	92%	30.33
3	Oxford	N	83%	22.49
4	Abbotts	N	83%	20.38
5	Bardon	Y	58%	31.54
6	Derby Rd Keg	Y	75%	33.43
7	Measham	N	50%	31.41
8	Boundary	N	67%	21.14
9	Keg A6 2	Y	92%	38.37
10	M1 Mole	Y	83%	67.39
11	Ashby A42	N	92%	26.90
12	Cd High	Y	67%	35.98
13	Cd Ema	Y	67%	17.36
14	Cd Stat	Y	33%	29.13
15	Cd Dise	N	92%	21.93
16	Keg A6	Y	75%	39.38
17	Keg Ema	N	75%	23.29
18	Keg Mole	Y	75%	67.10
19	Lw Mi	Y	92%	29.56
20	Lw West	N	92%	24.21
21	Copt Oak	N	92%	41.14
22	Charley	N	92%	32.65
23	Broom	Y	83%	39.63
24	Sinope	N	92%	29.33
25	Mole Hill House	Y	75%	34.92
26	Aeropark	N	83%	17.90
27	Bardon Rd W	Y	92%	43.79
28	M1 Mole 2	Y	83%	68.92

Table 3. Results of Nitrogen Dioxide Diffusion Tubes

Site ID	Location	Within AQMA?	Data Capture 2008 %	Annual mean concentrations 2008 (μgm ⁻³) Adjusted for bias (x0.93)
29	Broomleys	Y	92%	39.20
30	155 Bardon Rd	Ν	50%	23.14
31	242 Bardon Rd	Ν	83%	21.86
32	66 Bardon Rd	Ν	75%	14.60
33	104 Hill Top Castle Donington	Y	83%	25.97
34	44 High St Castle Donington	Y	75%	28.72
35	Crossroads Castle Donington	Y	83%	33.65
36	34 Bondgate Castle Donington	Y	75%	47.32
37	61-74 Bondgate Castle Donington	Y	67%	32.32
38	94 Bondgate Castle Donington	Y	67%	34.74
39	Wilson	Ν	75%	12.21
40	New Brickyard Lane Keg	Ν	83%	19.85
41	Shepherd Walk Keg	Ν	83%	22.03
42	Kirby Dr Keg	Ν	83%	21.42
43	Thomas Rd Keg	Ν	83%	22.21
44	Springfield Keg	Ν	50%	20.92
45	End Cottage Copt Oak	N	67%	29.58
46	62 Bardon Rd	Y	83%	23.05
47	87 Bardon Rd	Y	83%	23.55
48	134 Bardon Rd	Y	83%	25.55
49	181 Bardon Rd	У	83%	27.60

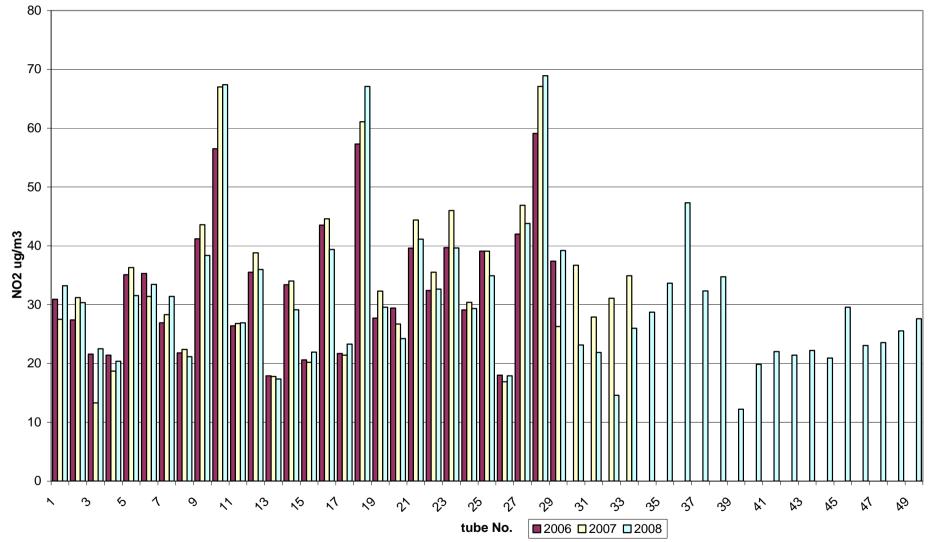
Exceedences of the AQ objective are shown in bold.

Results highlighted Yellow have less than 90% data coverage

Site ID	Location	Within AQMA?	Annual mean concentrations (µgm ⁻³) Adjusted for bias		
			2006	2007	2008
1	Belvoir	N	30.9	27.5	33.21
2	Jackson	N	27.4	31.2	30.33
3	Oxford	N	21.6	13.3	22.49
4	Abbotts	N	21.4	18.7	20.38
5	Bardon	Y	35.1	36.3	31.54
6	Derby Rd Keg	Y	35.3	31.4	33.43
7	Measham	N	26.9	28.3	31.41
8	Boundary	N	21.8	22.4	21.14
9	Keg A6 2	Y	41.2	43.6	38.37
10	M1 Mole	Y	56.5	67.0	67.39
11	Ashby A42	N	26.4	26.8	26.90
12	Cd High	Y	35.5	38.8	35.98
13	Cd Ema	Y	17.9	17.8	17.36
14	Cd Stat	Y	33.4	34.0	29.13
15	Cd Dise	N	20.6	20.2	21.93
16	Keg A6	Y	43.5	44.6	39.38
17	Keg Ema	Ν	21.7	21.4	23.29
18	Keg Mole	Y	57.3	61.1	67.10
19	Lw Mi	Y	27.7	32.3	29.56
20	Lw West	N	29.4	26.7	24.21
21	Copt Oak	N	39.6	44.4	41.14
22	Charley	N	32.4	35.5	32.65
23	Broom	Y	39.7	46.0	39.63
24	Sinope	N	29.1	30.4	29.33
25	Mole Hill House	Y	39.1	39.1	34.92
26	Aeropark	N	18.0	16.9	17.90
27	Bardon Rd W	Y	42.0	46.9	43.79
28	Mi Mole 2	Y	59.1	67.1	68.92

Table 4. Trend of Nitrogen Dioxide Diffusion Tubes 2006 to 2008

Site ID	Location	Within AQMA?	Annual mean concentrations (μgm ⁻³) Adjusted for bias		
			2006	2007	2008
29	Broomleys	Y	37.4	26.3	39.20
30	155 Bardon Rd	N		36.7	23.14
31	242 Bardon Rd	N		27.9	21.86
32	66 Bardon Rd	N		31.1	14.60
33	104 Hill Top Castle Donington	Y		34.9	25.97
34	44 High St Castle Donington	Y			28.72
35	Crossroads Castle Donington	Y			33.65
36	34 Bondgate Castle Donington	Y			47.32
37	61-74 Bondgate Castle Donington	Y			32.32
38	94 Bondgate Castle Donington	Y			34.74
39	Wilson	Ν			12.21
40	New Brickyard Lane Keg	Ν			19.85
41	Shepherd Walk Keg	N			22.03
42	Kirby Dr Keg	Ν			21.42
43	Thomas Rd Keg	Ν			22.21
44	Springfield Keg	N			20.92
45	End Cottage Copt Oak	N			29.58
46	62 Bardon Rd	Y			23.05
47	87 Bardon Rd	Y			23.55
48	134 Bardon Rd	Y			25.55
49	181 Bardon Rd	У			27.60



NO2 trends 2006 to 2008

Graph of NO_2 trends 2006 to 2008

Figure 7

2.3.2 PM₁₀

This Authority is currently not monitoring for PM₁₀

2.3.3 Sulphur Dioxide (SO₂)

This Authority is currently not monitoring for Sulphur Dioxide

2.3.4 Benzene (C₆H₆)

This Authority is currently not monitoring for Benzene ...

2.3.5 Other pollutants monitored

This Authority is currently not monitoring for any other pollutants...

North West Leicestershire District Council has examined the results from monitoring in the district. 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 Road Traffic Sources

3.1 Narrow Congested Streets with ResidentialProperties Close to the Kerb

North West Leicestershire District Council confirms that there are no new/newly identified congested streets with a flow above 5,000 vehicles per day and residential properties close to the kerb, that have not been adequately considered in previous rounds of Review and Assessment.

3.2 Busy Streets Where People May Spend 1-hour or More Close to Traffic

North West Leicestershire District Council confirms that there are no new/newly identified busy streets where people may spend 1 hour or more close to traffic.

3.3 Roads with a High Flow of Buses and/or HGVs.

North West Leicestershire District Council confirms that there are no new/newly identified roads with high flows of buses/HDVs.

3.4 Junctions

North West Leicestershire District Council confirms that there are no new/newly identified busy junctions/busy roads.

3.5 New Roads Constructed or Proposed Since the Last Round of Review and Assessment

North West Leicestershire District Council confirms that there are no new/proposed roads.

3.6 Roads with Significantly Changed Traffic Flows

North West Leicestershire District Council confirms that there are no new/newly identified roads with significantly changed traffic flows.

3.7 Bus and Coach Stations

North West Leicestershire District Council confirms that there are no relevant bus stations in the Local Authority area.

4 Other Transport Sources

4.1 Airports

North West Leicestershire District Council confirms that there are no airports in the Local Authority area which have not been previously assessed, please see reference [2] for further details.

4.2 Railways (Diesel and Steam Trains)

4.2.1 Stationary Trains

North West Leicestershire District Council confirms that there are no locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.

4.2.2 Moving Trains

North West Leicestershire District Council confirms that there are no locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.

4.3 Ports (Shipping)

North West Leicestershire District Council confirms that there are no ports or shipping that meet the specified criteria within the Local Authority area.

5 Industrial Sources

5.1 Industrial Installations

5.1.1 New or Proposed Installations for Which an Air Quality Assessment has been Carried Out

North West Leicestershire District Council confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

5.1.2 Existing Installations where Emissions have Increased Substantially or New Relevant Exposure has been Introduced

North West Leicestershire District Council confirms that there are no industrial installations with substantially increased emissions or new relevant exposure in their vicinity within its area or nearby in a neighbouring authority.

5.1.3 New or Significantly Changed Installations with No Previous Air Quality Assessment

North West Leicestershire District Council confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

5.2 Major Fuel (Petrol) Storage Depots

There are no major fuel (petrol) storage depots within the Local Authority area.

5.3 Petrol Stations

North West Leicestershire District Council confirms that there are no petrol stations meeting the specified criteria.

5.4 Poultry Farms

North West Leicestershire District Council confirms that there are no poultry farms meeting the specified criteria.

6 Commercial and Domestic Sources

6.1 Biomass Combustion – Individual Installations

North West Leicestershire District Council confirms that there are no biomass combustion plant in the Local Authority area.

6.2 Biomass Combustion – Combined Impacts

North West Leicestershire District Council confirms that there are no biomass combustion plant in the Local Authority area.

6.3 Domestic Solid-Fuel Burning

The southern half of the District of North West Leicestershire is historically a coal mining area as such most the area was historically without gas supply and the primary source of heating used was the burning of coal.

In 2006 the energy efficiency partnership for homes produced a report on the numbers of hard to heat homes [6]. The Report found that ~55% of homes within the district where without mains gas (see Appendix E). The Output Area data (included in Appendix E) shows that the percentage differs across the district, the report was based on data done on the number of houses in census output areas which do not have mains gas. This data is of more use in this assessment as output areas generally cover areas of a similar number of properties and are unlikely to average built up areas with high housing density with rural lower housing density areas. The report states that the data was created by analysis of RESIDATA and gas connections data supplied by Transco to map the prevalence of HTT dwellings at output area level.

Due to the historic nature of the southern half of the district it is likely that a large proportion of the off gas properties in the south of the district were built with coal as their primary source of heating. Some of these will have been converted to oil, electric storage heaters or a heat pump. Newer properties built in these areas are unlikely to use coal as their primary heat

source and will likely have had a gas supply installed or use an alternative energy source.

Appendix D shows areas of the district where the housing density is great enough for more than 100 houses to exist in a 500m×500m area.

When the percentage homes without mains gas is applied to the number of properties within a 500m×500m square it can be discerned which areas have the potential for more than 100 homes to use a method other than mains gas as their primary source of heating. This is shown in Appendix F. Where a grid square crossed several output areas the percentage of homes without mains gas is taken from the output area containing the largest number of homes within that grid square, if the number of properties contained by each output area is approximately equal the largest percentage of homes without mains gas will be used. Though a proportion of the off gas properties will use sources other than solid fuel, due to the nature of the area it is reasonable to assume that a proportion will be burning solid fuel.

The dataset does not take into account connections to private gas networks that cover the major conurbations of Castle Donington, Kegworth, Ashby-De-La-Zouch, Coalville, Whitwick, Thringstone, Ellistown, Packington, and Ibstock these areas can therefore be discounted as local knowledge suggests the majority of properties in these areas are now using gas as their main source of heating.

The rural areas, indentified in Appendix F, of Measham, Donisthorpe, Breedon on the Hill, Lount, Belton, Newton Burgoland, and Oakthorpe are either within "gas-free" zones or have large off-gas estates, therefore it will be necessary to conduct a survey of these areas to identify the number of properties in those areas using solid fuel as their primary source of heating.

North West Leicestershire District Council has assessed areas of significant domestic solid fuel use, and concluded that it will be necessary to proceed to a Detailed Assessment for sulphur dioxide.

7 Fugitive or Uncontrolled Sources

North West Leicestershire District Council confirms that there are no potential sources of fugitive particulate matter emissions in the Local Authority area.

8 Conclusions and Proposed Actions

8.1 Conclusions from New Monitoring Data

At Mole Hill the level of NO_2 is above $60\mu gm^{-3}$ and also exceeded $60\mu gm^{-3}$ in 2007 as such the authority, in line with Paragraph 5.17 of the technical guidance [11], assumes that the 1-hour mean objective is being exceeded and will amend the scope of the current AQMA order to reflect an exceedance of the 1-hour mean objective.

Following the Detailed Assessment of Copt Oak, in negotiation with Hinckley and Bosworth Borough Council, Copt Oak will be declared as a AQMA.

8.2 Conclusions from Assessment of Sources

There are areas of potential concern for exceedences of the SO_2 target identified in section 6.3. Further information is required in the form of a fuel survey to further clarify this issue and may lead to the requirement for the monitoring of SO_2

8.3 Proposed Actions

The Updating and Screening Assessment has identified a need for the following changed to existing AQMA's:

• Amend the scope of the current AQMA order for M1 north (Mole Hill) to reflect an exceedance of the 1-hour mean objective.

The Updating and Screening Assessment has identified a need for the following additional monitoring:

• Due to the findings of Section 6.3 a survey of the number of properties using solid fuel as their primary source of heating in the areas of potential concern identified in Section 6.3 will be undertaken and submitted in the form of a detailed assessment. Should it be found that there are more than 100 properties within a 500m×500m area that are burning solid fuel as their primary source of heating it

will be necessary to undertake monitoring for SO_2 to ascertained if the air quality objective is being exceeded.

The council will undertake the following course of action:

- Submit 2010 Progress Report;
- Undertake a fuel usage survey and submit a Detailed assessment for SO₂ for the areas identified in Section 6.3;
- Amend the M1 AQMA order to include exceedance of the 1-hour mean objective; and
- Undertake and submit a further assessment for the recently declared AQMA at Copt Oak.

9 References

- CRA (2008) Air Quality Progress Report 933628. Conestoga-Rovers & Associates (Europe) Ltd prepared on behalf of North West Leicestershire District Council, April 2008.
- [2] CRA (2009) Air Quality Detailed Assessment For East Midlands Airport 933690(1). Conestoga-Rovers & Associates (Europe) Ltd prepared on behalf of North West Leicestershire District Council, March 2009.
- [3] CRA (2009) Air Quality Detailed Assessment For Copt Oak 933690(2).
 Conestoga-Rovers & Associates (Europe) Ltd prepared on behalf of North West Leicestershire District Council, January 2009
- [4] CRA (2009) Air Quality Further Assessment Of Bardon Road Aqma, Coalville 933690(2). Conestoga-Rovers & Associates (Europe) Ltd prepared on behalf of North West Leicestershire District Council, February 2009.
- [5] CRA (2009) Air Quality Further Assessment of Castle Donington AQMA 933690(4). Conestoga-Rovers & Associates (Europe) Ltd prepared on behalf of North West Leicestershire District Council, April 2009.
- [6] Energy efficiency partnership for homes (2006) Identifying and Quantifying the Prevalence of Hard to Treat Homes Final Report to the Energy Efficiency Partnership for Homes (Insulation Strategy Group and Hard-to-Treat Subgroup)
- [7] DEFRA (2009) Local Air Quality Management Technical Guidance LAQM.TG(09). Department for Food and Rural Affairs
- [8] DEFRA (2007a) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. Department for Food and Rural Affairs July 2007. Cmd Paper No. 7169.
- [9] DEFRA (2007b) National Atmospheric Emissions Inventory. www.naei.org.uk Department for Food and Rural Affairs
- [10] DEFRA (2007c) Air Quality Archive via the internet www.airquality.co.uk Department for Food and Rural Affairs
- [11] DEFRA (2009) Local Air Quality Management Technical Guidance (LAQM.TG(09)). Department for Food and Rural Affairs

- [12] DfT (2008) Annual Average Daily Traffic Flows. Department for Transport www.dft.gov.uk/matrix
- [13] Highways Agency (2007) Environmental Assessment Techniques Design Manual for Roads and Bridges. Highways Agency. Volume 11, Section 3.
- [14] HMSO (2000) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. CM 4548, Her Majesty's Stationary Office Publication
- [15] HMSO (2002) The Air Quality (England) (Amendment) Regulations 2002 Statutory
- [16] Instrument 3043. ISBN 0 11044220 2, Her Majesty's Stationary Office Publication
- [17] Laxen & Marner (2003) Analysis of the Relationship between 1-Hour and Annual Mean Nitrogen Dioxide at UK Roadside and Kerbside Monitoring Sites. Available from DEFRA, 2007b.
- [18] NWLDC (2006) Air Quality Updating and Screening Assessment. North West Leicestershire District Council, April 2006.
- [19] NWLDC (2007) Air Quality Detailed Assessment for Coalville and Castle Donington. North West Leicestershire District Council, April 2007.

Appendices

Appendix A QA:QC Data

• Diffusion Tube Bias Adjustment Factors

Tube supplier/Analyst

Gradko International Limited

Preparation method

50% TEA in acetone

Bias Adjustment factor from R&A Helpdesk Database

As discussed earlier in this report, diffusion tubes are a simple method to obtain information on the local pollution levels. There is a recognised inherent error in using diffusion tubes in that there is a tendency for them to either over or under estimate the actual pollution levels. There are a number of ways in which this error can be adjusted. The current recommended best practice is to use established bias correction factors, which are compiled from several different co-location studies throughout the country. Details of the bias correction factors can be found on http://www.uwe.ac.uk/aqm/review/R&Asupport/diffusiontube050 509.xls by taking into consideration North West Leicestershire District Councils diffusion tube supplier and preparation methods, the bias correction factor for 2008 is **0.93**.

• Factor from Local Co-location Studies (if available)

No current co-location study

• Discussion of Choice of Factor to Use

As no current local co-location study is available national Bias adjustment factor will be used

PM Monitoring Adjustment

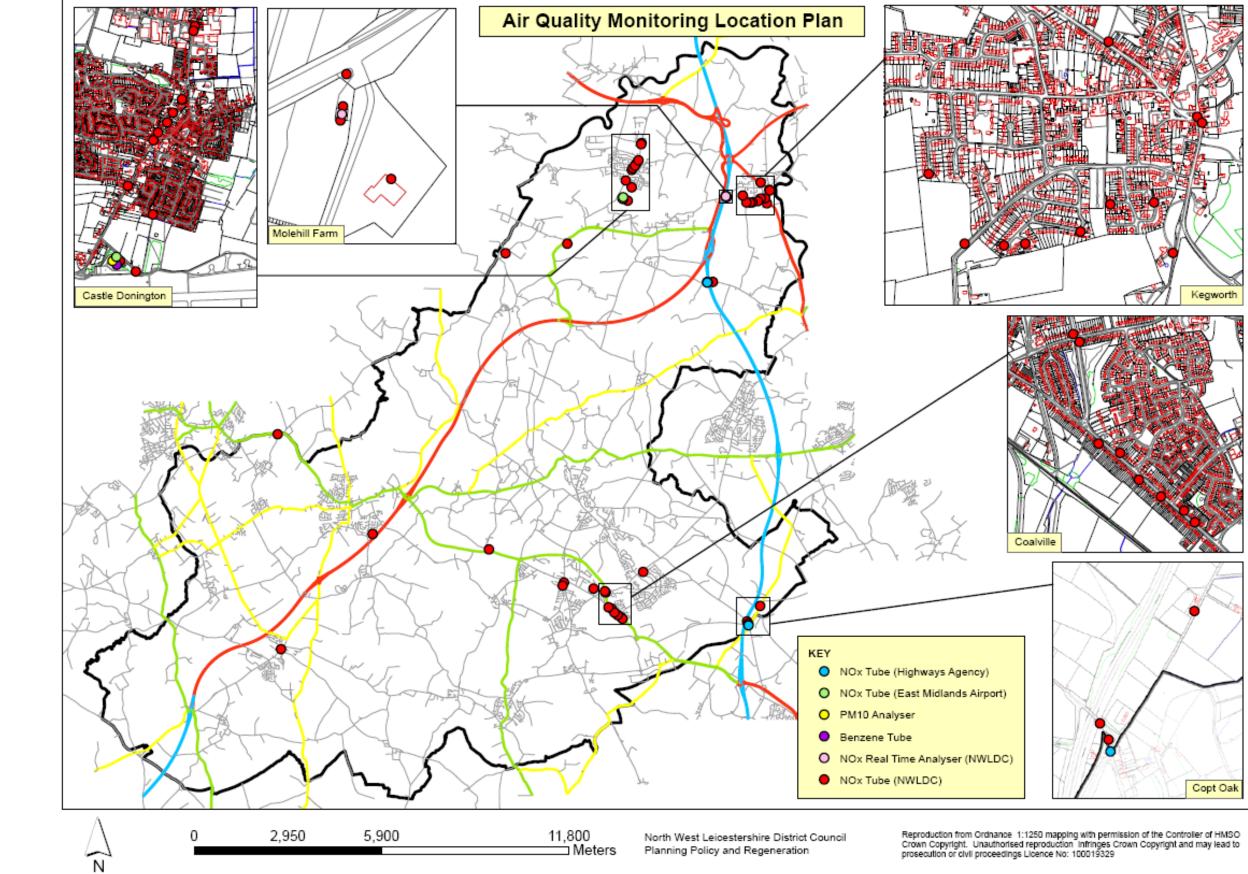
No monitoring undertaken

Short-term to Long-term Data adjustment

Not required

• QA/QC of diffusion tube monitoring

Gradko International were rated as "Good" in WASP for 2008 overall and in each monthly trial, the AEA intercomparison results are bias -11%, precision 3%...



Appendix B Map of NOx tube Locations in North West Leicestershire 2008

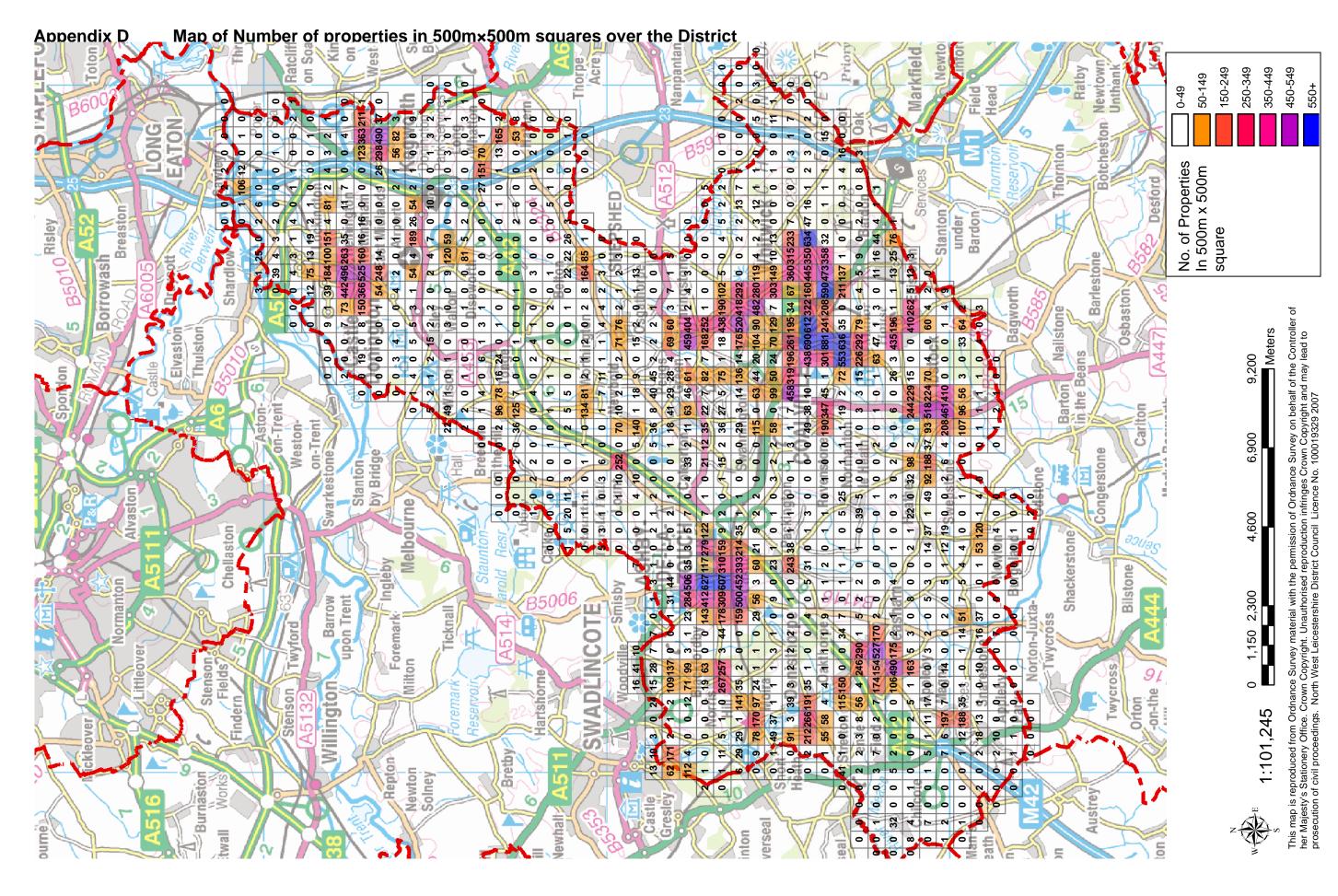
Appendix C NO_X Tube monthly data

Tube No.	Jan 2008	Feb 2008	Mar 2008	Apr 2008	May 2008	June 2008	July 2008	Aug 2008	Sep 2008	Oct 2008	Nov 2008	Dec 2008	Mean	Bias corrected Mean (*0.93)	% data cover- age
1	Α	А	А	В	А	Α	А	А	32.72	31.64	А	42.76	35.71	33.21	25%
2	34.66	38.60	29.33	29.61	29.32	А	24.35	28.71	34.52	30.89	40.30	38.48	32.61	30.33	92%
3	18.83	А	45.77	19.50	18.77	A	16.89	18.70	24.30	23.30	28.52	27.26	24.18	22.49	83%
4	21.47	26.57	17.46	18.96	Α	A	16.46	19.48	21.49	21.69	25.76	29.85	21.92	20.38	83%
5	30.36	Α	А	29.31	А	A	28.20	29.72	36.68	A	41.11	42.00	33.91	31.54	58%
6	37.97	42.92	33.78	31.86	30.27	A	36.57	35.01	36.31	38.86	А	A	35.95	33.43	75%
7	26.67	36.33	А	А	30.35	A	22.25	A	25.56	A	А	61.51	33.78	31.41	50%
8	18.45	32.61	19.18	20.19	Α	A	16.24	19.00	А	A	27.07	29.13	22.73	21.14	67%
9	37.13	44.54	40.97	36.55	36.21	A	36.43	35.83	42.37	47.24	51.01	45.55	41.26	38.37	92%
10	74.41	69.02	70.64	71.33	28.27	A	95.84	79.80	А	88.41	84.42	62.44	72.46	67.39	83%
11	25.51	34.48	20.92	27.39	34.84	A	23.51	33.65	27.37	25.90	30.08	34.55	28.93	26.90	92%
12	33.17	43.70	39.11	49.67	46.25	A	29.08	32.04	36.45	A	A	A	38.68	35.98	67%
13	17.84	25.73	13.41	А	A	A	17.53	14.99	19.33	17.00	23.48	Α	18.66	17.36	67%
14	31.22	Α	А	A	A	A	A	30.09	32.14	31.85	А	A	31.33	29.13	33%
15	42.80	27.65	15.25	18.95	20.33	A	19.59	18.30	22.95	19.58	27.11	26.88	23.58	21.93	92%
16	19.30	47.59	38.78	40.30	46.62	A	44.75	A	А	40.74	55.83	47.22	42.35	39.38	75%
17	24.39	36.08	A	20.20	A	A	18.77	18.51	21.02	24.65	32.77	29.03	25.05	23.29	75%
18	83.16	68.04	63.21	A	32.14	A	63.48	90.09	А	83.01	109.42	56.85	72.15	67.10	75%
19	30.48	39.36	29.30	29.93	16.73	A	30.98	35.24	25.37	34.31	41.06	36.90	31.79	29.56	92%
20	21.92	25.48	21.39	22.69	40.32	A	24.47	20.47	29.18	20.06	31.33	29.09	26.04	24.21	92%
21	37.89	45.58	38.44	51.87	37.99	Α	43.04	52.06	47.82	42.65	43.64	45.64	44.24	41.14	92%
22	30.74	37.57	28.69	39.95	31.77	A	31.96	35.29	34.22	33.94	39.37	42.74	35.11	32.65	92%
23	38.69	43.12	39.10	42.48	Α	A	38.34	45.22	43.07	45.51	47.10	43.46	42.61	39.63	83%
24	25.65	34.81	30.17	31.63	26.39	A	27.05	35.95	25.69	34.63	34.14	40.78	31.54	29.33	92%

Tube No.	Jan 2008	Feb 2008	Mar 2008	Apr 2008	May 2008	June 2008	July 2008	Aug 2008	Sep 2008	Oct 2008	Nov 2008	Dec 2008	Mean	Bias corrected Mean (*0.93)	% data cover- age
25	41.95	45.18	38.25	38.93	18.08	А	А	38.56	30.62	В	50.81	35.61	37.55	34.92	75%
26	20.20	27.06	А	16.38	15.95	А	19.61	16.03	17.34	16.59	19.22	24.13	19.25	17.90	83%
27	35.90	44.73	43.61	39.84	51.98	Α	45.88	47.57	50.64	45.90	59.29	52.54	47.08	43.79	92%
28	76.85	90.40	70.95	62.87	41.89	Α	78.05	94.44	А	79.04	75.05	71.49	74.10	68.92	83%
29	29.17	44.28	35.74	43.47	60.78	A	38.66	36.16	47.26	36.85	47.92	43.41	42.16	39.20	92%
30	Α	А	21.27	А	14.71	A	17.55	19.62	А	41.28	34.86	А	24.88	23.14	50%
31	Α	32.75	19.28	19.14	15.46	A	20.30	20.18	23.36	23.60	31.40	29.60	23.51	21.86	83%
32	А	20.49	11.20	12.48	11.12	А	10.06	А	24.33	13.34	18.89	19.41	15.70	14.60	75%
33	А	33.01	21.00	27.07	29.91	А	25.26	24.45	30.30	27.03	29.44	31.78	27.93	25.97	83%
34	А	35.52	24.81	29.50	30.79	А	29.56	25.48	А	30.15	36.44	35.72	30.89	28.72	75%
35	Α	39.32	27.44	37.94	42.49	А	40.66	32.97	37.81	26.91	35.11	41.12	36.18	33.65	83%
36	Α	58.59	36.43	57.39	62.53	Α	55.20	42.98	55.37	50.71	38.77	А	50.89	47.32	75%
37	Α	40.11	31.46	42.29	42.73	А	37.54	5.21	А	36.32	А	42.33	34.75	32.32	67%
38	Α	35.73	21.46	37.32	43.31	А	36.73	А	38.68	33.65	51.99	А	37.36	34.74	67%
39	Α	17.39	10.10	13.56	13.46	A	10.95	22.50	4.64	6.08	A	19.51	13.13	12.21	75%
40	Α	26.66	16.98	20.28	28.95	Α	13.20	14.29	22.80	15.35	30.16	24.81	21.35	19.85	83%
41	А	30.40	21.11	20.11	14.17	A	19.93	19.04	20.10	24.65	37.31	30.04	23.69	22.03	83%
42	Α	31.59	24.62	21.07	15.95	A	18.07	13.11	18.75	20.95	38.35	27.88	23.04	21.42	83%
43	Α	29.13	24.99	17.77	15.46	A	18.63	18.76	20.38	25.69	39.09	28.94	23.88	22.21	83%
44	Α	31.56	25.96	24.76	15.09	Α	17.99	19.63	А	A	А	Α	22.50	20.92	50%
45	А	38.36	А	39.54	21.88	A	28.23	33.95	27.80	34.97	А	29.72	31.81	29.58	67%
46	А	29.07	19.16	23.78	29.73	A	21.77	21.46	26.44	23.51	19.35	33.54	24.78	23.05	83%
47	Α	27.19	25.25	19.74	22.19	A	23.68	23.14	23.40	24.94	31.00	32.75	25.33	23.55	83%
48	А	37.11	27.45	25.05	31.58	A	17.94	16.48	24.28	23.12	32.33	39.37	27.47	25.55	83%
49	Α	31.63	26.93	28.51	33.91	А	24.73	25.71	27.75	23.61	36.46	37.59	29.68	27.60	83%

Cells marked with an A have no data available.

Cells marked with a B have data but has been excluded as low value outliers.



Appendix E Housing Intelligence for the East Midlands Data on Mains Gas Availability in NW Leicestershire by Census Output Area

OACode	Total households	Total Off Gas households	Off Gas percent	GOR	County name	District code	District name	Ward code	Ward name
31UHFZ0001	112	16	14.29%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0002	104	52	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0003	115	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0004	93	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0005	43	31	72.73%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0006	48	48	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0007	113	50	44.44%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0008	109	109	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHFZ0009	127	127	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHFZ	Appleby
31UHGA0001	157	72	46.15%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGA0002	137	74	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGA0003	136	34	25.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGA0004	128	43	33.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGA0005	125	71	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGA0006	110	48	43.48%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGA0007	164	96	58.62%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGA0008	135	94	69.70%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGA	Ashby Castle
31UHGB0001	184	115	62.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0002	143	114	80.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0003	143	87	61.11%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0004	132	73	55.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0005	145	85	58.82%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0006	130	65	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0007	124	107	86.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0008	120	105	87.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0009	150	81	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0010	114	93	81.40%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0011	136	106	77.78%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0012	131	70	53.13%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0013	122	61	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0014	128	64	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGB0015	127	64	50.00%		Leicestershire	31UH	North West Leicestershire	31UHGB	Ashby Holywell
31UHGC0001	124	66	53.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0002	137	73	53.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0003	116	90	77.27%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0004	140	80	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0005	114	73	63.64%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0006	131	75	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0007	105	53	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0008	109	59	54.55%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0009	123	68	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0010	129	86	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0011	61	43	70.59%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0012	143	72	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0013	126	59	46.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0014	125	63	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0015	100	50	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe
31UHGC0016	134	74	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGC	Ashby Ivanhoe

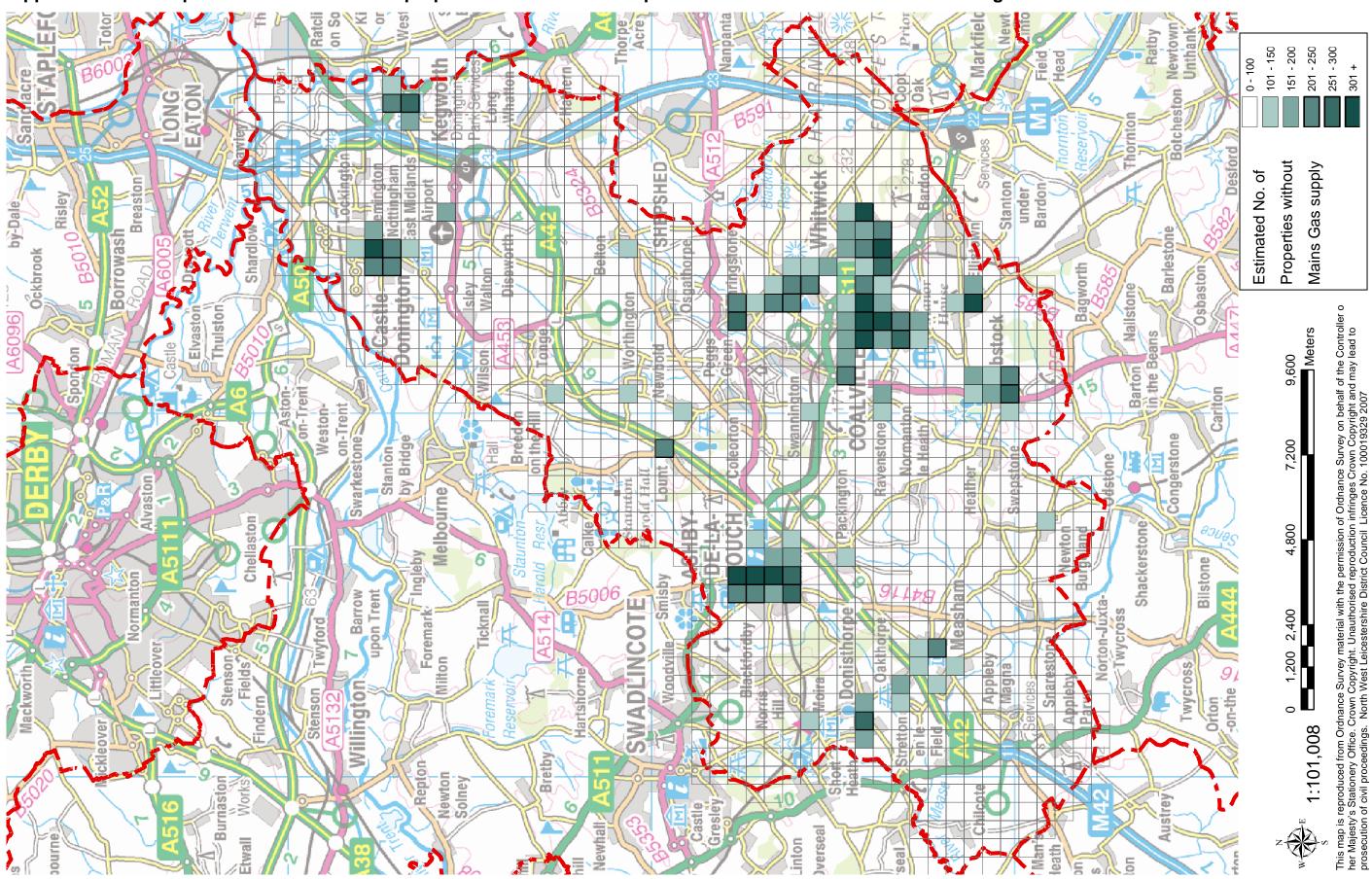
OACode	Total households	Total Off Gas households	Off Gas percent	GOR	County name	District code	District name	Ward code	Ward name
31UHGD0001	214	136	63.64%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGD	Bardon
31UHGD0002	129	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGD	Bardon
31UHGD0003	126	104	82.35%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGD	Bardon
31UHGD0004	172	86	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGD	Bardon
31UHGD0005	132	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGD	Bardon
31UHGD0006	133	59	44.44%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGD	Bardon
31UHGD0007	145	97	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGD	Bardon
31UHGE0001	146	49	33.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGE	Breedon
31UHGE0002	167	109	65.38%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGE	Breedon
31UHGE0003	165	165	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGE	Breedon
31UHGE0004	139	139	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGE	Breedon
31UHGE0005	148	148	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGE	Breedon
31UHGE0006	126	70	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGE	Breedon
31UHGE0007	127	79	62.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGE	Breedon
31UHGF0001	130	98	75.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0002	141	81	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0003	142	71	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0004	122	71	58.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0005	157	90	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0006	141	66	47.06%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0007	122	71	58.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0008	122	69	53.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0009	123	67	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0010	134	65	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0010	120	86	56.76%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0012	171	117	68.18%	East Midlands	Leicestershire	310H	North West Leicestershire	31UHGF	
31UHGF0012	127	64				310H	North West Leicestershire	31UHGF	Castle Donington
31UHGF0013	127	76	50.00% 61.54%	East Midlands East Midlands	Leicestershire	310H	North West Leicestershire	31UHGF	Castle Donington
					Leicestershire				Castle Donington
31UHGF0015	129	65	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0016	125	83 74	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire North West Leicestershire	31UHGF	Castle Donington
31UHGF0017	134		55.56%	East Midlands	Leicestershire	31UH		31UHGF	Castle Donington
31UHGF0018	107	54 76	50.00%		Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0019	142		53.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0020	138	69	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0021	131	52	40.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGF0022	109	88	80.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGF	Castle Donington
31UHGG0001	165	116	70.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0002	191	147	76.92%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0003	145	94	64.71%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0004	156	71	45.45%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0005	133	91	68.42%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0006	144	104	72.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0007	202	130	64.55%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0008	131	95	72.22%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0009	128	80	62.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0010	145	73	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0011	131	95	72.73%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0012	136	62	45.45%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0013	122	55	45.45%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGG0014	177	89	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville

OACode	Total households	Total Off Gas households	Off Gas percent	GOR	County name	District code	District name	Ward code	Ward name
31UHGG0015	136	116	85.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGG	Coalville
31UHGH0001	101	51	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0002	95	48	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0003	106	45	42.86%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0004	155	115	73.91%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0005	173	87	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0006	326	177	54.17%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0007	160	80	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0008	111	67	60.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0009	130	65	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0010	110	55	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0011	126	88	70.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0012	77	39	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0013	123	62	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0014	146	73	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0015	101	51	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0016	123	76	61.54%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0017	152	84	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0018	108	54	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0019	90	45	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0020	100	60	60.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0021	96	48	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0022	124	62	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGH0023	68	65	95.45%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGH	Greenhill
31UHGJ0001	136	74	54.55%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0002	155	89	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0003	149	87	58.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0004	132	29	22.22%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0005	133	73	54.55%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0006	136	88	64.71%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0007	137	60	43.75%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0008	180	144	80.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0009	143	72	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0010	130	16	12.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0011	189	131	69.23%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0012	131	71	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0013	157	99	63.04%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGJ0014	126	68	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGJ	Hugglescote
31UHGK0001	131	69	52.94%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0002	149	84	56.25%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0003	118	79	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0004	126	56	44.44%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0005	139	95	68.42%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0006	127	64	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0007	128	78	61.11%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0008	160	103	64.29%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0009	136	68	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0010	125	54	42.86%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0011	155	103	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0012	161	88	54.55%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather

OACode	Total households	Total Off Gas households	Off Gas percent	GOR	County name	District code	District name	Ward code	Ward name
31UHGK0013	129	84	65.22%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0014	108	72	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0015	102	58	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0016	122	61	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0017	216	126	58.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0018	138	55	40.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0019	129	89	68.75%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0020	132	48	36.36%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0021	123	62	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGK0022	131	66	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGK	Ibstock and Heather
31UHGL0001	125	67	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0002	146	83	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0003	132	66	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0004	127	64	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0005	128	71	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0006	140	80	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0007	130	92	70.59%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0008	123	69	56.25%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0009	140	82	58.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0010	138	92	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0011	142	76	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0012	165	30	18.18%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0013	145	54	37.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGL0014	153	56	36.36%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGL	Kegworth and Whatton
31UHGM0001	285	114	40.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0002	140	38	27.27%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0003	119	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0004	115	19	16.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0005	127	36	28.57%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0006	132	17	12.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0007	114	16	14.29%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0008	109	27	25.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0009	126	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0010	131	87	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0011	99	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0012	128	43	33.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0013	129	52	40.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0014	140	11	7.69%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0015	142	81	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGM0016	100	60	60.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGM	Measham
31UHGN0001	131	24	18.18%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0002	131	12	9.09%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0003	128	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0004	137	23	16.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0005	139	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0006	138	35	25.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0007	126	69	54.55%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0008	123	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0009	163	101	61.90%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0010	149	83	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira

OACode	Total households	Total Off Gas households	Off Gas percent	GOR	County name	District code	District name	Ward code	Ward name
31UHGN0011	165	55	33.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0012	116	70	60.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0013	105	0	0.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0014	120	15	12.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0015	119	108	90.91%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGN0016	132	38	28.57%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGN	Moira
31UHGP0001	141	141	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0002	112	112	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0003	130	119	91.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0004	141	141	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0005	136	121	88.89%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0006	59	59	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0007	155	145	93.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0008	85	85	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGP0009	111	111	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGP	Oakthorpe and Donisthorpe
31UHGQ0001	51	48	94.74%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGQ0002	162	85	52.63%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGQ0003	156	94	60.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGQ0004	136	68	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGQ0005	120	75	62.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGQ0006	116	64	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGQ0007	131	60	45.45%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGQ0008	174	109	62.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGQ	Ravenstone and Packington
31UHGR0001	139	56	40.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0002	145	79	54.55%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0003	139	86	61.54%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0004	176	117	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0005	114	57	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0006	120	67	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0007	157	115	73.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0008	137	64	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0009	123	41	33.33%	East Midlands		31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0010	114	65	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0011	91	46	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0012	141	71	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0012	141	104	57.14%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0014	154	144	93.71%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0015	119	60	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0016	93	47	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGR0017	124	67	53.85%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGR	Snibston
31UHGS0001	161	67	41.67%			31UH	North West Leicestershire	31UHGS	
31UHGS0002	136	68	50.00%	East Midlands East Midlands	Leicestershire Leicestershire	310H 31UH	North West Leicestershire	31UHGS	Thringstone Thringstone
31UHGS0002	136	70	55.56%	East Midlands	Leicestershire	310H 31UH	North West Leicestershire	31UHGS	-
31UHGS0004	120	61	50.00%	East Midlands	Leicestershire	310H	North West Leicestershire	31UHGS	Thringstone
31UHGS0005	122	64	50.00%	East Midlands	Leicestershire	310H 31UH	North West Leicestershire	31UHGS	Thringstone Thringstone
31UHGS0005	127	64 52	50.00%	East Midlands	Leicestershire	310H 31UH	North West Leicestershire	31UHGS 31UHGS	-
									Thringstone
31UHGS0007	200	100	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone
31UHGS0008	128	64	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone
31UHGS0009	123	57	46.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone
31UHGS0010	117	59	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone

OACode	Total households	Total Off Gas households	Off Gas percent	GOR	County name	District code	District name	Ward code	Ward name
31UHGS0011	151	70	46.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone
31UHGS0012	149	96	64.29%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone
31UHGS0013	115	64	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone
31UHGS0014	112	65	58.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGS	Thringstone
31UHGT0001	137	126	91.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0002	131	98	75.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0003	152	120	79.07%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0004	154	148	96.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0005	48	48	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0006	101	51	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0007	100	50	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0008	117	68	58.33%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0009	166	118	71.05%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0010	137	127	92.59%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0011	170	170	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0012	139	139	100.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGT0013	144	135	93.75%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGT	Valley
31UHGU0001	117	59	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0002	121	73	60.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0003	126	70	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0004	125	63	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0005	128	85	66.67%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0006	140	70	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0007	137	69	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0008	111	56	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0009	131	49	37.50%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0010	117	59	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0011	131	66	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0012	128	71	55.56%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0013	137	69	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0014	128	64	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0015	137	55	40.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0016	117	59	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0017	136	80	58.82%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0018	129	65	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0019	97	49	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0020	150	68	45.45%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0021	128	64	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick
31UHGU0022	141	71	50.00%	East Midlands	Leicestershire	31UH	North West Leicestershire	31UHGU	Whitwick



Appendix F Map of estimated number of properties in 500mx500m squares that do not have access to mains gas

Appendix G Traffic data Combined Flow AADT-AAWT supplied by Leicestershire County Council Highways department

Site No	Site Title	Road No.	Easting	Northing	Combined Annual AAWT	Combined Annual AADT	% HGV's	Profiler
20834	Willesley Lane, S of Measham Rd, Ashby	C8108	434630	315593	2,078	1,944	0.71	У
20836	Ashby Road, Packington, Ashby de la Zouch	C7114	436183	315252	2,807	2,550	0.60	
20837	Leicester Road, New Packington, Ashby	C7116	437190	315851	3,792	3,390	0.49	
20779	Burton Road, S of Ingles Hill, Ashby-de-la-Zouch	C7122	434734	317319	3,606	3,456	2.45	
23409	Swepstone Road, E of Gallows Lane, Measham	C7111	434439	312141	4,231	3,828	3.27	
20833	Moira Road, Ashby, Ashby Woulds	C7121	433135	316640	5,927	5,498	0.57	
24131	Measham Road, N of A42, Ashby-de-la-Zouch	C7120	434742	314815	6,208	5,789	3.23	
20832	Smisby Road, S of Bypass, Ashby de la Zouch	C7120	435353	318328	6,659	5,975	8.19	
25184	Beveridge Lane, W of Regs Way, Coalville	C7115	443843	311458	8,023	7,015	8.73	
20820	Station Road, N of the Green, Hugglescote	C5112	442434	312425	7,813	7,294	0.83	
22003	Ashby Road, W of Ringing Hill, Belton	A512	444615	318349	8,316	7,576	5.09	
20822	Ibstock Road, S of St Marys Ln, Ravenstone	A447	440570	312499	8,690	8,080	4.55	
21615	Swannington Road, S of Ashby Rd, Ravenstone	A447	440897	314850	9,580	8,923	4.02	У
21501	Atherstone Road, N of Bowleys Ln, Appleby Magna	A444	430772	309920	7,793	9,294	8.20	
20831	Ashby Bypass, W of Smisby Rd	A511	434395	318585	12,408	11,237	9.00	У
20248	London Road, S of New Brickyard Ln, Kegworth	A604	449015	326010	14,266	13,163	8.45	У
20830	Ashby Bypass, E of Smisby Rd	A511	435549	318505	15,323	13,837	10.15	У
20783	Nottingham Road, W of Woodcock Way, Ashby de la Zouch	C7122	436447	317023	14,653	13,847	1.53	
25190	Station Road, S of A50, Castle Donington	C9207	445181	329174	18,454	16,360	6.09	
20227	Derby Rd, SE of M1 J24, Kegworth	A603	448081	327206	18,588	16,727	8.71	У
21080	Ashby Road, EMA, Diseworth	A453	446160	325410	18,617	18,115	4.92	У
20827	Ashby Road, S of Corkscrew Lane, Coleorton	A511	437942	316272	20,298	18,127	10.83	
20823	Ashby Road, E of Moorlands, Sinope	A511	440132	315268	21,884	19,712	10.58	
20835	Bardon Road, N of A511, Coalville	A511	444408	312969	22,515	19,863	11.71	у
20825	Stephenson Way, E of Ashby Rd, Coalville	A511	442736	315062	22,953	20,838	9.03	У
22020	Shaw Lane, W of Stanton Lane, Markfield	A511	446686	311725	35,418	30,709	13.28	

Appendix H Traffic data Peaks-12 & 24 hour flows supplied by Leicestershire County Council Highways department

Site	Site Title	Road No.	Grid Re	ference	Direction of	Flow am/	Flow pm/	12 Hour Flow	24 Hour	Flow off/	%	Interpea k 10-	AM 3hr Peak 7-	PM 3hr Peak
No	Site Title	Noau No.	Easting	Northing	Flow	Peak	Peak	07:00- 19:00	Flow	Peak	HGV's	16:00	10:00	16-19:00
20830	Station Road, N of the Green, Hugglescote	C5112	442436	312423	Southbound	263	388	3,173	5	2,522	0.81	1,819	701	984
20830	Willesley Lane, S of Measham Rd, Ashby	C8108	434628	315595	Eastbound	151	87	888	1,063	650	0.72	450	284	231
20831	Willesley Lane, S of Measham Rd, Ashby	C8108	434632	315591	Westbound	89	130	894	1,088	675	0.71	503	179	316
20831	Ashby Road, Packington, Ashby de la Zouch	C7114	436181	315254	Northbound	157	160	1,176	1,395	859	0.59	605	310	383
20823	Ashby Road, Packington, Ashby de la Zouch	C7114	436185	315250	Southbound	177	144	1,251	1,504	930	0.60	722	323	239
20823	Burton Road, S of Ingles Hill, Ashby-de-la-Zouch	C7122	434736	317317	Southbound	190	144	1,513	1,862	1,179	2.48	818	408	419
21080	Burton Road, S of Ingles Hill, Ashby-de-la-Zouch	C7122	434732	317321	Northbound	150	186	1,520	1,900	1,184	2.43	838	356	484
21080	Leicester Road, New Packington, Ashby	C7116	437188	315853	Northbound	198	260	1,706	2,040	1,248	0.48	887	393	628
20836	Swepstone Road, E of Gallows Lane, Measham	C7111	434437	312143	Eastbound	204	263	1,713	2,113	1,246	3.33	811	466	636
20836	Swepstone Road, E of Gallows Lane, Measham	C7111	434441	312139	Westbound	233	210	1,699	2,119	1,256	3.20	793	543	530
20827	Leicester Road, New Packington, Ashby	C7116	437192	315849	Southbound	299	200	1,788	2,136	1,289	0.49	877	620	490
20827	Grange Road, W of Bardon Rd, Ellistown, Coalville	C7110	444182	312588	Eastbound	326	155	1,879	2,281	1,398	1.61	854	772	390
22003	Grange Road, W of Bardon Rd, Ellistown, Coalville	C7110	444186	312584	Westbound	180	349	1,978	2,377	1,449	2.21	1,034	387	826
22003	Moira Road, Ashby, Ashby Woulds	C7121	433137	316638	Westbound	198	344	2,443	3,037	1,901	0.40	1,388	460	874
21501	Moira Road, Ashby, Ashby Woulds	C7121	433133	316642	Eastbound	379	268	2,566	3,116	1,919	0.72	1,298	819	675
21501	Measham Road, N of A42, Ashby-de-la-Zouch	C7120	434744	314813	Southbound	309	284	2,595	3,218	2,002	2.95	1,380	727	750
20835	Measham Road, N of A42, Ashby-de-la-Zouch	C7120	434740	314817	Northbound	265	354	2,745	3,287	2,126	3.30	1,474	642	935
20835	Smisby Road, S of Bypass, Ashby de la Zouch	C7120	435351	318330	Northbound	267	317	2,725	3,449	2,141	7.64	1,536	678	803
25184	Smisby Road, S of Bypass, Ashby de la Zouch	C7120	435355	318326	Southbound	301	374	2,766	3,519	2,091	8.75	1,459	705	901
25184	Atherstone Road, N of Bowleys Ln, Appleby Magna	A444	430774	309918	Southbound	449	278	3,071	3,730	2,344	7.82	1,510	1,033	758
20779	Atherstone Road, N of Bowleys Ln, Appleby Magna	A444	430770	309922	Northbound	306	384	3,134	3,800	2,444	8.58	1,623	815	1,038
20779	Station Road, N of the Green, Hugglescote	C5112	442432	312427	Northbound	348	329	3,182	3,858	2,505	0.85	1,799	808	891
20227	Beveridge Lane, W of Regs Way, Coalville	C7115	443845	311456	Westbound	244	533	3,226	4,064	2,449	9.33	1,753	588	1,314
20227	Beveridge Lane, W of Regs Way, Coalville	C7115	443841	311460	Eastbound	509	285	3,224	4,142	2,430	8.15	1,480	1,264	729
20821	Ashby Road, W of Ringing Hill, Belton	A512	444617	318347	Westbound	432	462	3,618	4,299	2,724	4.94	1,982	899	1,199
20821	Ashby Road, W of Ringing Hill, Belton	A512	444613	318351	Eastbound	489	359	3,625	4,316	2,777	5.22	1,815	1,185	983
20822	Ibstock Road, S of St Marys Ln, Ravenstone	A447	440572	312497	Southbound	344	466	3,804	4,526	2,994	4.33	2,164	877	1,209
20822	Ibstock Road, S of St Marys Ln, Ravenstone	A447	440568	312501	Northbound	544	373	4,023	4,729	3,106	4.76	2,182	1,216	999
20837	Swannington Road, S of Ashby Rd, Ravenstone	A447	440899	314848	Southbound	308	528	3,963	4,831	3,127	4.11	2,265	810	1,387
20837	Swannington Road, S of Ashby Rd, Ravenstone	A447	440895	314852	Northbound	601	397	4,140	4,973	3,142	3.93	2,081	1,354	1,067
20248	Ashby Bypass, W of Smisby Rd	A511	434397	318583	Westbound	704	410	4,668	6,243	3,554	8.58	2,259	1,692	1,058
20248	Ashby Bypass, W of Smisby Rd	A511	434393	318587	Eastbound	395	737	5,001	6,412	3,869	9.14	2,688	1,048	1,886
24131	Nottingham Road, W of Woodcock Way, Ashby de la Zouch	C7122	436449	317021	Westbound	582	688	5,876	7,300	4,606	1.57	3,305	1,251	1,933
24131	Nottingham Road, W of Woodcock Way, Ashby de la Zouch	C7122	436445	317025	Eastbound	683	585	6,120	7,569	4,852	1.49	3,397	1,653	1,631
20833	London Road, S of New Brickyard Ln, Kegworth	A604	449013	326012	Northbound	636	753	6,205	7,615	4,816	8.40	3,287	1,681	1,988
20833	Ashby Bypass, E of Smisby Rd	A511	435547	318507	Eastbound	774	521	5,858	7,630	4,563	10.60	2,931	2,005	1,405
20783	London Road, S of New Brickyard Ln, Kegworth	A604	449017	326008	Southbound	697	687	6,346	7,760	4,962	8.50	3,257	1,893	1,805
20783	Ashby Bypass, E of Smisby Rd	A511	435551	318503	Westbound	554	932	6,399	8,103	4,913	9.71	3,450	1,409	2,324
22020	Station Road, S of A50, Castle Donington	C9207	445179	329176	Northbound	518	1,280	7,566	9,010	5,768	6.32	4,094	1,499	2,953
22020	Derby Rd, SE of M1 J24, Kegworth	A603	448079	327208	Northbound	914	894	7,693	9,432	5,885	8.70	1,095	539	586
20832	Derby Rd, SE of M1 J24, Kegworth	A603	448083	327204	Southbound	832	962	7,766	9,507	5,972	8.71	977	544	489
20832	Station Road, S of A50, Castle Donington	C9207	445183	329172	Southbound	1,414	657	7,718	9,521	5,647	5.88	3,663	2,930	1,748
20820	Ashby Road, EMA, Diseworth	A453	446162	325408	Westbound	652	656	6,752	10,159	5,444	4.50	4,108	1,700	1,052
20820	Ashby Road, S of Corkscrew Lane, Coleorton	A511	437940	316274	Northbound	798	900	8,131	10,185	6,433	11.69	4,535	2,138	2,264
25190	Ashby Road, S of Corkscrew Lane, Coleorton	A511	437944	316270	Southbound	921	784	8,001	10,195	6,296	10.07	4,237	2,413	2,092

Site	Site Title	Road No.	Grid Re	ference	Direction of	Flow am/	Flow pm/	12 Hour Flow	24 Hour	Flow off/	%	Interpea k 10-	AM 3hr Peak 7-	PM 3hr Peak
No	Site fille		Easting	Northing	Flow	Peak	Peak	07:00- 19:00	Flow	Peak	HGV's	16:00	10:00	16-19:00
25190	Ashby Road, EMA, Diseworth	A453	446158	325412	Eastbound	692	672	6,895	10,588	5,531	5.31	3,895	1,804	1,867
20825	Ashby Road, E of Moorlands, Sinope	A511	440130	315270	Eastbound	1039	792	8633	10857	6,802	9.06	4,606	2,626	2,164
20825	Ashby Road, E of Moorlands, Sinope	A511	440134	315266	Westbound	854	1092	9128	11366	7,182	10.1	5,023	2,331	2,719
21615	Bardon Road, N of A511, Coalville	A511	444410	312967	Southbound	1,013	866	8,996	11,521	7,117	11.46	4,884	2,691	2,238
21615	Bardon Road, N of A511, Coalville	A511	444406	312971	Northbound	866	1,108	9,189	11,538	7,215	11.97	5,175	2,154	2,800
23409	Stephenson Way, E of Ashby Rd, Coalville	A511	442734	315064	Eastbound	972	886	9,336	11,578	7,478	8.97	5,205	2,546	2,462
23409	Stephenson Way, E of Ashby Rd, Coalville	A511	442738	315060	Westbound	816	1,072	9,645	11,833	7,757	9.09	5,585	2,200	2,845
20834	Shaw Lane, W of Stanton Lane, Markfield	A511	446684	311727	Eastbound	1,598	1,643	13,707	17,317	10,466	12.94	7,127	3,963	3,958
20834	Shaw Lane, W of Stanton Lane, Markfield	A511	446688	311723	Westbound	1,680	1,549	14,043	17,853	10,814	13.61	7,425	3,983	4,052