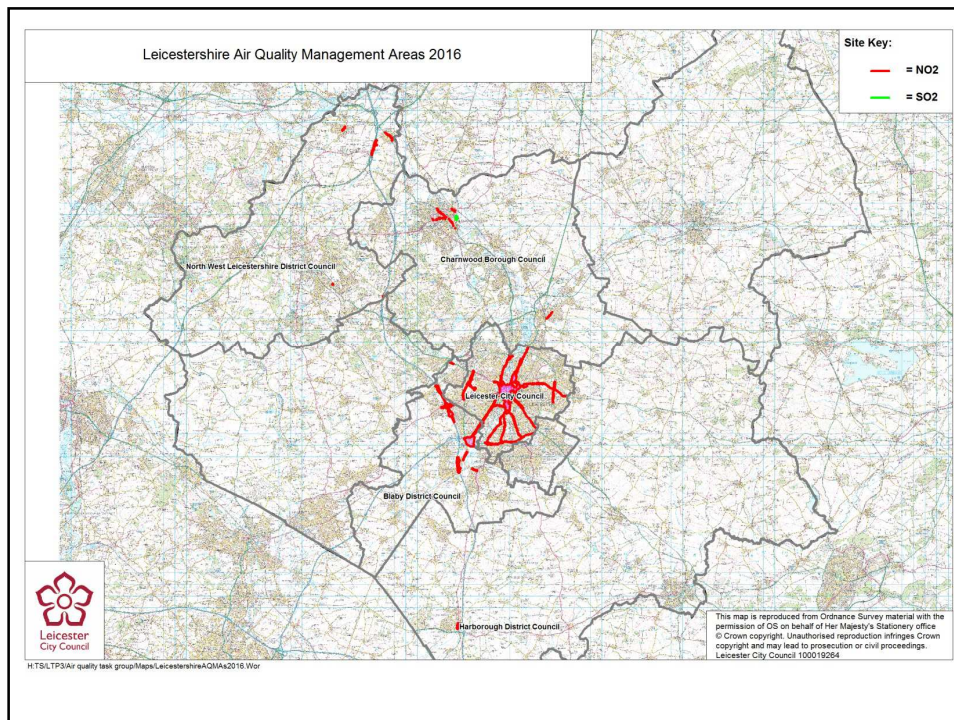


Annual Air Quality Status Report 2017

Tony Cawthorne
Environmental Health Officer

Objectives

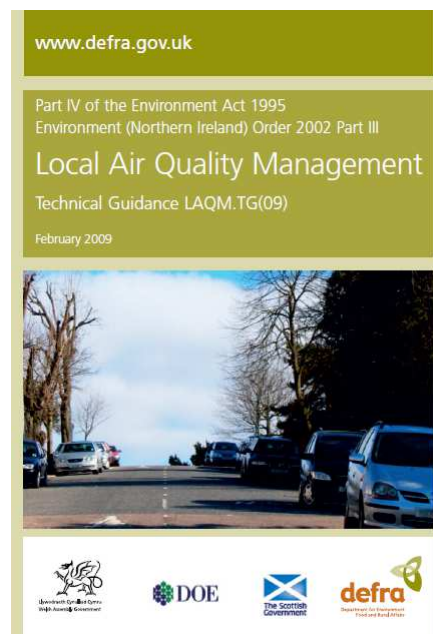
- To bring to your attention the Annual Status Report 2017
- Explain what is meant by Air Quality and an overview of Air Quality in Leicestershire
- Explain the causes and effects of Air Quality
- What Oadby and Wigston Borough Council is doing about Air Quality
- Receive your comments and observations



Annual Status Report 2017

- The report is a statutory requirement
- The reports are always done for the previous year.
- The report follows a template provided by DEFRA using a guidance manual : Air Quality Management Technical Guidance LAQM.TG(09)
- The report used the data gathered throughout the year 2016.
- The data set has been completed and cannot be changed.

- DEFRA requires the Council to involve and advise the local community on the findings of the report.
- Issues raised will be looked at and may affect the actions taken by the Council in addressing Air Quality issues.



What do we mean by Air Quality?

- The air that we breath may contain pollutants which can have a negative effect on our health
- Pollutants we are interested in are:
 - Particulate Matter- PM
 - Nitrous oxides –NO_x
 - Sulphur -S
- Where the pollution is significant an Air Quality Management Area shall be declared
- NO_x sampling is undertaken across the Borough using diffusion tubes

NO_x Passive Diffusion Tubes



National Air Quality Objectives

Pollutant	Air Quality Objective	
	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

⁽¹⁾ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Monitoring Locations

DT1	Uplands Road / Junction A6
DT3	Shackerdale Road / Aylestone Lane
DT5	Victoria Court, A6
DT6	Glen Rd, A6
DT7	Leicester Rd, Wigston
DT9	Church Nook / Bullhead Street
DT10	Magna Road / Blaby Road
DT11	Canal Street / Station Road

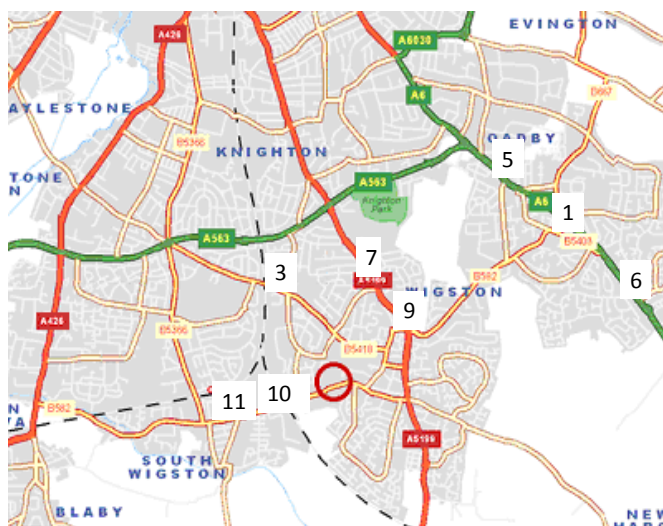
Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube collocated with a Continuous Analyser?	Height (m)
DT1	Uplands Road/A6	Kerbside	463208	299913	NO2	NO	12.7	3.8	NO	2.2
DT3	Shackerdale Road	Kerbside	459448	299747	NO2	NO	13.4	1.42	NO	2.36
DT5	Victoria Court AQMS	Kerbside	461856	301027	NO2	NO	14	0.8	NO	2.2
DT6	Glen Road A6	Kerbside	463208	299913	NO2	NO	12.5	5	NO	2.2
DT7	Leicester Road, Wigston	Kerbside	460541	299722	NO2	NO	4	3.16	NO	2.17
DT9	St. Wistans Church / Bull Head Street	Kerbside	460881	299075	NO2	NO	25	1.55	NO	2.34
DT10	Magna Road / Station Road	Kerbside	459337	298464	NO2	NO	7.4	1.63	NO	2.4
DT11	Canal Street / Blaby Road	Kerbside	459.12	298376	NO2	NO	1.6	0.82	NO	2.35

The map indicates the approximate position of the NO₂ diffusion tube

- 1 - Uplands Road / A6
- 2 - Council Offices*
- 3 - Shackerdale Road
- 4 - 141 Blaby Road*
- 5 - Victoria Court
- 6 - Glen Road, A6
- 7 - Leicester Road, Wigston
- 8 - Oadby Road, Wigston*
- 9 - Church Nook / Bullhead Street
- 10 - Magna Road / Station Road
- 11 - Canal Street / Blaby Road
- 12 - Tigers Road*

*Monitoring ceased in June 2013

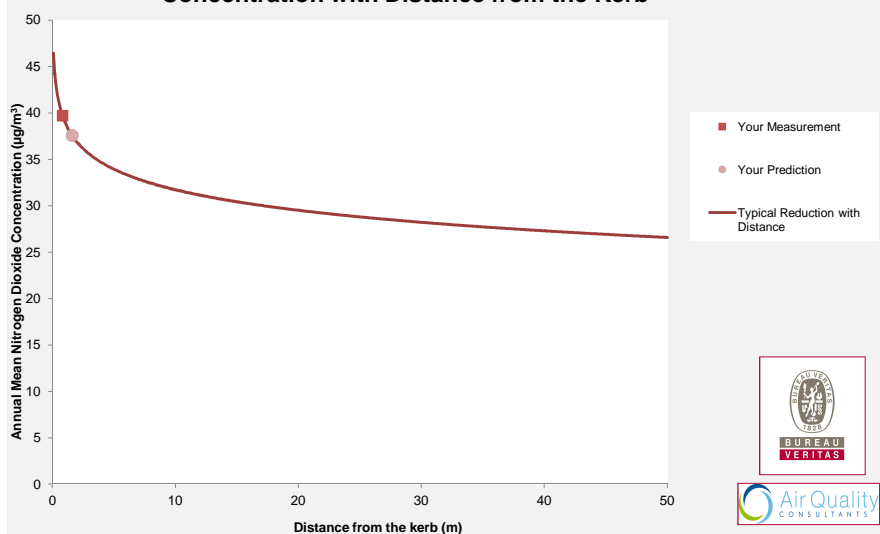


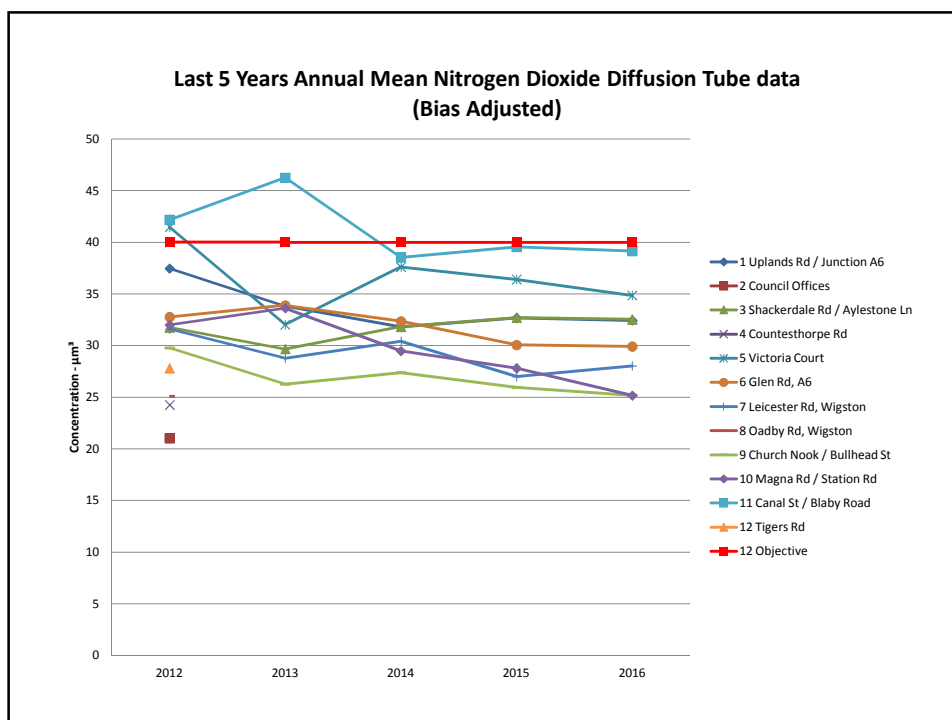
Full Monthly Diffusion Tube Results for 2016

Site ID	NO ₂ Mean Concentrations (µg/m ³)												Annual Mean		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (0.77) and Annualised ⁽¹⁾	Distance Corrected to Nearest Exposure ⁽²⁾
DT1	54.2	42.5	45.1	34.9	37.1	35.1	41.6	38.7	39.6	35.9	51.1	49.8	42.13	32.44	27.4
DT3	52.9	53.1	52.5		40.5	36.3	39.8	36.7	42.6	40	54.8	57.9	46.10	35.50	30.3
DT5	<u>61.8</u>	49.2	49.4	47.6	36.2	36.5	31.7	33.6	41	34.8	58.2	<u>63.2</u>	45.27	34.86	27.0
DT6	48.1	44.1	50.2	43.2	37.4	32.8	29.2	28.7	33.1	33.7	38.4	47.4	38.86	29.92	26.5
DT7	42.5	45.5	41.1	35.4	32.6	32.3	27.5	30	34.9	39	47.1	44.3	37.68	29.02	28.6
DT9	31	38.6	37	30.5	27.8	27.2	24.4	24.7	30.7	32.7	40.9	45.3	32.57	25.08	22.9
DT10	25.8	37.9	44.4		35.3	35.1	26.8	34.5	30.8	40.1	44.1	30.6	35.04	26.98	25.7
DT11	59.5	58.1	<u>61.5</u>	55.3	41.7	53.8	41.2	40	46.1	54.8	59.6	47.4	51.58	39.72	37.6

x National bias adjustment factor used

Expected Reduction in Annual Mean Nitrogen Dioxide Concentration with Distance from the Kerb





The Future

- Additional monitoring :
 - Aylestone Lane at Railway Bridge and West Avenue Junctions
 - Blaby Road detailed monitoring through 8 additional diffusion tubes between Magna Road and Saffron Road
 - Air Quality Monitoring Station to be put in place near Canal Street – Through Section 106 monies from the Former Premier Drum Development

Blaby Road new diffusion tube monitoring locations

- 9. Vicarage, Blaby Road
- 10. 45 Blaby Road
- 11. 50a Blaby Road
- 12. 11 Canal Street
- 13. Canal Street / Station Road
- 14. 4 Station Road
- 15. Health Centre, Blaby Road
- 16. 141 Leicester Road
- 17. 2 Lansdowne Grove
- 18. Magna Road / Station Road



Aylestone Road/ Shakerdale Road Junctions additional Monitoring

- 6. Shakerdale Road /Aylestone Lane
- 7. 259 Aylestone Lane
- 8. 225 Aylestone Lane



Tony Cawthorne

any comments or feedback please

Email:

Enviromental.Health@oadby-wigston.gov.uk