

Mid Ulster District Council 2016 Air Quality Progress Report

In fulfillment of Environment (Northern Ireland) Order 2002 Local Air Quality Management

November 2016

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Executive Summary

Mid Ulster District Council undertakes non automatic monitoring for No2 in a number of towns and villages across the District. There were previously a total of five AQMA's declared in the former Council areas of Dungannon and South Tyrone and in the former Council area of Magherafelt. Two of the AQMA's in the Dungannon District were revoked prior to the formation of Mid Ulster District Council.

An Air Quality Management Area (AQMA) was declared in the former Magherafelt District Council area in February 2012 at Church Street and lower King Street. Based on current monitoring data, concentrations within this areas continue to exceed the objective limit of 40ug/m³ for NO2 and as a result the AQMA should remain.

Construction of the A31 Magherafelt by-pass has now been completed. The by-pass consists of a 5.9km single carriageway to the east of Magherafelt town. This Department is confident that the use of the by-pass will result in a reduction of NO2 levels, enabling the AQMA to be revoked.

Diffusion Tube monitoring at 8 locations within the former Dungannon and South Tyrone Borough Council's area has demonstrated that there are **2** sites where NO₂ levels exceeded the objective limit of 40ug/m³; namely Newell Road, Dungannon and Charlemont Street in Moy. There are already Air Quality Management Areas in place for these 2 sites. Action Plans for the existing AQMAs at Newell Road, Dungannon and Charlemont Street, Moy were submitted in January 2015.

As was stated in the Progress Report in 2014 the Air Quality Management Areas at Church Street (Dungannon) and Stewartstown Road (Coalisland) had not breached the air quality objective for the previous three years. As a result these 2 AQMAs were revoked by Dungannon & South Tyrone Borough Council in November 2014.

Diffusion tube monitoring at 8 locations in the former Cookstown District Council area in Cookstown and Moneymore did not demonstrate any exceedences of the objective

limit of 40 ug/m³. Routine monitoring of the 8 locations in Cookstown and Moneymore will continue.

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1 Introduction

1.1 Description of Local Authority Area

Mid-Ulster District Council is a local authority that was established on 1 April 2015 as a part of Local Government re-organisation in Northern Ireland. It replaced the three former Councils of Cookstown, Dungannon and South Tyrone, and Magherafelt.

Mid Ulster District Council, as the name suggests, is located centrally within the province. It straddles the two counties of Tyrone and Derry/ Londonderry. The District runs from Swatragh in the north to Fivemiletown in the south and from the Sperrin Mountains in the west to the shores of Lough Neagh in the east. Mid Ulster is the seventh largest of the eleven new council districts.

The district covers an area of some 1714 km² and serves a population of over 141,000 people. One third of the Council's population lives in urban areas while two thirds inhabit rural areas. The District has the fastest population growth when compared with the other 10 Council areas. The population increased by 18.7% from 2001 to 2013 compared with the Northern Ireland average of 8.3%.

Mid Ulster's employment sector is concentrated in the manufacturing, engineering, construction and agri-food industries.

1.2 Purpose of Progress Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) process as set out in the Environment (Northern Ireland) Order 2002, the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedences are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

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

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

1.3 Air Quality Objectives

, Statutory Rules of Northern Ireland 2003, no. 342, and are shown in Table 1.1. This table shows the objectives in units of microgrammes per cubic metre μg/m³ (milligrammes per cubic metre, mg/m³ for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Table 1.1 – Air Quality Objectives included in Regulations for the purpose of LAQM in Northern Ireland

Pollutont	Air Quality	Objective	Date to be
Pollutant	Concentration	Measured as	achieved by
Benzene	16.25 µg/m³	Running annual mean	31.12.2003
Delizerie	3.25 µg/m³	Running annual mean	31.12.2010
1,3-butadiene	2.25 μg/m³	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m ³	Running 8-hour mean	31.12.2003
1.00-1	0.50 μg/m ³	Annual mean	31.12.2004
Lead	0.25 μg/m ³	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m ³ Annual mean		31.12.2005
Particulate matter (PM ₁₀) (gravimetric)	50 µg/m³, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
,	40 μg/m³	Annual mean	31.12.2004
	350 µg/m³, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
Sulphur dioxide	125 µg/m³, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m³, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

The Updating and Screening Assessment submitted by Mid Ulster District Council for 2015 was the first Report submitted by the recently merged former Councils of Dungannon and South Tyrone Borough Council, Magherafelt District Council, and Cookstown District Council. The conclusions of this report were as follows.

Former Magherafelt District Council

Routine monitoring of NO2 levels in an area of Magherafelt town in part of Church Street and King Street showed levels of exceedence of the standard set in Technical Guidance document LAQM.TG(09). A document entitled 'Detailed Assessment for NO2 Levels on Church Street and King Street, Magherafelt September 2011' was submitted to DOENI with the conclusion that there was a breach of the objective limit of 40ug/m³ in this location, and recommending that the council should declare an AQMA as required by legislation and the technical guidance. The findings of the Detailed Assessment have been reviewed by the Air and Environmental Quality Unit of DOENI and the conclusions and recommendation accepted. An Air Quality Management Area has been formally declared in the District of Magherafelt on 14th February 2012 in respect of Church Street and lower King Street. This area has been shown on the map in Appendix 2.

Concentrations within the AQMA have continued to exceed the objective for NO2 at sites 2, 9 & 10 and as a result it was felt the AQMA should remain. The concentration at site 20 exceeded the objective for NO2 since monitoring commenced in 2013. All other concentrations outside of the AQMA are all below the objectives. As a result of historic results, monitoring at sites 5,6 & 8 ceased on 2nd April 2014.

Former Dungannon & South Tyrone Borough Council

Monitoring at 10 locations within Dungannon and South Tyrone Borough Council's area demonstrated that there were **2** sites where NO₂ levels exceeded the objective limit of 40ug/m³; Newell Road, Dungannon and Charlemont Street in Moy.

Air Quality Management Areas are already in place for these 2 sites. Action Plans for the existing AQMAs at Newell Road, Dungannon and Charlemont Street, Moy were submitted in January 2015.

It was stated in the Progress Report in 2014 the Air Quality Management Areas at Church Street (Dungannon) and Stewartstown Road (Coalisland) had not breached the air quality objective in 3 consecutive years (2011, 2012, & 2013). These 2 AQMAs were revoked by Dungannon & South Tyrone Borough Council in November 2014.

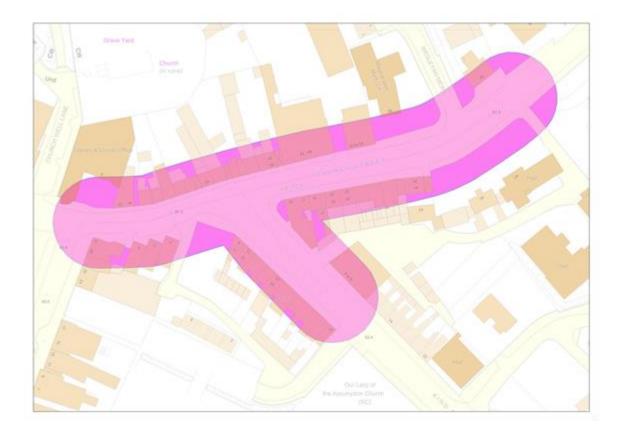
No detailed assessments are required for NO₂ at this time.

Former Cookstown District Council

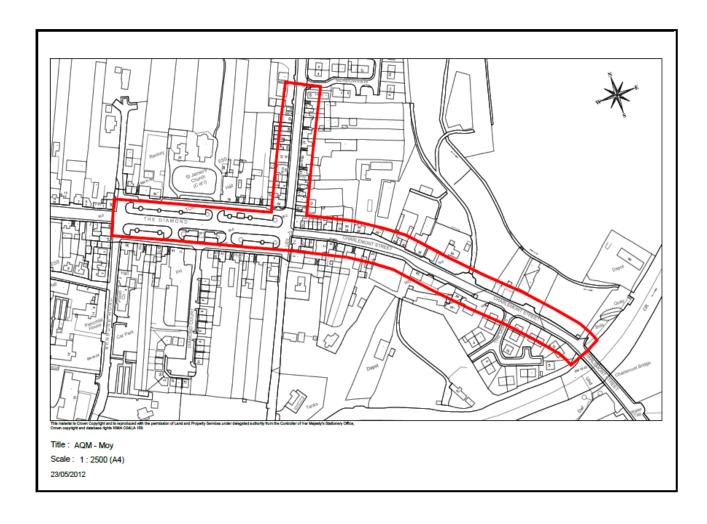
Cookstown District Council had no Air Quality Management Areas declared in the District. Air quality monitoring for NO2 continues at a number of sites in the District in order to detect any trends in pollutant levels.

Figure 1.1 – Map(s) of AQMA Boundaries

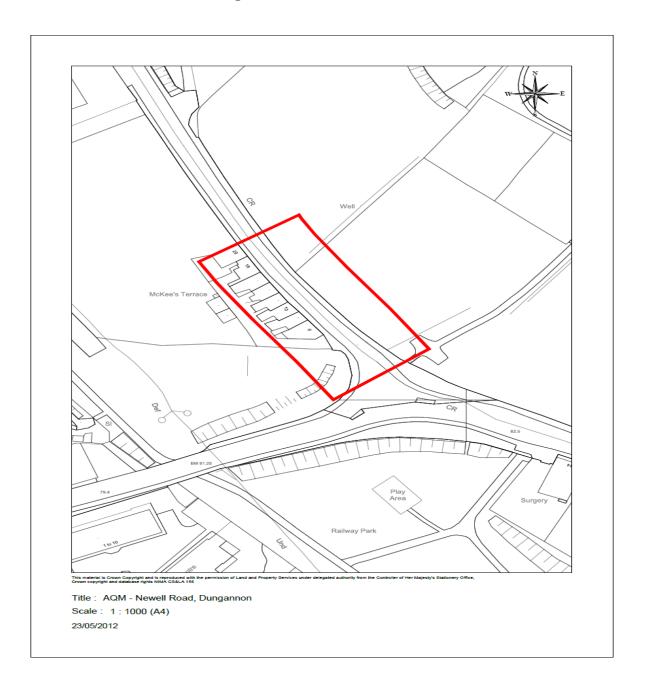
AQMA Church Street/ Lower King Street in Magherafelt



AQMA Charlemont Street in Moy



AQMA Newell Road in Dungannon



Previous assessments conducted by each of the three former District Councils were summarized in the Updating and Screening Report of 2015.

2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

There are no automatic monitoring sites within Mid Ulster District Council area

2.1.2 Non-Automatic Monitoring Sites

There are a number of non-automatic monitoring sites within the Mid Ulster District Council Area. These are located in Magherafelt, Moneymore, Cookstown, Dungannon, and Moy.

Table 2.2 – Details of Non- Automatic Monitoring Sites

Site ID	Site Name	OS Grid Reference	Pollutants Monitored	In AQMA?	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst- Case Exposure?
	Magherafelt						
2	Main route through town	X 8977 Y9073	NO ₂	Y	Y (1m)	1.5m	Υ
3	Adj traffic lights	X8531 Y9043	NO ₂	Υ	Y (1m)	1m	Υ
4	Off main Rd leading to Cul de sac	X8989 Y9078	NO ₂	N	Y(10m)	1m	Υ
7	Moderately used route to town centre	X8982 Y9069	NO ₂	Υ	Y(15m)	1m	Υ
9	Adj. roundabout off town centre	X8974 Y9073	NO ₂	N	Y(10m)	1m	Υ
10	Adj. roundabout off town centre	X8979 Y9074	NO ₂	Y	Y(0m)	1m	Υ
11	Moderately used route to town centre	X8979 Y9071	NO ₂	N	Y(15m)	1m	Υ
12	Main route through town	X8989 Y9075	NO ₂	N	Y(15m)	1m	Υ
13	Main route through town	X8989 Y9077	NO ₂	Υ	Y(5m)	1m	Υ
14	Main route through town	X8995 Y9083	NO ₂	Υ	Y(5m)	1m	Υ

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Site ID	Site Name	OS Grid Reference	Pollutants Monitored	In AQMA?	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst- Case Exposure?
15	Moderately used route to town centre	X8994 Y9084	NO ₂	Y	Y(10m)	1m	Υ
16	Moderately used route to town centre	X8993 Y9089	NO ₂	Υ	Y(5m)	1m	Υ
17	Main route through town	X8997 Y9082	NO ₂	Υ	Y(3m)	1m	Υ
18	Main route through town	X8999 Y9085	NO ₂	Υ	Y(3m)	1m	Υ
19	Main route through town	X9003 Y9087	NO ₂	Υ	Y(3m)	1m	Υ
20	Main route through town	X9004 Y9089	NO ₂	Υ	Y(20m)	1m	Υ
21	Main route through town	X9008 Y9093	NO ₂	Υ	Y(20m)	1m	Υ
22	Main route through town	X9013 9097	NO ₂	Y	Y(20m)	1m	Y
	Dunganan						
	Dungannon						
	Dunclare Way	Urban Background	NO ₂	N	Υ	<2m	Υ
	Ardgannon	Urban Background	NO_2	N	Y(<10)	<5m	Υ
	Church Street	Roadside	NO_2	N	Y(<1)	1m	Υ

	Mid Olste					Ster District C	
Site ID	Site Name	OS Grid Reference	Pollutants Monitored	In AQMA?	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst- Case Exposure?
	Newell Road	Roadside	NO_2	N	Y(<1)	1m	Υ
	Moy		_		,		
	Charlemont St. Moy	Roadside	NO_2	N	Y(<1)	1m	Υ
	Killyman St. Moy	Roadside	NO ₂	N	Y(<1)	1m	Υ
	The Quays Moy	Urban Background	NO ₂	N	Y(<5)	<5m	Υ
	Cookstown						
2	William Street Cookstown	X 281071 Y 378445	NO ₂	N	Y(<20)	6m	Y
3	James Street Cookstown	X 281053 Y 378197	NO ₂	N	Y(<20)	7m	Y
4	Church Street Cookstown	X 281121 Y 377537	NO ₂	N	Y(<20)	<1m	Y
5	Killymoon Street, Cookstown	X 281225 Y 376939	NO ₂	N	Y(<10)	7m	Y
	Moneymore						
1	Lawford St Moneymore	X 285770 Y 383510	NO ₂	N	Y(1)	<1m	Y
8	Smith Street Moneymore	X 285813 Y 383458	NO ₂	N	Y(<5)	1m	Y

Site ID	Site Name	OS Grid Reference	Pollutants Monitored	In AQMA?	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst- Case Exposure?
10	Stonard Street	X 285759	NO ₂	N	Y(1)	1m	Υ
	Moneymore	Y 383333					
11	Conyngham Street,Moneymore	X 285874 Y 383341	NO ₂	Z	Y(1)	1m	Y

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide (NO₂)

Automatic Monitoring Data

Mid Ulster District Council has no automatic monitoring data.

Diffusion Tube Monitoring Data

As can be seen from the Tables below there is one monitoring location within Magherafelt, and one each within Dungannon and Moy that are in excess of the 40µg/m³ annual mean NO₂ objective. All these sites are within designated AMQA areas.

However it should be noted that the tubes for Magherafelt required to be annualised due to there only being a data capture of 42% due to problems with tube contracts at the time of reorganisation of the District Councils.

The diffusion tubes used were supplied and analysed by Gradko Environmental of Hampshire, England. The results were adjusted for bias using figures obtained from the DEFRA Website under the Local Air Quality Management Section. The website lists the bias adjustment figures that should be applied to the diffusion tubes based on individual laboratories and the type of analysis undertaken. The overall 2015 figure for Gradko Laboratories and the 20% TEA method in water was 0.87. This is based on 30 studies. This was the figure used as it seemed most representative of the method in general.

The website can be found at the following address:

http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html

Table 2.5 - Results of NO₂ Diffusion Tubes 2015

Site ID	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2015 (Number of Months or %) ^a	2015 Annual Mean Concentration (µg/m³) - Bias Adjustment factor =0.87 ^b
Magherafelt					Annualised and bias adjusted figure
					adjusted figure
2		Υ	N	42%	37.7
3		N	N	42%	27.2
4		Υ	N	42%	17.6
7		Υ	N	42%	20.8
9		Υ	N	42%	37.6
10		Υ	N	42%	45.6
11		Υ	N	42%	28.8
12		Υ	N	42%	27.2
13		Υ	N	42%	23.2
14		N	N	42%	19.2
15		N	N	42%	16.0
16		N	N	42%	16.0
17		N	N	42%	27.2
18		N	N	42%	26.4
19		N	N	42%	27.2
20		N	N	42%	35.2
21		N	N	42%	31.2
22		N	N	42%	22.4

Site ID	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2015 (Number of Months or %) ^a	2015 Annual Mean Concentration (µg/m³) - Bias Adjustment factor =0.87 ^b
Dungannon					
Dunclare way	Urban Background	Υ	N	100	8
Newell Road	Roadside	N	N	100	53
Ardgannon	Urban Background	Ν	N	100	11
Moy					
The Quays, Moy	Urban Background	N	N	100	8
Killyman Street, Moy	Roadside	Υ	N	100	23
Moy Hill, Moy	Roadside	N	N	83	58
Cookstown					
William Street Cookstown	Kerbside	N	N	100	20.4
James Street Cookstown	Roadside	Ν	N	100	28.3
Church Street Cookstown	Kerbside	N	N	100	22.4
Killymoon Street, Cookstown	Kerbside	N	N	100	29.1
Moneymore					
Lawford St Moneymore	Roadside	N	N	100	28.8
Smith Street Moneymore	Kerbside	N	N	100	22.1
Stonard Street Moneymore	Kerbside	N	N	100	21.5
Conyngham Street,Moneymore	Kerbside	N	N	100	23.2

Table 2.6 – Results of NO₂ Diffusion Tubes (2011 to 2015)

Cito ID	Cita Turna	Within	A	nnual Mean Co	ncentration (µg/	m³) - Adjusted for	Bias ^a
Site ID	Site Type	AQMA?	2011	2012	2013	2014	2015 (
Magherafelt							· ·
2		Υ	47*	48*	44*	47*	37.7
3		N	32	33	30	33	27.2
4		Υ	19	19	19	20	17.6
7		Υ	24	23	23	24	20.8
9		Υ	38	41*	42*	42*	37.6
10		Υ	51*	50*	50*	49*	45.6
11		Υ	30	30	29	30	28.8
12		Υ	31	32	33	30	27.2
13		Υ	N/A	N/A	25	26	23.2
14		N	N/A	N/A	21	22	19.2
15		N	N/A	N/A	19	20	16.0
16		N	N/A	N/A	18	19	16.0
17		N	N/A	N/A	29	31	27.2
18		N	N/A	N/A	31	33	26.4
19		N	N/A	N/A	34	32	27.2
20		N	N/A	N/A	41*	42*	35.2
21		N	N/A	N/A	37	38	31.2
22		N	N/A	N/A	24	25	22.4

Cito ID	Cita Tura	Within	An	nual Mean Cond	centration (µg/m³	3) - Adjusted for	Bias ^a
Site ID	Site Type	AQMA?	2011	2012	2013	2014	2015 (
Dungannon							Ì
Dunclare Way	Urban Background	Υ	N/A	N/A	N/A	8	8
Newell Road	Roadside	N	46*	55*	52*	52*	53*
Ardgannon	Urban Background	N	6	12	12	12	11
Moy							
Killyman Street, Moy	Roadside	Υ	N/A	N/A	N/A	25	23
Moy Hill, Moy	Roadside	N	55*	56*	56*	55*	58*
The Quays, Moy	Urban Background	N	N/A	N/A	N/A	8	8
Cookstown Area							
Lawford St Moneymore	Roadside	N	31.6	35	31	34	28.8
William Street Cookstown	Kerbside	N	28.8	23	23	25	20.4
James Street Cookstown	Roadside	N	33.3	34	28	30	28.3
Church Street Cookstown	Kerbside	N	29.6	28	23	26	22.4
Killymoon Street, Cookstown	Kerbside	N	31.1	32	29	33	29.1
Smith Street Moneymore	Kerbside	N	26.0	27	22	26	22.1
Stonard Street Moneymore	Kerbside	N	32.4	34	32	31	21.5
Conyngham Street,Moneymore	Kerbside	N	N/A	N/A	16	16	23.2

As can be seen from Table 2.6 the results for monitoring from 2011 to the present has shown a steady pattern with results not fluctuating by a significant amount through this period. A monitoring location within the AQMA's at both Moy and Dungannon continue to show exceedences of the $40\mu g/m^3$ annual mean NO_2 objective. The Magherafelt area has shown a reduction in the number of sites exceeding the objective to one site, although this should be treated with some caution as the figures for the Magherafelt sites were annualised. Monitoring sites within the Cookstown and Moneymore areas continue to be below the $40\mu g/m^3$ annual mean NO_2 objective.

2.2.2 Particulate Matter (PM₁₀)

Mid Ulster District Council does not monitor for PM10 within the district.

2.2.3 Sulphur Dioxide (SO₂)

Mid Ulster District Council does not monitor for Sulphur Dioxide within the district.

2.2.4 Benzene

Mid Ulster District Council does not monitor for Benzene within the district.

2.2.5 Other Pollutants Monitored

Mid Ulster District Council does not monitor for any other pollutants within the district.

2.2.6 Summary of Compliance with AQS Objectives

Mid Ulster District Council has examined the results from monitoring in the district.

Concentrations within the AQMA still exceed the objective for NO2 at the relevant AQMA's and the AQMA should remain.

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

3 New Local Developments

3.1 Road Traffic Sources

Mid Ulster 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 Other Transport Sources

Mid Ulster District Council confirms that there are no new/newly identified significant transport sources within its District.

3.3 Industrial Sources

Mid Ulster 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.

3.4 Commercial and Domestic Sources

Mid Ulster District Council confirms that there are no new significant commercial or domestic sources in the District.

3.5 New Developments with Fugitive or Uncontrolled Sources

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

Mid Ulster District Council confirms that there are no new or newly identified local developments which may have an impact on air quality within the Local Authority area.

Mid Ulster District Council confirms that all the following have been considered:

- Road traffic sources
- Other transport sources
- Industrial sources
- Commercial and domestic sources
- New developments with fugitive or uncontrolled sources.

4 Planning Applications

Tal	ole 4.1 Henhouses	s & Pig Houses	
1	M/2015/0014/F	Proposed poultry housing	Killybracken Road Granville
		unit	Dungannon
2	M/2014/0604/F	Erection of 2no. Broiler Poultry Houses with 4no. Feed Bins 2no. Gas Tanks Biomass Plant Room with 1no. Wood Pellet Bin Washing Collection Tank and an Office Changing and Standby Generator Building and Associated Siteworks (to contain 74 000 Broilers)	250m north east of 37 Dunroe Road Clooney Coppage Clogher
3	M/2015/0062/F	Proposed free range poultry shed with 2No.feed bins (shed to Contain 16000 free range egg laying hens)	Land approx 100m SSW of 115 Caledon Road Aughnacloy BT69 6HZ
4	I/2015/0014/F	Proposed free range organic poultry shed with a feed bin and a standby generator building. (Shed to contain 3 000 free range organic egg laying hens)	Land approx 150m North of 25 Murnells Road Pomeroy
5	I/2015/0054/F	Proposed pig fattening shed with feed bin (to contain 1950 pork pigs)	Land approx 185m south east of 15 Knockanroe Road Tullyconnell Cookstown BT80 8SR
6	M/2015/0122/F	Peoposed 2No. additional broiler poultry sheds with 4No. feed bins 2No.biomass boiler sheds with 2No. fuel bins (proposed sheds to contain 72 000 broilers giving total site capacity of 130 000 broilers)	Land approx 175m South West of 44 Dyan Road Caledon BT68 4XF
7	I/2015/0096/F	Extension to existing effluent plant including 4No. tanks and control room	Karro Food Group Ltd 70 Molesworth Street Cookstown BT80 8PJ
8	LA09/2015/0078/F	Proposed 2No.broiler Poultry sheds with 4No. feed bins 2No. gas tanks a biomass boiler shed	Land adjacent to 14 Grange Road Dungannon BT71 7EJ

		with fuel bin and an office changing and standby generator building (to contain in total 74000 broilers)	
9	LA09/2015/0086/F	Proposed Free range henhouse (max capacity 16000 birds) with 2No.meal bins and litter shed	60m North West of 49 Bockets Road Ballygawley BT70 2HL
10	LA09/2015/0160/O	Proposed 3 no additional broiler poultry sheds with 6 no feed bins a biomass boiler shed with fuel bin and a storage shed (to contain in total 111 000 broilers - increasing total site capacity to 258 500 broilers)	Approx 25m NW of 30 Bellagherty Road Coagh
11	LA09/2015/0244/F	Proposed free range henhouse (max 8000 birds) with 2 no meal bins	9 Aghafad Road Cornamaddy Pomeroy
12	LA09/2015/0205/F	Proposed 2No. broiler poultry sheds with 4No. feed bins .2No.gas tanks . A biomass boiler shed with fuel bin and an office.Changing and standby generator building. (to contain in total 74000 broilers	Land approx. 250m South East of 30 Ballynasollus Road Cookstown BT80 9TQ
13	LA09/2015/0214/F	Proposed 2No. free range poultry sheds with 4No. feed bins 2No. gas tanks and an office and standby generator building (to contain in total 30000 free range broilers)	Lands adjacent to 18 Favour Royal Road Aughnacloy BT69 6BR
14	LA09/2015/0134/F	Proposed 2No.broiler poultry sheds with 4No.feed bins 2No. gas tanks a biomass boiler shed with fuel bin and an office changing and standby generator building (to contain in total 74000 broilers)	Land adjacent to 46 Megargy Road Magherafelt BT45 5HP
15	LA09/2015/0323/F	Proposed free range poultry shed with feed bin and a standby generator building (poultry shed to contain 8000 free range egg laying hens)	Land approx. 325m N.W of 17 Tullybleety Road Aughnacloy

16	LA09/2015/0343/F	Proposed free range poultry shed with 4 feed bins and a standby generatoe building (poultry shed to contain 32000 free range egg laying hens)	Land approx. 450m SE of 50 Killygarvan Road Cookstown BT80 9BG
17	LA09/2015/0470/F	Proposed free range poultry shed with 2 feed bins and a standby generator building (poultry shed to contain 16000 free range egg laying hens)	Lands approx. 125m SW of 25 Coolmaghry Road Dungannon
18	LA09/2015/0637/F	Proposed erection of an additional high welfare poultry house including 2 no additional feed bins and associated works (max no. of birds 34 000) Ex poultry units capacity of 29 000 each giving overall total no. of birds on site of 92 000	Approx 160m N.E of no 19b Springtown Road Augher
19	LA09/2015/0273/F	Proposed 1no. additional broiler breeder laying poultry shed with 2no. additional feed bins (to contain in total 9 000 broiler breeder laying birds taking the site capacity to 36 000 birds)	Land approx. 150m North of 6 Baladoogh Lane Cookstown.
20	LA09/2015/0501/F	Proposed 2 no additional broiler poultry sheds with 4 no feed bins 2 no gas tanks and a biomass boiler shed with fuel bin. (Proposed sheds to contain 68 000 broilers giving a total site capacity of 136 000 broilers).	Land approx. 250m West of 36 Killyliss Road Dungannon
21	LA09/2015/1137/F	Proposed erection of a free range poultry laying unit including 2 meal storage bins reception hut/generator store shed to accommodate bio mass boiler and storage bin for wood pellets and associated works (max No of birds 16000)	Lands approx. 180m East of 89 Sluggan Road Gortnagarn Pomeroy
22	LA09/2015/0981/F	Proposed free range poultry shed with 2 feed bins (Poultry shed to contain 16000 free range egg laying hens)	Land approx. 250m S.W. of 43 Carricklongfield Road Carnteel Aughnacloy

23	LA09/2015/0297/F	Proposed free range henhouse (max capacity 16000 birds) with two No. meal bins and litter shed	60m North West of 49 Bockets Road Ballygawley BT70 2HL			
24	LA09/2015/0789/F	Free Range Henhouse (Max 16 000 birds) with 2 no Meal Bins	20m SW of 80 Lurgylea Road Galbally Dungannon			

Tab	ole 4.2 Anaerobic	Digestors	
1	I/2015/0032/F	An application under article 28 of the Planning (Northern Ireland) Order 1991 to vary condition 2 of planning permission I/2013/0081/F to include additional feedstock EWC codes for an operational 500kw anaerobic digestion and combined heat and power (CHP) plant.	Lands approximately 220 metres east of No. 14 Tullywiggan Cottages Tullywiggan Road Tullywiggan Cookstown
2	LA09/2015/0696/F	Proposed regularisation of operational Anaerobic Digestion (AD) plant granted under planning permission I/2013/0081/F to include proposed additional plant (additional digestate tank and CHP) and minor alterations including part covered silage clamp CHP gas clean-up skid enclosure and relocated tanks	Lands approximately 220 metres East of no 14. Tullywiggan Cottages Tullywiggan Road Tullywiggan Cookstown

Tal	Table 4.3 Quarries								
1	LA09/2015/0664/PAN	As stated under Section 27(4) of the Planning Act 2011 and advised with paragraph 2.4 of the DMPN 10 - the description provided is a general description to be finalised after consultation with the community: A lateral Westerly Extension to the Existing Sand and Gravel Quarry.	Creagh Concrete Products Limited Brackagh Sand and Gravel Quarry 29 Disert Road Draperstown						

Tab	ole 4.4 Housing [Developments				
1	M/2015/0065/F	Development of an apartment block providing 28 apartment units for social housing	The Cloisters Killyman Road Dungannon			
2	M/2015/0097/F	Housing development consisting of 40 units of detached semi detached terrace and apartments	46 Tullyvar Road Aughnacloy			
3	M/2015/0004/F	Housing development consisting of 41 houses at Marfield Killyman Dungannon consisting of 8 detatched and 33 semi detatched associated with site works.	Lands adjacent to and opposite 16 Tamnamore Road Killymand Dungannon			
4	M/2015/0042/F	Renewal of residential development of 49 no. dwellings and 42 no. apartments two and three storey dwellings and three storey apartments	62m SW of 5 Old Eglish Road Mill Field Dungannon			
5	H/2015/0004/F	Residential development (Change of house type and reduction in unit numbers from 100 units to 83 units (excluding units constructed) proposed alterations to approved layout and private streets determination (previously approved H/2005/0886/F))	Salters Bridge Magherafelt (Adjacent to and North of 1 to 17 Salters Bridge)			
6	M/2015/0028/O	Housing development	Land to the rear and SW of The Haven Private Nursing Home Quarry Lane Dungannon			
7	M/2015/0046/F	Housing scheme consisting of 13 no. terrace houses	Opposite Altmore View Cappagh Dungannon			
8	I/2015/0105/F	Erection of 16 no semi detached dwellings	Opposite and 15m East of 19 Westland Road Cookstown			

9	LA09/2015/0241/F	21 dwellings from 2-3 storey in height with associated carparking and landscaping	Killymeal House and adjacent lands Killymeal Road Dungannon
10	LA09/2015/0393/F	Residential development of 15 no dwellings comprising 5 no detached and 10 no semidetached with associated road site works and landscaping (reduction in density from that previously approved under M/2005/0513/F	Lands adjacent to and North of 14 16 and 18 Bush Road Dungannon

Tab	ole 4.5 Other				
1	M/2015/0043/F	Public realm scheme to include provision of new footway and parking bay surfaces new stone kerbing new street furniture tree planting and improved lighting	Anne Street William Street Georges Street Scotch Street Scotch Street Centre Thomas Street Perry Street and Northland Row Dungannon Town Centre		
2	LA09/2015/0636/F	Public realm improvements comprising: re-surfacing of existing footways with natural stone; granite kerbs; landscape proposals comprising semimature planting raised planters and shrub planting; new street furniture - seating litter bins and cycle tracks new feature lighting columns; plinth for future artwork; formalisation of existing onstreet parking arrangements and surface treatment to carriageways	Lands adjacent to Broad Street Market Street The Diamond Queen Street and Rainey Street Magherafelt		

5 Conclusions and Proposed Actions

5.1 Conclusions from New Monitoring Data

There is no need to proceed to a detailed assessment based on this year's new monitoring data.

5.2 Conclusions relating to New Local Developments

There are no significant conclusions to be drawn in relation to new developments.

5.3 Other Conclusions

There are no other significant conclusions to be drawn from the new monitoring data.

5.4 Proposed Actions

The new monitoring data has not identified the need to progress to a detailed assessment for any pollutant. The monitoring data has indicated that there are no changes required to the existing AQMA's within the District. This Council's next course of action is to continue to monitor pollutants at their current locations and submit a Progress Report for 2016.

6. References

- i. The Environment (Northern Ireland) Order 2002
- ii. Air Quality Regulations (Northern Ireland) 2003
- iii. The Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2000
- iv. DEFRA Local Air Quality Management Technical Guidance LAQM.TG(09)
- v. Magherafelt District Council 1st Stage Review and Assessment of Air Quality 2001
- vi. Magherafelt District Council 2nd Stage Review and Assessment of Air Quality 2002
- vii. Magherafelt District Council Progress Report on Air Quality Management 2005
- viii. Magherafelt District Council Air Quality Update and Screening Assessment 2006
- ix. Magherafelt District Council Progress Report on Air Quality Management 2007
- x. Magherafelt District Council Local Air Quality Management Grant Evaluation Form 2008
- xi. Magherafelt District Council Progress Report on Air Quality Management 2008
- xii. Magherafelt District Council Local Air Quality Management Grant Evaluation Form 2009
- xiii. Magherafelt District Council Air Quality Update and Screening Assessment 2009
- xiv. Magherafelt District Council Local Air Quality Management Grant Evaluation Form 2010
- xv. Magherafelt District Council Progress Report on Air Quality Management 2010
- xvi. Magherafelt District Council Local Air Quality Management Grant Evaluation Form 2011
- xvii. Magherafelt District Council Detailed Assessment for NO2 Levels on Church Street and King Street, Magherafelt 2011
- xviii. Magherafelt District Council Local Air Quality Management Grant Evaluation Form 2012

- xix. Magherafelt District Council Air Quality Update and Screening Assessment 2012
- xx. Magherafelt District Council Local Air Quality Management Grant Evaluation Form 2013
- xxi. Magherafelt District Council Air Quality Progress Report 2013
- xxii. Magherafelt District Council Air Quality Progress Report 2014
- xxiii. Cookstown District Council 1st Stage Review and Assessment August 2001
- xxiv. Cookstown District Council 2nd/3rd Stage Review and Assessment Report-August 2004.
- xxv. Cookstown District Council Updating and Screening Assessment August 2006
- xxvi. Cookstown District Council Updating and Screening Assessment Aug 2009
- xxvii. Cookstown District Council Updating and Screening Assessment Aug 2012
- xxviii. Cookstown District Council Progress Report 2007
- xxix. Cookstown District Council Progress Report 2008
- xxx. Cookstown District Council Progress Report 2010
- xxxi. Cookstown District Council Progress Report 2011
- xxxii. Cookstown District Council Progress Report 2013
- xxxiii. 2015 Updating and Screening Assessment

Appendices

Appendix A: Quality Assurance / Quality Control (QA/QC) Data

Diffusion Tube Bias Adjustment Factors

The diffusion tube analysis for the Council in 2015 was carried out by Gradko International, Wincester, Hampshire, England. The tubes were exposed for a month at a time before being sent for laboratory analysis. The preparation method used was an absorbent of %20 TEA (Triethanolamine)/Water. Analysis was carried out by U.V. Spectrophotometry using a UVSO4 Camspec M550.

The results were adjusted for bias using figures obtained from the DEFRA Website. under the Local Air Quality Management Section. The website lists the bias adjustment figures that should be applied to the diffusion tubes based on individual laboratories and the type of analysis undertaken. The overall 2015 figure for Gradko Laboratories and the 20% TEA method in water was 0.87. This is based on 30

overall co-location studies. This was the figure used as it seemed most

representative of the method in general.

The website can be found at the following address:

http://www.uwe.ac.uk/aqm/review/R&Asupport/diffusiontube290909.xls

Factor from Local Co-location Studies (if available)

This factor is not available in the Mid Ulster District Council area.

Discussion of Choice of Factor to Use

Given that no locally available relevant co-location studies were available it was decided to use the national overall lo-location figure of 0.87 as this was representative of 30 separate co-location studies and was thought to represent a

good 'average' figure.

Appendix B: Non Automatic Monitoring Sites in AQMA'S

LAQM Progress Report 2016

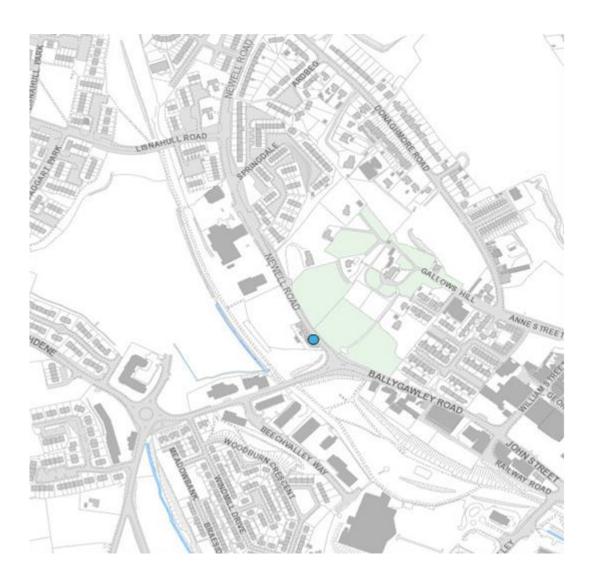
31

Non Automatic Monitoring Sites in AQMA in Magherafelt





Non Automatic Monitoring Sites in AQMA in Dungannon



Appendix C

Magherafelt Results that have been annualised as per Boxes 7.9 and 7.10 of LAQM.TG16

Month	Dale's Corner Derry	Magherafelt Results		
	B1	Site 2 (D1)	B1 when D1 is available	
January	41	44	41	
February	39			
March	42			
April	24			
May	17			
June	16			
July	14			
August	14	45	14	
September	28	62		
October	39			
November	38	43	38	
December	36	42	36	
Ave	29	47.2	31.4	

Dale's Corner, Derry was selected as the closest continuous monitoring site.

Annual Mean of B1 =29 ug/m³

Period Mean of B1 = 31.4

Annual Mean/ Period Mean = 29/31.4 = 0.92

0.92= Annualisation Factor

D1 Mean x Annualisation Factor= **Annualised figure for Site 2** $47.2 \times 0.92 = 43.4 \text{ ug/m}^3$

 $43.4 \times 0.87 = 37.7 \text{ ug/m}^3$ Bias adjusted final figure for Site 2.

This process was then repeated for all sites at the Magherafelt location.

Appendix D NO2 Monitoring Tube data Monitoring Results for Magherafelt

2	3	4	7	9	10	11	12	13	14	15	16	17	18	19	20	21	22
41.5	29.2	26.5	21.8	42.9	52.8	36.6	29.4	30.7	24.9	19.8	22	28.9	31.5	30.5	34.8	34.2	28
44.2	41	23.7	28.6	55	69.4	39.2	38.9	29.3	24.5	16.8	23.2	43	40.4	39.5	59	44.6	27.5
44.8	34.2	18.7	25.3	44.8	47	30.6	32.1	26.2	22.1	19.7	16.1	31.8	28.7	32.4	40.2	39	27.7
61.8	34.9	18.3	26.9	44.2	54.5	33.6	33.9	28.4	23.2	20.3	16.9	31.8	34.6	39.2	46	38.3	29
43.2	28.9	21.2	28.4	46.1	59.8	38.7	35.7	30.6	26.3	22.8	23.2	32.7	30.9	26.3	42.2	38.2	29.4
47.1	33.64	21.68	26.2	46.6	56.7	35.74	34	29.04	24.2	19.88	20.28	33.64	33.22	33.58	44.44	38.86	28.32

Monitoring Results for Dungannon and Moy

	Dunclare Way	Church St	The Quays, Moy	Killyman Street, M oy	Newell Road	M oy Hill, M oy	Ardgannon	Stewartstown Road (Coalisland)
JANUARY	12	44	9	28	65		16	54
FEBRUARY	14	47	10	34	73	81	18	49
MARCH	10	44	9	32	66	79	15	47
APRIL	8		9	31	72	70	11	
MAY	8		8	28	66	69	10	
JUNE	4		6	22	61	60	8	
JULY	6		6	24	57	58	10	
AUGUST	6		6	27	56	66	11	
SEPTEMBER	10		11	34	74	78	15	
OCTOBER	14		16	40	78	77	20	
NOVEMBER	11		11	30	64	80	16	
DECEMBER	13		13	21	54		18	
AVERAGE	10		10	29	66	72	14	
Adjusted Average (0.8	8		8	23	53	58	11	

Monitoring Results for Cookstown and Moneymore

1	2	3	4	5	8	10	11
36.4	24.2	37.1	16.7	45.3	32	21.8	35.9
38	22.5	38.5	36	32.3	28.7	23.1	36.3
31	25	29.8	26.5	31.2	22.9	17.2	36.3
24	13.5	22	17.3	25.4	15	12.7	18.8
23.7	23	35.9	34.1	29.2	22	33.9	18.6
22.4	15.4	19.6	15.8	21	16.3	21.6	8.8
43.4	29.9	36.6	31.4	33.2	33.7	18.4	48.5
41.2	26.3	37.3	34	46.1	33	36	21
38.8	31.6	36.2	20.3	36.6	25.5	37.6	16.5
32.2	23.3	32.9	25.7	29.9	25.8	16.2	25.5