



2013 Air Quality Progress Report for Dungannon and South Tyrone Borough Council

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

APRIL 2013

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Executive Summary

Monitoring at 10 locations within Dungannon and South Tyrone Borough Council's area has demonstrated that there are 3 sites where NO₂ levels exceeded the objective limit of 40µg/m³ ; Newell Road, Dungannon; Church Street Site C, Dungannon; and Charlemont Street in Moy.

It must be noted that whilst the objective level at Church Street location Site C was breached, this location is not at the sensitive receptor (Church Mews, Church Street Site 1). The annual mean for Church Mews in 2012 is 37 µg/m³. This is the second year in a row that the annual mean has been below the limit of 40 µg/m³ as the annual mean for 2011 was 39 µg/m³.

The Stewartstown Road monitoring site in Coalisland also has a mean annual result below the objective limit (35 µg/m³). However, the Council will not opt to revoke this AQMA at this time. A revocation of the AQMA at this site will require several years of consistent data demonstrating compliance with the objective limit.

Whilst the Council has the option of proposing a revocation of the Church Street AQMA on the basis of the results for the previous two years, it has been decided to continue diffusion tube monitoring at this site for a further year to verify if the pollution levels will continue to remain below the objective level of 40 µg/m³. A decision on the revocation of one or both of these AQMA's will be highlighted in the Council's Progress Report in April 2014.

No other pollutants were assessed to have an impact on air quality within the district at this time and therefore no AQMA's or detailed assessments are required for any other pollutants.

Dungannon and South Tyrone Borough Council has not seen any significant changes from any pollution sources since the last round of review and assessment and no other sources of pollution have been identified. Therefore the likely impact from such sources is negligible.

The next course of action to be taken by the council is to complete and **submit AQMA Action Plan for Newell Road in Dungannon, Stewartstown Road in Coalisland and Charlemont Street in Moy.**

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1 Introduction

1.1 Description of Local Authority Area

Dungannon and South Tyrone Borough is located in the geographical heartland of Northern Ireland, a beautiful rural, historic area served by the main motorway network in Northern Ireland, with major road links to the business capital of Belfast, South towards Armagh City and Dublin; and west to Donegal and Sligo. The borough does not have a high level of heavy industry. The majority of the local work force is employed in the delivery of services such as local government, education authority, health and social services, minor retail, agriculture and food processing. Although there are a number of quarries provided graded stone & gravel as well as road-stone coating. The greatest contribution to air quality pollution is from road traffic. Particularly in the town centre where the road network is quickly reaching it's maximum capacity due to the increase in car ownership. Given the size of the rural hinterland surrounding the town of Dungannon, public transport resources are stretched and the reliance on the motor car is greatly exacerbated. Dungannon is regarded as a "route hub" to the border from Mid-Ulster travelling to Belfast, North-West Northern Ireland the Republic Of Ireland; and is main through-route between mid-Ulster and the south east of Northern Ireland and hence probably has a traffic flow higher than that which could be created by local traffic alone. Particulate Matter (PM10) and NO₂ would be considered as the pollutants most at risk of breaching the objective limits in Dungannon as a result of road traffic. Dungannon already has declared an AQMA in January 2008 for NO₂ on Church Street; and in 2012 also declared AQMA's at Newell Road, Dungannon; Stewartstown Road, Coalisland; and Charlemont Street in Moy.

1.2 Purpose of Progress Report

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 Local Air Quality Management 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

The air quality objectives applicable to LAQM in **Northern Ireland** are set out in the Air Quality Regulations (Northern Ireland) 2003, 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 $\mu\text{g}/\text{m}^3$ (milligrammes per cubic metre, mg/m^3 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 Local Air Quality Management in Northern Ireland.

Pollutant	Concentration	Measured as	Date to be achieved by
Benzene	16.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
	3.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2010
1,3-Butadiene	2.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
Carbon monoxide	10.0 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.5 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2004
	0.25 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2008
Nitrogen dioxide	200 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2005
Particles (PM₁₀) (gravimetric)	50 $\mu\text{g}/\text{m}^3$, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2004
Sulphur dioxide	350 $\mu\text{g}/\text{m}^3$, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 $\mu\text{g}/\text{m}^3$, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 $\mu\text{g}/\text{m}^3$, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

Report Type	Date	Exceedences	Detailed Assessment Required	AQMA's Declared
Initial Review and Assessment	Jan 2001	None	Yes	None
Reappraisal of Traffic Pollution Modelling	Jan 2004	None	No	None
Report of the Second and Third Stage R&A of Local Air Quality	Aug 2004	None	No	None
Progress Report	June 2005	None	Yes	None
Review and Assessment: Supplementary Report on NO ₂ concentrations in Church Street Dungannon	June 2005	None	No	None
Updating and Screening Assessment	June 2006	Yes	Yes	None
Further Assessment of NO ₂ levels in Church Street	September 2007	Yes	No	Yes
Progress Report	June 2008	Yes	No	Already declared
AQMA Action Plan and Progress Report	July 2010	-	-	-
Progress Report	April 2011	Yes	Yes	No
Detailed Assessment	July 2011	Yes		Yes
Updating and Screening Assessment	April 2012	Yes	No	No

Figure 1.1 Map of AQMA Boundaries (if applicable)

See Appendix B

2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

There are no automatic monitoring sites in operation within the Borough

2.1.2 Non-Automatic Monitoring

During 2012 Dungannon and South Tyrone Borough Council carried out monitoring of NO₂ with diffusion tubes at 10 sites throughout the Borough. The NO₂ diffusion tubes were prepared and analysed by Environmental Scientifics Group Limited (ESG). The tubes are prepared by coating the grids in a 50% v/v solution of the absorbent, triethanolamine (TEA) in Acetone. Analysis is carried out using a colorimetric technique.

Table 2.2 Details of Non- Automatic Monitoring Sites

Site Name	Site Type	OS Grid Ref	Pollutants Monitored	In AQMA ?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case Location ?
Market Square	Roadside	-	NO ₂	N	Y	<2m	N
Ardgannon	Urban Background	-	NO ₂	N	Y(<10)	1m	Y
Church Street (4 sites)	Roadside	-	NO ₂	Y	Y(<1m)	1m	Y
Newell Road	Roadside	-	NO ₂	N	Y(<1m)	1m	Y
Charlemont Street, Moy	Roadside	-	NO ₂	N	Y(<1m)	1m	Y
Dungannon Road, Coalisland	Roadside	-	NO ₂	N	Y(<1m)	1m	Y
Stewartstown Road, Coalisland	Roadside	-	NO ₂	N	Y	1m	Y

The bias factor used to adjust the diffusion tube results was taken from the DEFRA air quality website <http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>. The bias factor used to adjust the diffusion tubes is 0.79

The details of Environmental Scientifics Group (ESG) WASP results are provided in Appendix A.

See Appendix C for Map(s) of Monitoring Sites (if applicable)

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide

Three of the diffusion tube sites monitored in Dungannon Borough recorded an NO₂ result above the objective limit of 40µg/m³ during 2010. These were at Church Street & Newell Road in Dungannon; and Charlemont Street in Moy.

Dungannon and South Tyrone Borough Council do not monitor NO₂ pollution using automatic monitoring equipment.

Details of Gradko Environmental Ltd's WASP can be found in Appendix A.

Nitrogen Dioxide Diffusion Tube Monitoring Data

Table 2.3 Results of Nitrogen Dioxide Diffusion Tubes

Dungannon and South Tyrone Borough Council monitors NO₂ pollution using diffusion tubes at 9 sites through the borough. All of the tubes are positioned in accordance with the practical guidelines published by AEA Energy and Environment in a report to Defra and the Devolved Administrations.

Table 2.4a Results of Nitrogen Dioxide Diffusion Tubes

Site ID	Location	Within AQMA?	Data Capture 2012 %	Annual mean concentrations
				2012 (µg/m ³) Adjusted for bias
Market Square	Market Square	N	92	22
Ardgannon	Ardgannon	N	100	12
Church Street 1	Church Street 1	Y	100	37
Church Street A	Church Street A	Y	100	30
Church Street B	Church Street B	Y	92	24
Church Street C	Church Street C	Y	100	45
Newell Road	Newell Road	Y	100	55
Charlemont Street, Moy	Charlemont Street, Moy	Y	100	56
Dungannon Road, Coalisland	Dungannon Road, Coalisland	N	100	34
Stewartstown Road, Coalisland	Stewartstown Road, Coalisland	Y	100	35

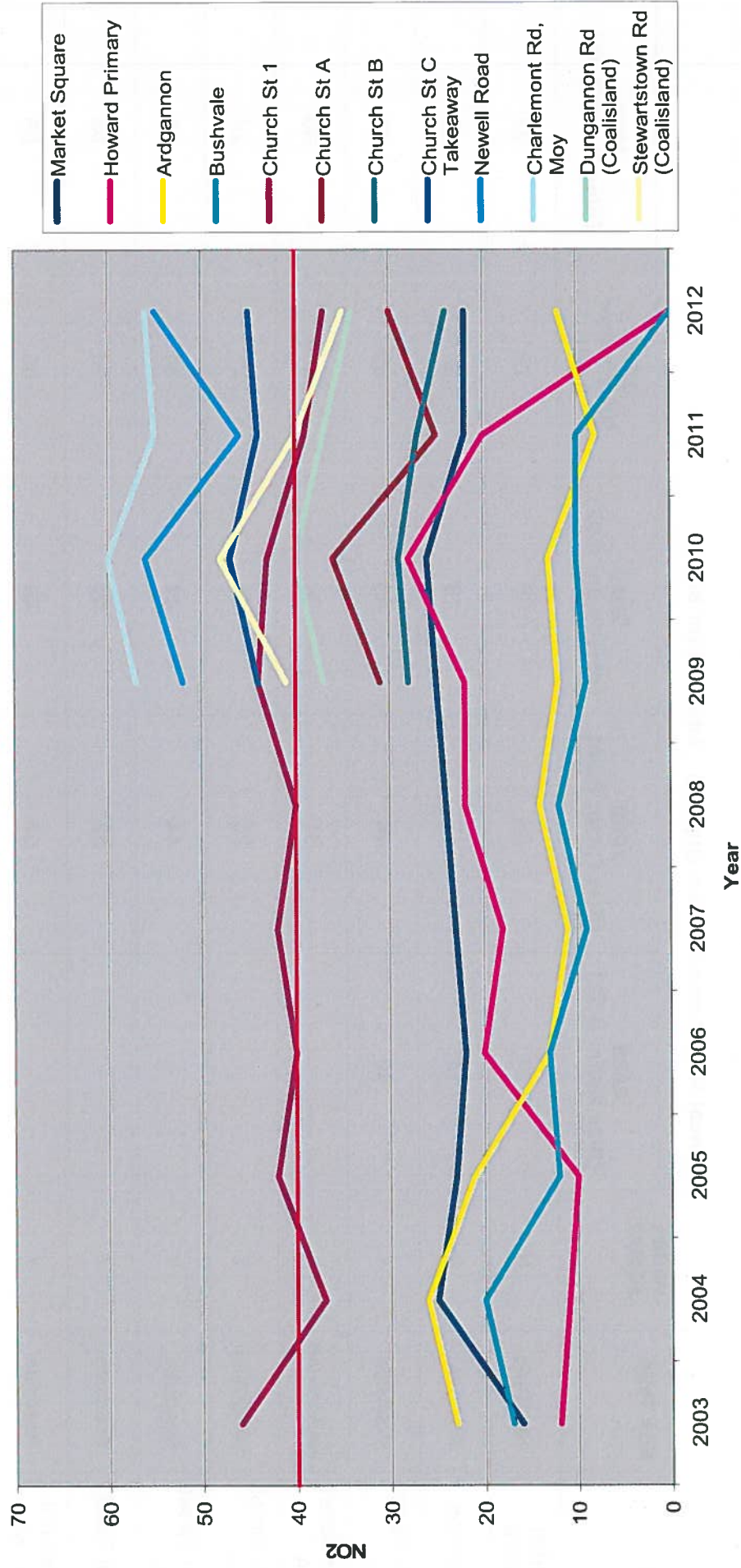
NO₂ emissions are monitored at 4 locations on Church Street in triplicate diffusion tube formation. The result obtained at this site is an average of the triplicate tubes.

Table 2.4b Historical Results of Nitrogen Dioxide Diffusion Tubes

Site ID	Site Type	Within AQMA?	Annual Mean Concentration ($\mu\text{g}/\text{m}^3$) - Adjusted for Bias ^a				
			2008 (Bias Factor 0.92)	2009 (Bias Factor 0.90)	2010 (Bias Factor 0.92)	2011 (Bias Factor 0.84)	2012 (Bias Factor 0.79)
Market Square	Roadside	N	24	25	26	22	22
Ardgannon	Roadside	N	14	12	13	6	12
Church Street 1	Roadside	Y	40	44	43	39	37
Church Street A	Background	Y	-	31	36	25	30
Church Street B	Background	Y	-	28	29	27	24
Church Street C	Roadside	Y	-	44	47	44	45
Newell Road	Roadside	Y	-	52	56	46	55
Charlemont Street, Moy	Roadside	Y	-	57	60	55	56
Dungannon Road, Coalisland	Roadside	N	-	37	40	37	34
Stewartstown Road, Coalisland	Roadside	Y	-	41	48	40	35

Figure 2.3 Trends in Annual Mean NO₂ Concentrations Measured at Automatic Monitoring Sites in the Borough.

NO₂ Diffusion Tube Results



2.2.2 PM₁₀

Dungannon and South Tyrone Borough Council does not monitor for PM10 emissions at this time.

2.2.3 Sulphur Dioxide

N/A

2.2.4 Benzene

N/A

2.2.5 Other pollutants monitored

N/A

2.2.6 Summary of Compliance with AQS Objectives

Dungannon and South Tyrone Borough Council has examined the results from monitoring in the borough.

Concentrations within the AQMA's still exceed the objective for Nitrogen Dioxide at Church Street Site C & Newell Road, Dungannon; and Charlemont Street, Moy and the AQMA's should remain. Concentrations within the AQMA at Stewartstown Road in Coalisland have not exceeded the objective limit for Nitrogen Dioxide, however the AQMA will remain until a consistent pattern of non-exceedences is recorded over several years of monitoring.

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

The A4 Dungannon to Ballygawley dual carriageway was completed in 2010. However no new sensitive receptors are within close proximity of the road.

3.2 Other Transport Sources

3.3 Industrial Sources

3.4 Commercial and Domestic Sources

3.5 New Developments with Fugitive or Uncontrolled Sources

Dungannon and South Tyrone Borough 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.

4 Local / Regional Air Quality Strategy

There are currently no Local or Regional Air Quality Strategies applicable to Dungannon and South Tyrone Borough Council. The Southern Group Air Quality Strategy came to an end in 2010. No further strategies are planned at this time.

5 Planning Applications

Below is a list of planning applications that have come under review for air quality considerations during 2010. At the time of writing, no decision has been made by the Northern Ireland Planning Service.

Planning	
Ref.	

Location:	Old Eglish Road, Dungannon. Tyrone
------------------	------------------------------------

Proposal:	Installation of a 100kW Biomass Boiler at the Poultry Farm of Felix Daly
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An Air Quality Screening Assessment was completed for the above planning application. The assessment concluded that the proposed biomass boiler will not lead to a significant impact on local air quality for the proposed stack height of 14m and the maximum potential impact was described as 'Slight Adverse'.

6 Air Quality Planning Policies

N/A

7 Local Transport Plans and Strategies

Regional Transportation Strategy

The Regional Transportation Strategy (RTS) for Northern Ireland 2002- 2012 identifies strategic transportation investment priorities and considers potential funding sources and affordability of planned initiatives. The RTS focuses on three geographic areas and one overlying Network. These are as follows:

- Belfast Metropolitan Area (BMA), containing the continuous area comprising Belfast City Council and the built-up areas within the Council areas of Carrickfergus, Castlereagh, Lisburn, Newtownabbey and North Down;
-
- Other Urban Areas (OUAs): collectively those towns described as main or local hubs in the RDS (including Dungannon) and other towns outside the BMA with a population greater than 5,000;
- Rural Area – the remainder of Northern Ireland; and
- Regional Strategic Transport Network (RSTN) comprising the complete rail network and all motorway and trunk road links (including the Key Transport Corridors and Link Corridors).

The RTS is a “daughter document” of the Regional Development Strategy (RDS), which sets out the spatial development framework for Northern Ireland up to 2025. Implementation of the Strategy will be through three Transport Plans covering the Regional Strategic Transport Network (RSTN), the Belfast Metropolitan Area (BMA), and the Sub-Regional Transport Plan (SRTP). Transport studies undertaken to support the RSTN Transport Plan will take due account of current and future cross-border inter-urban transport demands and the roles of the gateway cities and towns, including Dungannon.

3.4 Regional Strategic Transport Network Transport Plan

The Regional Strategic Transport Network (RSTN) Transport Plan prepared by the Department for Regional Development (DRD) covers the complete rail network, five Key Transport Corridors (KTCs), four Link Corridors, the Belfast Metropolitan Transport Corridors and the remaining trunk network across Northern Ireland. The Plan is based on the guidance set out in the Regional Development Strategy (RDS) and the Regional Transportation Strategy (RTS), as described in Sections 3.2 and 3.3 of the RSTN Transport Plan.

The RSTN Transport Plan consists of proposals for transport schemes and measures for the maintenance, management and development of the RSTN until 2015. The RSTN Transport Plan also includes a number of measures for rail, bus, roads, walking and cycling.

3.5 Sub-Regional Transport Plan 2015

The Sub-Regional Transport Plan (SRTP) was prepared by the Department for Regional Development (DRD) and completed in 2007. The SRTP is based upon the guidance provided by the Regional Development Strategy (RDS) and the Regional Transportation Strategy (RTS). Proposed public transport measures for Dungannon (within category of Other Urban Areas (OUA)) contained within the SRTP are as follows:

- Improved walk/cycle
- Improved local bus services
- Bus stop Improvement Strategy
- Bus based Park and Ride
- Increased parking at bus/rail station
- Taxi rank
- Transport Programme for People with Disabilities

Spatial Development Strategy for Northern Ireland

The Spatial Development Strategy (SDS) guides the physical development of the Region to 2025. The SDS will contribute to meeting a number of key regional challenges emerging from the significant local, national and international forces, which will drive change over the next 25 years, including:

Transport:

- Promote a change in travel culture and particularly manage the effects of a possible 100% growth in the number of vehicles by 2025;
- Contribute to the creation of a modern, sustainable, safe transportation system for the Region, meeting the travel needs of all groups in society;
- Accommodate the growing volume of freight moving to and from the regional gateways; and
- Strengthen the regional gateways to handle the increasing flow of people and goods in and out of the Region.

Environment:

- Accommodate future development growth while protecting and caring for the environment;
- Reduce the consumption of resources;
- Continue to maintain or, where needed, to improve the quality of air, water and land resources within the Region;
- Seek to maintain local landscape character and to conserve cultural assets; and
- Take particular care to sustain and, where required, to enhance the biodiversity of the Region, its natural habitats, high quality landscapes and built heritage.

Developing a Regional Transportation System

Creating an upgraded and integrated transport system, built around the Regional Strategic Transport Network of the key transport corridors with their main public transport services providing the framework for future development is recognised as one of the key assets to accommodate growth. Strategic planning guidelines relating to the development of a Regional Transport System (RTS) are as follows:

- **SPG-TRAN 1:** To develop a Regional Strategic Transport Network (RSTN), based on Key Transport Corridors (KTCs), to enhance accessibility to regional facilities and services. Two major roads within the District are identified in the RDS as part of the Key Transport Corridors in Northern Ireland: -
 - A4 Dungannon - Fivemiletown Road: The South Western Corridor; and
 - A5 Aughnacloy - Omagh Road: The Western Corridor.
- In addition, the A29 Cookstown to Moy Road is identified as part of one of three additional Link Corridors in the RTS.
- **SPG-TRAN 2:** To extend travel choice for all sections of the community by enhancing public transport. Including the strengthening of the regional bus network (including the promotion of public transport routes and Park and Ride schemes) and the regional rail system;
- **SPG-TRAN 3:** To integrate land use and transportation to provide a much better range of travel choices for all, and reduce the demand for travel; and
- **SPG-TRAN 4:** To change the regional travel culture and contribute to healthier lifestyles, such as giving greater priority to encouraging more walking and cycling.

8 Climate Change Strategies

N/A

9 Implementation of Action Plans

Dungannon and South Tyrone Borough Council have an Action Plan for the AQMA currently in operation in Church Street, Dungannon. The Council completed a public consultation event in October 2010, the Action Plan was passed by Council in March 2011 and is now an actionable document. A review of the objectives will be completed through a stakeholders meeting in early 2012, where progress on each objective will be re-assessed.

Appendix D contains a list of the Actions that have been formulated by the AQMA Stakeholder Committee which includes DRD Roads Service, The Northern Ireland Planning Service, Translink, Southern Group Environmental Health Committee and the councils Environmental Health Department.

There are three Action Plans pending for the AQMA's at Newell Road, Dungannon; Charlemont Street, Moy; and Stewartstown Road, Coalisland. Dungannon and South Tyrone Borough Council are currently engaged in the consultation process with their AQMA stakeholder committee members and will be producing the necessary Action Plans by the end of summer, 2013.

10 Conclusions and Proposed Actions

10.1 Conclusions from New Monitoring Data

Monitoring at 10 locations within Dungannon and South Tyrone Borough Council's area has demonstrated that there are 3 sites where NO₂ levels exceeded the objective limit of 40ug/m³ ; Newell Road, Dungannon; Church Street Site C, Dungannon; and Charlemont Street in Moy.

It must be noted that whilst the objective level at Church Street location Site C was breached, this location is not at the sensitive receptor (Church Mews, Church Street Site 1). The annual mean for Church Mews in 2012 is 37 µg/m³. This is the second year in a row that the annual mean has been below the limit of 40 µg/m³ as the annual mean for 2011 was 39 µg/m³.

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No other pollutants were assessed to have an impact on air quality within the district at this time and therefore no AQMA's or detailed assessments are required for any other pollutants.

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The next course of action to be taken by the council is to complete and **submit AQMA Action Plan for Newell Road in Dungannon, Stewartstown Road in Coalisland and Charlemont Street in Moy.**

11 References

Local Air Quality Management Technical Guidance – LAQM.TG(09)

Appendices

Appendix A: Financial Information

Appendix B: Environmental Information

Appendix C: Planning and Development

Appendix D: Community and Social Services

Appendix E: Other Information

Appendices

Appendix A QA/QC Data and Gradko WASP Data

Appendix B Diffusion Tube Site Maps

Appendix C Diffusion Tube Monitoring Data 2010

Appendix D Church Street AQMA Action Plan: Actions Tables

Appendix E – Church Street AQMA Action Plan Progress Report 2012

Appendix A: QA:QC Data and Gradko WASP Data

Diffusion Tube Bias Adjustment Factors

The NO₂ diffusion tubes were prepared and analysed by Environmental Sciences Group (ESG) Didcot from the beginning of January 2012. This laboratory takes part in the NO₂ Network QA/QC Field Intercomparison survey. ESG's diffusion tubes are prepared by coating the grids in 50% TEA in Acetone. Craigavon Borough Council obtained the appropriate bias factor from the DEFRA Website. <http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html> A bias factor of **0.79** was taken from the drop down menus available on the excel spreadsheet matrix.

Factor from Local Co-location Studies (if available)

Craigavon Borough Council did not use a Bias Factor from a local Co-location study. Craigavon does not have an automatic NO₂ analyser in the district to carry out a co-location assessment. Also, although a co-location factor may be available from two other neighbouring councils (Armagh & Newry), it was felt that the national bias factor was drawn from a greater range of sites and could therefore be considered overall more representative of the sites monitored in the borough.

Discussion of Choice of Factor to Use

Craigavon Borough Council used the Bias Factor from the Defra Website. <http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>. This was calculated by using the matrix available on the site by selecting the appropriate laboratory, year of monitoring and significant methodology. Craigavon Borough Council used a bias factor for 2012 (0.79)

PM Monitoring Adjustment

N/A

Short-term to Long-term Data adjustment

N/A

QA/QC of automatic monitoring

N/A

QA/QC of diffusion tube monitoring

See table below

Table 1: Laboratory summary performance for WASP NO₂ PT rounds 111 - 118

The following table lists those UK laboratories undertaking LAQM activities that have participated in recent HSL WASP NO₂ PT rounds and the percentage (%) of results submitted which were subsequently determined to be **satisfactory** based upon a z-score of $\square \pm 2$ as defined above.

WASP Round	WASP R111	WASP R112	WASP R113	WASP R114	WASP R115	WASP R116	WASP R117	WASP R118
Round conducted in the period	October - December 2010	January - March 2011	April - June 2011	July - September 2011	October - December 2011	January - March 2012	April - June 2012	July - September 2012
Aberdeen Scientific Services	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Bristol City Council [6]	100 %	100 %	100 %	100 %	100 %	-	-	-
Cardiff Scientific Services	75 %	100 %	100 %	100 %	75 %	100 %	100 %	100 %
Edinburgh Scientific Services	100 %	100 %	100 %	100 %	0 %	100 %	100 %	100 %
Environmental Services Group, Didcot (formerly Bureau Veritas Laboratories, Glasgow and Harwell Scientifics) [1] [2]	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Exova (formerly Clyde Analytical)	100 %	100 %	100 %	0 %	75 %	0 %	0 %	100 %
Glasgow Scientific Services	100 %	100 %	100 %	100 %	100 %	100 %	50 %	100 %
Gradko International [2]	100 %	100 %	100 %	100 %	37.5 %	100 %	100 %	100 %
Kent Scientific Services	100 %	50 %	100 %	100 %	75 %	75 %	100 %	75 %
Kirklees MBC	0 %	100 %	0 %	0 %	50 %	100 %	100 %	75 %
Lambeth Scientific Services	100 %	50 %	25 %	100 %	25 %	75 %	100 %	0 %
Lancashire County Analysts [3]	100 %	75 %	-	-	-	-	-	-
Milton Keynes Council	100 %	100 %	75 %	100 %	100 %	100 %	100 %	75 %
Northampton Borough Council	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Somerset Scientific Services [4]	-	-	-	-	-	100 %	100 %	100 %
South Yorkshire Air Quality Samplers	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Staffordshire County Council	100 %	100 %	100 %	100 %	100 %	100 %	100 %	75 %
Tayside Scientific Services (formerly Dundee CC)	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Walsall MBC [5]	100 %	-	-	-	-	-	-	-
West Yorkshire Analytical Services	100 %	75 %	75 %	100 %	100 %	75 %	75 %	50 %

[1] Bureau Veritas laboratory and Harwell Scientific now part of ESG Group.

[2] Participant subscribes to two sets of test samples (2 x 4 test samples) in each WASP PT round.

[3] No longer involved in NO₂ diffusion tube measurements from R113.

[4] New participant from R115.

[5] No longer involved in NO₂ diffusion tube measurements from R112.

[6] No longer involved in NO₂ diffusion tube measurements from R116.

Appendix B

Diffusion Tube Monitoring Sites & AQMA Maps



scale 1 2500



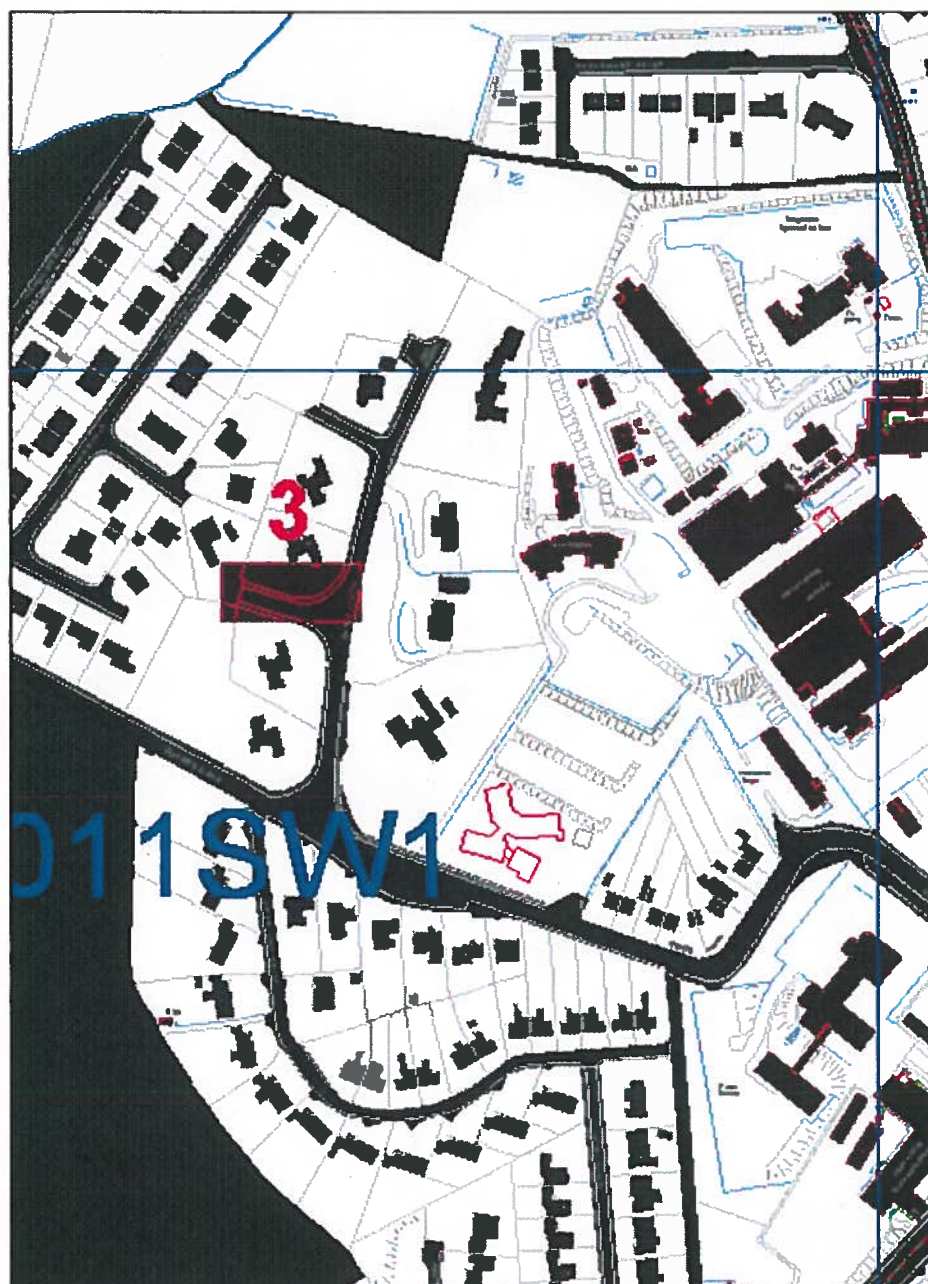
Dungannon and South Tyrone Borough Council
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Tel: 028 9772 0200, Fax: 028 9772 0266

Officer:	
Department:	Building Control
Date: 11/12/15	Unit: 15200



Yikes... we didn't do it... we're sorry... the...
the... we... the... we... the... we...
the... we... the... we... the... we...
the... we... the... we... the... we...
the... we... the... we... the... we...

Market Square and Church Street



scale 1 2500



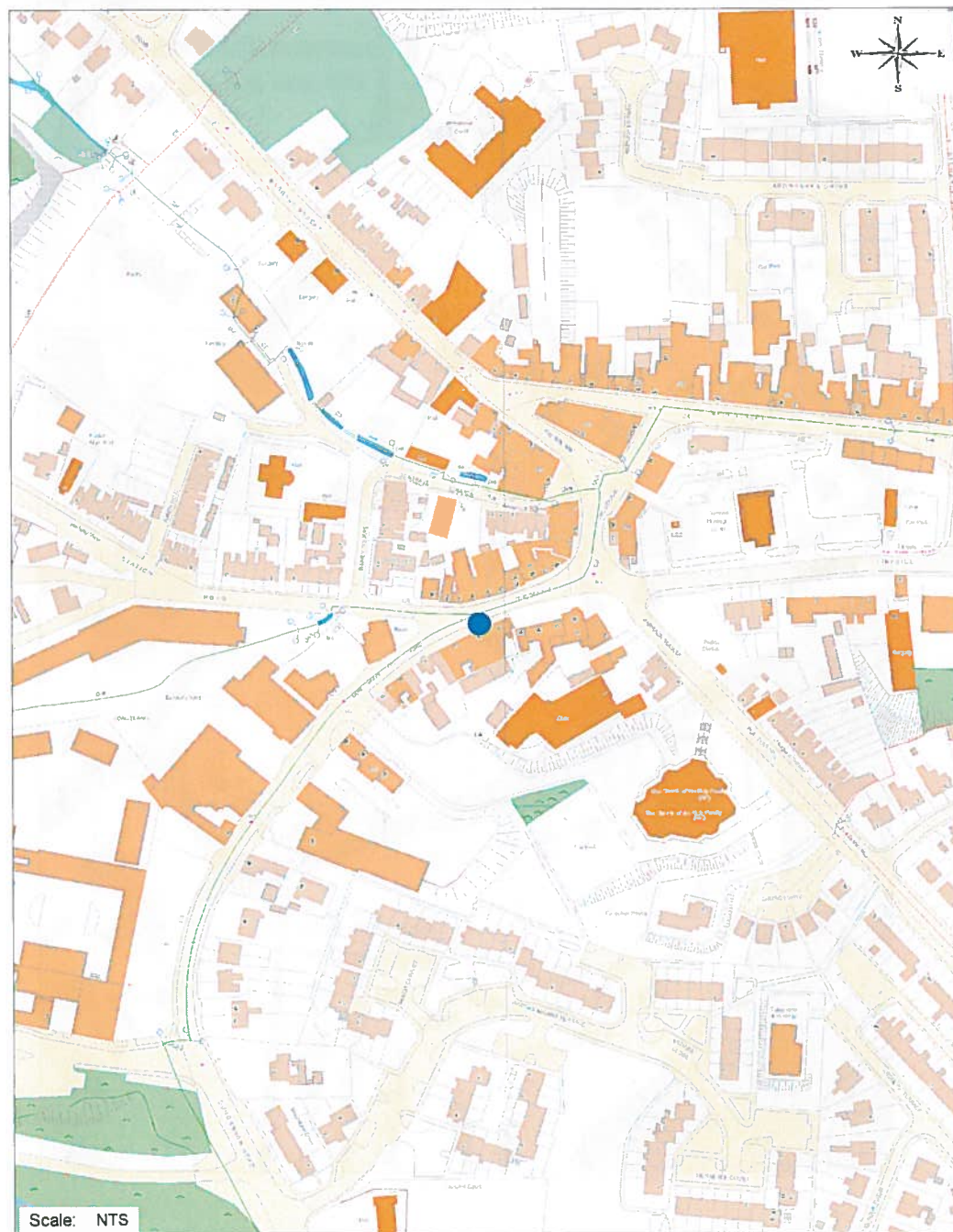
Dungannon and South Tyrone Borough Council,
Council Office, Circular Road, Dungannon BT71 8DT,
Tel: 028 8772 0260, Fax: 028 8772 0266

Officer:	
Supervisor:	Building Command
Inv. Officer(s):	Waller (1000)



There are also different ways to get the most out of the data. One way is to use the data to create a new variable. For example, you could create a variable that represents the average of the two variables. Another way is to use the data to create a new variable that represents the difference between the two variables. Both of these methods can be useful in different situations.

Ardgannon



Scale: NTS



Dungannon and South Tyrone
Borough Council,
Council Offices, Circular Road,
Dungannon BT71 6DT,
Tel: 028 8772 0300, Fax: 028 8772 0368

NO2 MONITORING LOCATION MAP

Dungannon Road, Coalisland (10)

● NO2 Monitoring Point
(Passive Diffusion Tube)



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Property
Services.

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Dungannon and South Tyrone
Borough Council,
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Dungannon BT71 6DT,
Tel: 028 8772 0300, Fax: 028 8772 0368

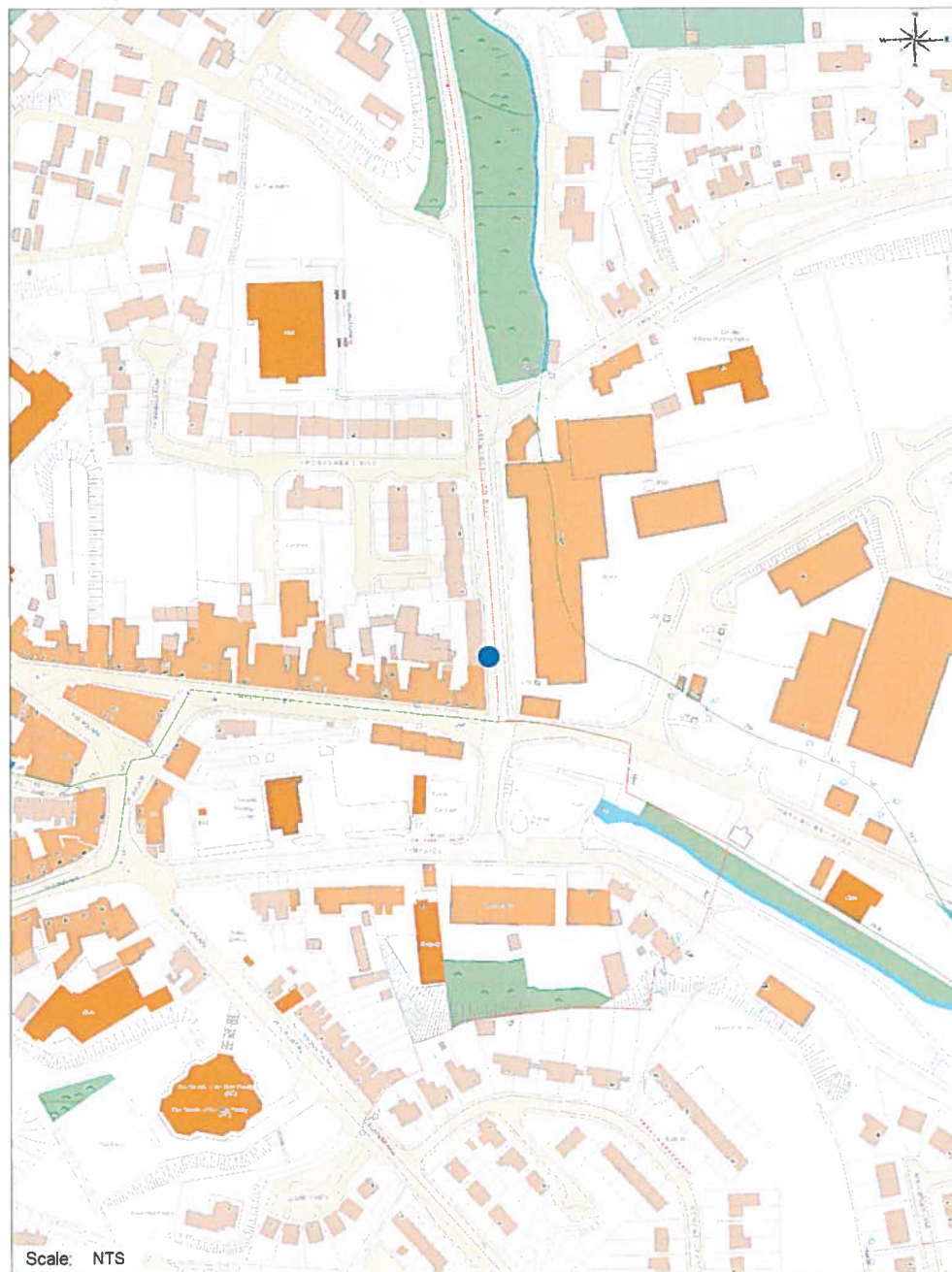
NO2 MONITORING LOCATION MAP

Newell Road, Dungannon (8)

● NO2 Monitoring Point
(Passive Diffusion Tube)



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Scale: NTS



Dungannon and South Tyrone
Borough Council
Council Offices, Circular Road,
Dungannon BT71 6DT,
Tel. 028 8772 0300, Fax: 028 8772 0368

NO2 MONITORING LOCATION MAP

Stewartstown Road, Coalisland (11)

● NO2 Monitoring Point
(Passive Diffusion Tube)



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Dungannon BT71 6DT
Tel: 028 8772 0300, Fax: 028 8772 0368

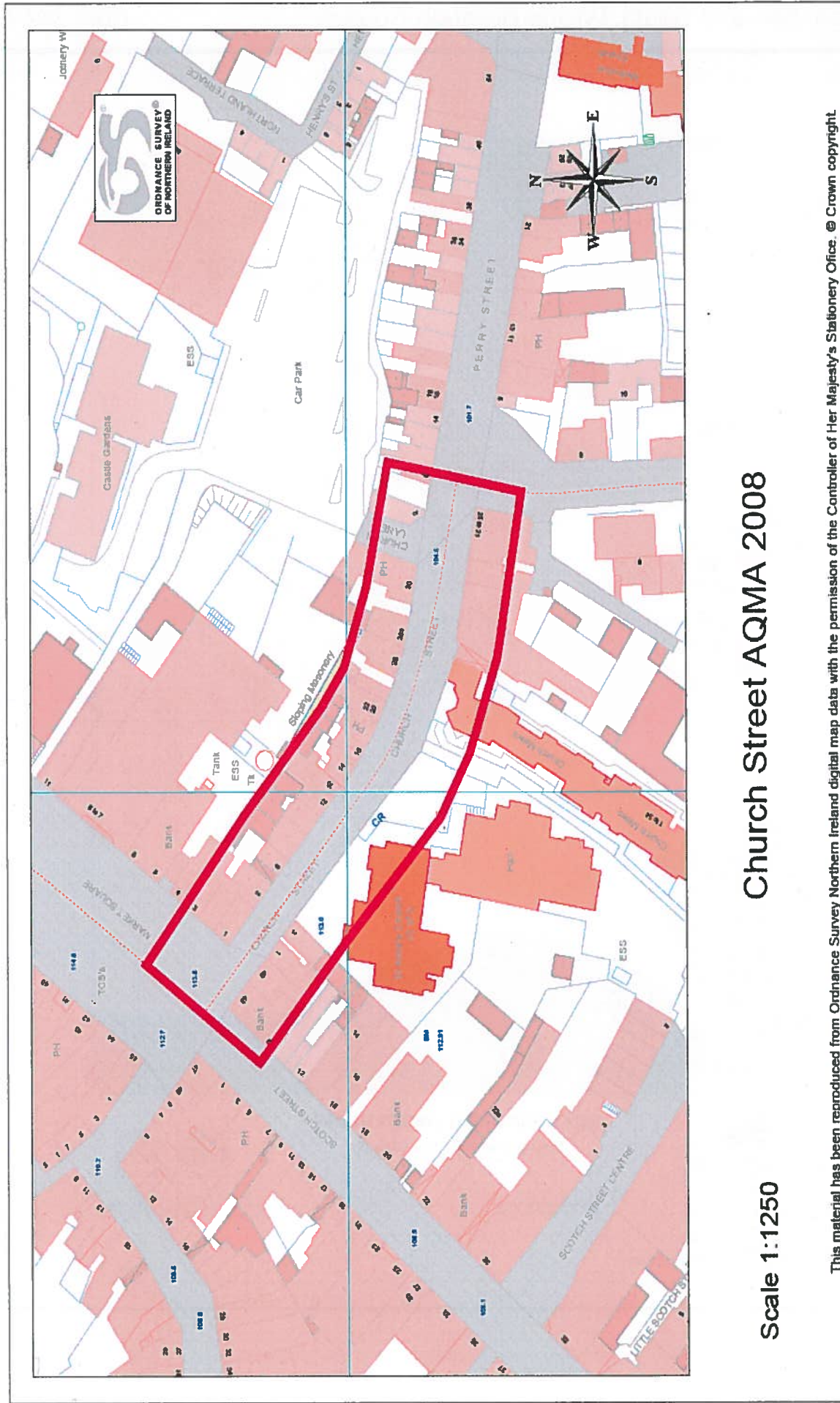
NO2 MONITORING LOCATION MAP

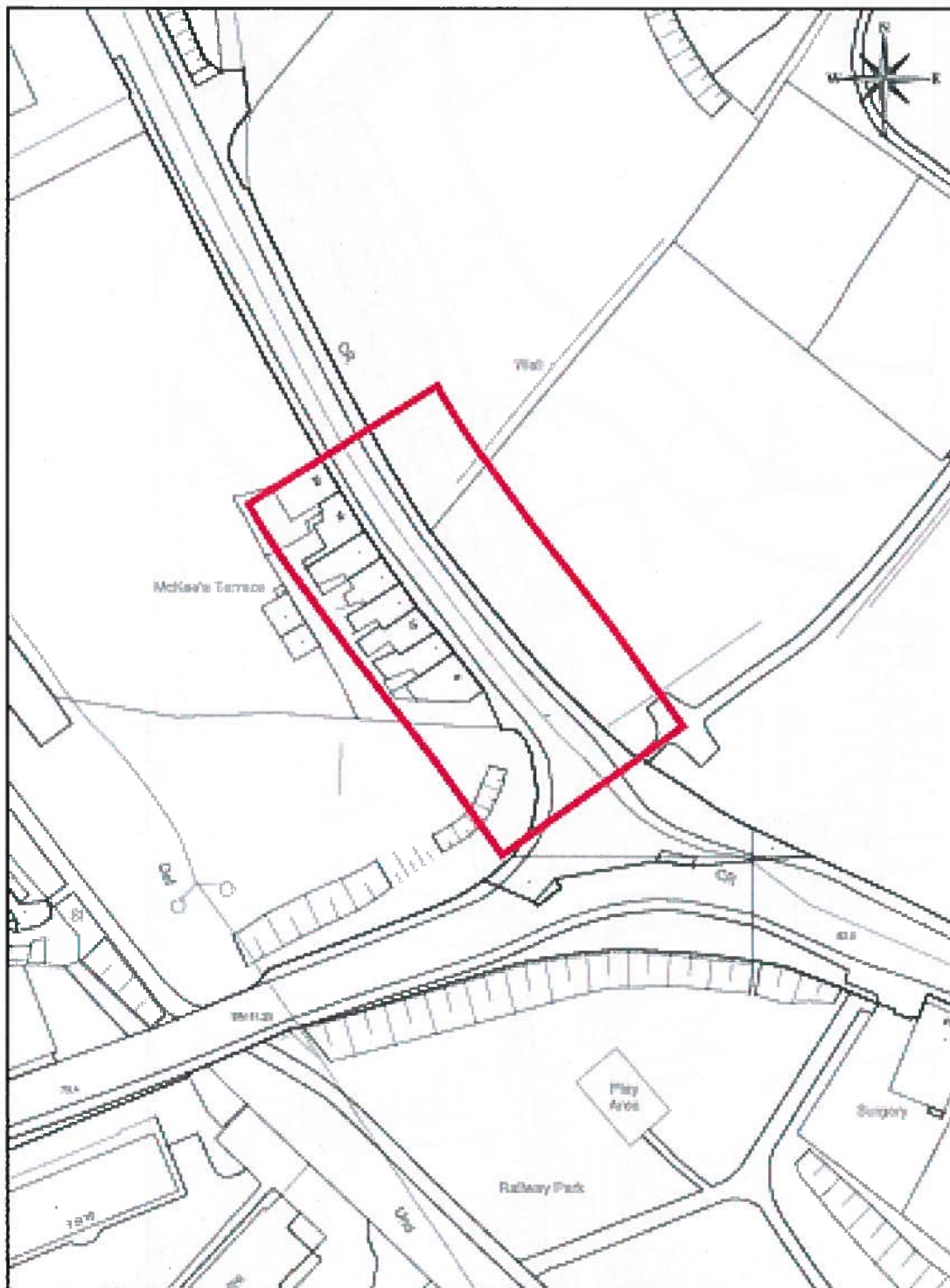
Moy Hill, Charlemont Street, Moy (9)

● NO2 Monitoring Point
(Passive Diffusion Tube)



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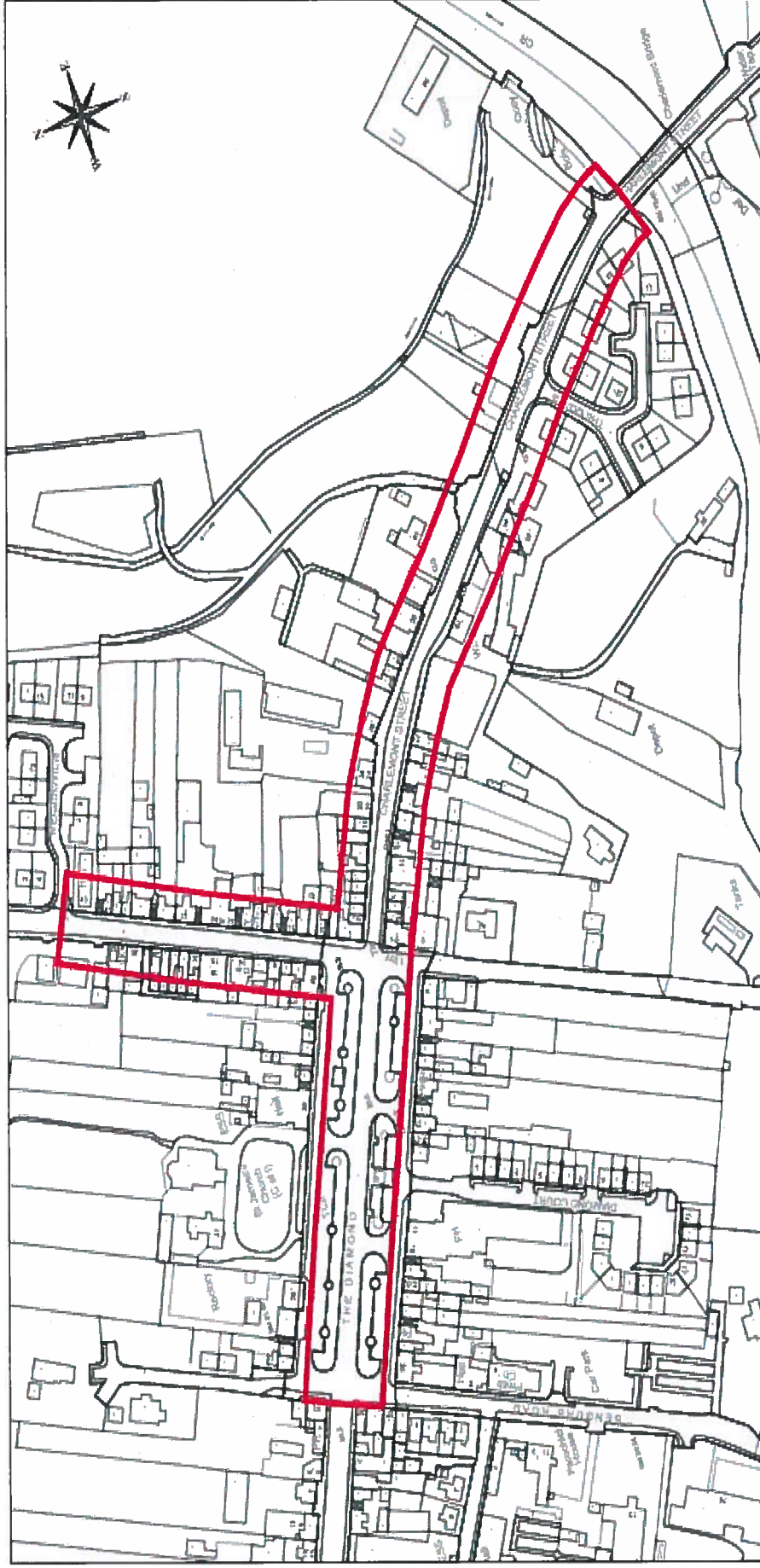


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Title : AGM - Newell Road, Dungannon

Scale : 1 : 1000 (A4)

23/05/2012

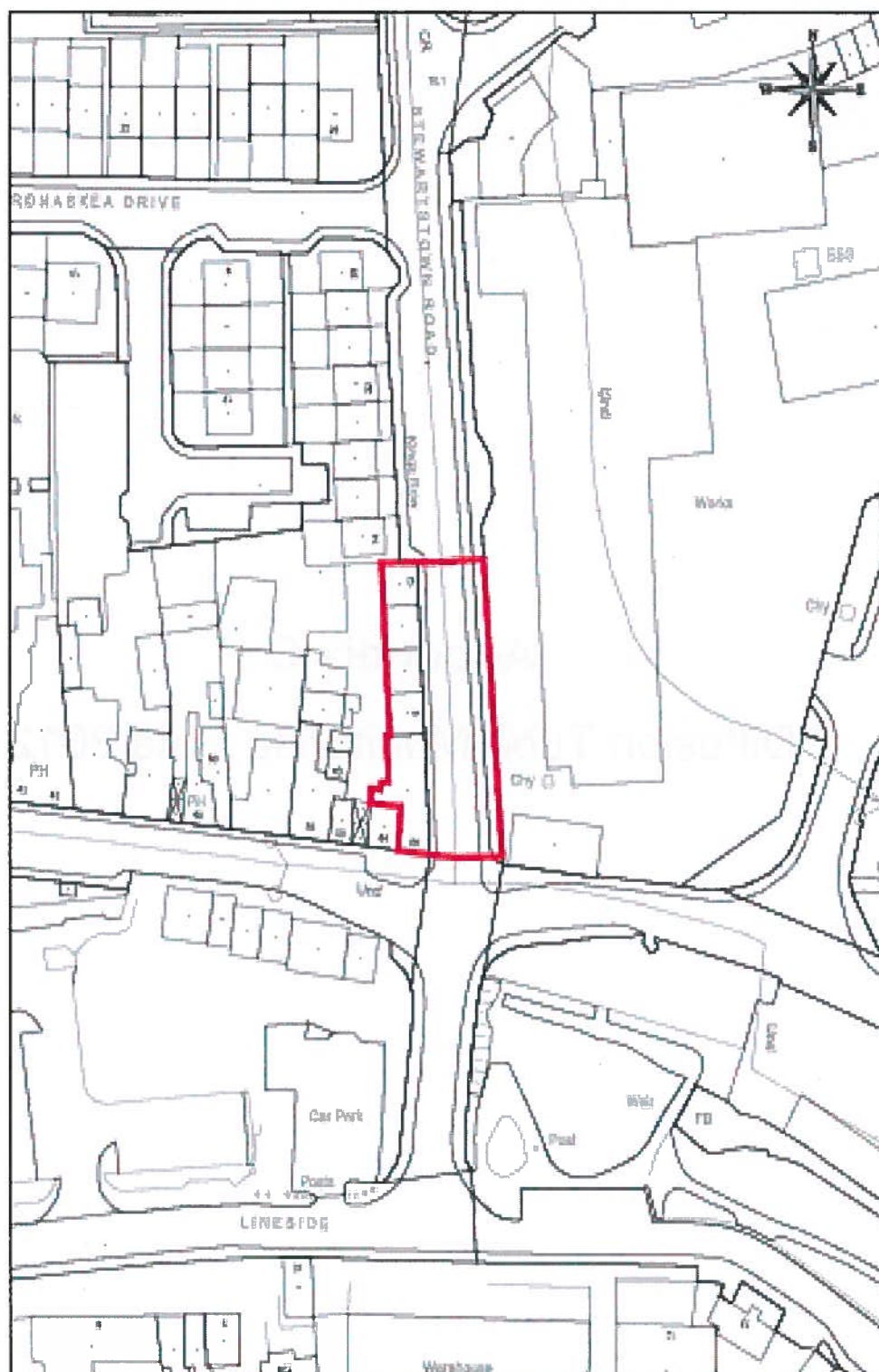


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Title : AQM - Moy

Scale : 1 : 2500 (A4)

23/05/2012



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Title : AQM - Stewartstown Road, Coalisland

Scale : 1 : 1000 (A4)

23/05/2012

Appendix C

Diffusion Tube Monitoring Data 2012

NO2 DIFFUSION TUBE RESULTS 2012 ($\mu\text{g}/\text{m}^3$)										
	Market Square	Dungannon Road (Coalisland)	Ardgannon	Church St 1	Church St A	Church St B	Church St C	Newell Road	Moy	Stewartstown Road (Coalisland)
JANUARY	32	46	16	57	36	38	62	65	77	52
FEBRUARY	34	52	19	58	39	38	63	66	83	59
MARCH	30	53	15	54	41	36	63	72	73	50
APRIL	26	33	9	39	42	26	54	74	73	42
MAY	23	37	10	35	32	28	47	70	58	16
JUNE	26	46	13	40	37	30	52	74	62	36
JULY	25	28	9	39	35	22	47	61	64	33
AUGUST	22	47	12	46	29	31	49	60	68	34
SEPTEMBER	30	36	25	49	36	30	51	70	72	46
OCTOBER	28	41	12	41	40	29	58	74	70	49
NOVEMBER	-	52	17	57	42	33	70	79	79	67
DECEMBER	31	49	18	51	40	-	72	65	77	54
AVERAGE	28	43	15	47	37	31	57	69	71	45
Adjusted Ave	22	34	12	37	30	24	45	55	56	35

Appendix D

Church Street AQMA Action Plan: Actions Tables

Action Plan Proposals for Dungannon and South Tyrone Borough Council

Dungannon and South Tyrone Borough Council along with Southern Group Environmental Health Committee developed a stakeholder group including Translink, Roads Service and The Northern Ireland Planning Service to consider the reduction in NO₂ required to address the problem at the Church Street AQMA. In particular, as the major source of pollution in this AQMA is transport related those relevant authorities with responsibilities for transport had a very important role.

Following a number of stakeholder meetings and a detailed consideration of possible options, a number of proposals have been developed which in combination will reduce NO₂ emissions within the area and will work towards achieving the AQ objective limit.

The proposals agreed by the stakeholders are detailed in the following pages, including the anticipated scale of impact and the timescales for delivering these proposals. In order to inform the action planning process a simple assessment of the cost and benefit of each proposal has been undertaken. The following table gives an indication of the scoring used. A simple multiplication of the cost and the beneficial impact gives an indication as to the cost effective score of the proposals.

In 2012 Dungannon and South Tyrone Borough Council produced an AQMA Action Plan Progress Report. The aim of the report was to provide details on how the implementation of the Action Plan was proceeding. The Progress Report was submitted to DOENI and approved by their assessors. See Appendix E for details.

Table 4.1 - Scoring used to assess and prioritise proposals

Costs		Beneficial Impact on Air Quality		Timescale*	
Score	£			Years	
7	<100k	10 ↓	Highest	Short (S)	1 – 2
6	100 – 500k			↓	↓
5	500k – 1 million			Medium (M)	3 – 5
4	1 – 10 million			↓	↓
3	10 – 50 million			Long (L)	6+
2	50 – 100 million	1	Lowest		
1	>100 million				

*measures implemented already are denoted as "I", otherwise denoted as ongoing - "O"

4.1 Specific Measures to Be Implemented within the AQMA

To ensure that the AQS objectives will be achieved at the AQMA, the following measures are proposed to be implemented

ACTION	Lead Authority	Impact	Time scale	Status	Impact	Cost	Cost Effective score	Indicator	To be achieved
1. Introduce traffic control systems at the junction of Church Street and Market Square	DRD Roads Service (NI)	Allows for better efficiency in traffic flow throughout the town centre and could be synchronised with other traffic lights to maximise these benefits	S	O	2	7	14	Long Term reduction of NO2 levels in annual monitoring results Conduct road traffic surveys on Church St to assess traffic queue length and traffic delay times	Annually May 2011
2. Investigate the efficiency of the traffic lights on Circular Road and improve the timings of the lights to aid traffic flow	DRD Roads Service (NI)	Reduction in the overall level of traffic pollution on Church Street. De-incentivise Church Street as short cut through town. Optimises use of traffic lights on Circular Road at peak periods.	S	O	5	7	35	DRD to report back to AQMA Stakeholder Committee on possible efficiency measures	May 2011
3. To use vehicles, fuel and technology which optimize the balance of efficient operations, output emissions and environmental impact, with regulatory compliance as a minimum standard.	Translink	Reduction in the overall level of traffic pollution on Church Street and reduction in the numbers of highly polluting vehicles on the roads	S	O	2	7	14	To achieve an average road fleet age of 8 years and a retirement age of 12 years for coaches and 18 years for buses by 2013	2013

ACTION	Lead Authority	Impact	Time scale	Status	Impact	Cost	Cost Effective score	Indicator	To be achieved
4 Air Pollution Monitoring.	Dungannon and South Tyrone Borough Council	Identification of long term trends in pollution and focus on areas of poor air quality	M	O	5	7	35	Long Term reduction of NO2 in annual monitoring results	On-Going
5. Remove a number of the parking spaces on the 'downside' direction on Church Street.	DRD Roads Service (NI)	Reduces pressure on vehicles exiting Market Square and on Church Street & Perry Street. Optimises traffic speeds and eradicates congestion on the downside of Church Street.	M	O	2	7	14	Redesign included in drawings submitted to Northern Ireland Planning Service as part of Public realm Scheme in Dungannon Number of Car Parking spaces reduced Long term reduction of NO2 in annual monitoring results	May 2010 May 2011 On-Going
6. Investigate possibility of 'Pay & Display' system on Church Street	Dungannon and South Tyrone Borough Council	Increased efficiency in traffic flow leading away from the town centre. Reduces congestion and encourages use of larger off-street car parks.	S	O	5	7	35	DRD & Dungannon and South Tyrone Borough Council to report back to AQMA stakeholder committee on possible measures	Post May 2011

ACTION	Lead Authority	Impact	Time scale	Status	Impact	Cost	Cost Effective score	Indicator	To be achieved
7. To investigate the possibility of designating a number of free parking spaces in Market Square for electric/hybrid vehicles only.	Dungannon and South Tyrone Borough Council	Promotes the use of more environmentally friendly vehicles and the follow on reduction in road traffic pollution in the town centre	S	O	1	7	7	Included in drawings submitted to Northern Ireland Planning Service as part of Public realm Scheme in Dungannon Ducting laid for electricity supply of recharging points and Road Works completed at Market Square. Long term reduction of NO2 in annual monitoring results	Post May 2010 May 2011 On-Going
8. To investigate the possibility of creating a Low Emissions Zone within Dungannon Town Centre	Dungannon and South Tyrone Borough Council & DRD Roads Service (NI)	Allow access for vehicles that meet the latest euro emissions standards to designated area within town.	M/L	O	1	7	7	Dungannon and South Tyrone Borough Council & DRD to report back to AQMA stakeholder committee on possible measures	May 2011
9. Investigate the possibility of a 'Park and Ride' scheme for shoppers and employees on the outskirts of Dungannon	DRD Roads Service (NI) & Translink	Increases options for access to town centre and may reduce traffic congestion in Dungannon overall. Helps to promote the benefits of public transport.	M	O	2	6	12	Percentage of parking spaces being used on a daily basis Long term reduction of NO2 in annual monitoring results	On-Going On-Going

ACTION	Lead Authority	Impact	Time scale	Status	Impact	Cost	Cost Effective score	Indicator	To be achieved
10. Use the Northern Ireland Planning Service to ensure potential air quality issues are assessed with new developments before problems arise.	Dungannon and South Tyrone Borough Council)	Reduces the possibility of further AQMA declarations and limits the degradation of air quality in future years.	L	O	2	7	14	Long term reduction of NO2 in annual monitoring results Number of consultations on planning application by Dungannon and South Tyrone Borough Council	From May 2010 onwards
11. Air quality assessment of vehicle emissions	Dungannon and South Tyrone Borough Council	Reduction in the numbers of highly polluting vehicles on the roads	S	I	2	7	14	Long Term reduction of NO2 in annual monitoring results	On-Going
12. Cleaning up Council Vehicles	Dungannon and South Tyrone Borough Council	Reduction in pollution from Council vehicles	S	I	2	7	14	Long term reduction of NO2 in annual monitoring results	On-Going

ACTION	Lead Authority	Impact	Time scale	Status	Impact	Cost	Cost Effective score	Indicator	To be achieved
13. Investigate the use of alternative fuels where possible.	Dungannon and South Tyrone Borough Council	Reduction in pollution from Council vehicles	S	O	2	7	14	Report to be produced by Council on the viability of using alternative fuels for Council vehicles Long term reduction of NO2 in annual monitoring results	December 2011 On-Going
14. Vehicle upgrading/renewal programme to comply with EURO 5 emission standards	Dungannon and South Tyrone Borough Council	Reduction in pollution / noise from Council vehicles and increased fuel efficiency	S	O	2	7	14	Two new Bin Lorries purchased to replace two older models being removed from service Long term reduction of NO2 in annual monitoring results	December 2010 On-Going
15. Develop better travel planning amongst Council employees	Travelwise NI	Reduction in vehicle pollution from Council staff travelling to and from work.	S	O	2	7	14	Travel plan produced and implemented by Council	May 2011
16. Bin Collections to be restricted during peak traffic periods in Church Street.	Dungannon and South Tyrone Borough Council	Reduction in pollution from council vehicles in Church Street and to ease flow of traffic through AQMA	S	O	2	7	14	Instruction to be disseminated through Operational Services and placed on schedule of works.	May 2011

ACTION	Lead Authority	Impact	Time scale	Status	Impact	Cost	Cost Effective score	Indicator	To be achieved
17. Sustainable Development.	Dungannon and South Tyrone Borough Council	General environmental impact. In form policy makers. Increased awareness of sustainable development issues among a variety of stakeholders	M	O	5	7	35	Long Term reduction of NO2 in annual monitoring results	On-Going
18. Industrial Pollution Control	Dungannon and South Tyrone Borough Council	Reduced ambient pollution in local atmosphere	S	O	3	7	21	Long term reduction of NO2 in annual monitoring results Percentage of IPPC inspections completed by Dungannon and South Tyrone Borough Council	On-Going
19. Nuisance policy for dealing with burning of commercial and domestic waste	Dungannon and South Tyrone Borough Council	Reduced pollution from uncontrolled burning of commercial and domestic waste	S	O	1	7	7	Long Term reduction of NO2 in annual monitoring results	On-Going
20. Air Quality Awareness Promotion Campaign	Dungannon and South Tyrone Borough Council & Translink	Increase public awareness of Air Quality Management Area and general air pollution issues	S	O	2	7	14	Production of visual, verbal and written materials for dissemination to general public highlighting air quality issues through various media	Annually

Appendix E

Church Street AQMA Action Plan Progress Report 2012

Progress on Objectives within Dungannon AQMA Action Plan (Church Street only)**1. Introduce traffic control systems at the junction of Church Street and Market Square**

Indicator - Long Term reduction of NO2 levels in annual monitoring results. Conduct road traffic surveys on Church St to assess traffic queue length and traffic delay times.

Lead – DRD Roads

This was proposed as part of the Dungannon Public Realm Scheme which was temporarily postponed due to costing issues. However the scheme is supposed to be back on track and work is due to commence on the ground works of the scheme in August 2012. The Council will continually review progress of the on site works associated with the objectives contained in the action plan.

2. Investigate the efficiency of the traffic lights on Circular Road and improve the timings of the lights to aid traffic flow

Indicator - DRD to report back to AQMA Stakeholder Committee on possible efficiency measures

Lead - DRD Roads Service (NI)

DRD Roads had stipulated that the lights on Circular Road were the most suitable type in operation for this particular location. This objective was re-assessed at the Stakeholder meeting on the 7th February. The DRD Roads Service informed the stakeholder group that there is currently an assessment underway to determine if a 'MOVA' traffic light system would be better suited for use at the junctions of Killyman and Killymeal Roads which are part of Circular Road. The system is designed by TRL and a description of the MOVA system is provided via their website at;

http://www.trl.co.uk/software/software_products/traffic_and_network/mova.htm

MOVA stands for **M**icroprocessor **O**ptimised **V**ehicle **A**ctuation. Designed by TRL during the 1980s, it is now a very well established strategy for the control of traffic light signals at isolated junctions - i.e. junctions that are uncoordinated with any neighbouring signals. It can also be used at stand-alone pedestrian crossing, i.e. Puffin and Pelicans. Currently the UK is thought to have at least 700 sites equipped with MOVA with each year seeing at least another 100 installations. Although designed for isolated junctions, a number of linked schemes have also been installed.

MOVA is designed to cater for the full range of traffic conditions, from very low flows through to a junction that is overloaded. For the major part of the range - before congestion occurs, MOVA operates in a delay minimising mode; if any approach becomes overloaded, the system switches to a

capacity maximising procedure. MOVA is also able to operate at a wide range of junctions, from the very simple 'shuttle-working', to large, multi-phase multi-lane sites.

MOVA is particularly well suited to the following:

- Sites with high traffic flow, particularly where these are seasonal or intermittent (for instance, motorway diversion routes and holiday routes).
- Sites experiencing capacity difficulties under VA control with congestion on one or more approaches.
- Sites with high speed approaches and/or red compliance problems.
- Where additional capacity is required to allow pedestrian facilities or safer staging structure to be introduced.
- Where more than one junction is situated too close to be considered as isolated, there are ways in which two or more junctions can be linked by the use of MOVA control. Partially or even fully signalised roundabouts are a good example of a MOVA linking opportunity.
- Puffin crossings where the call-cancel demands from kerbside detectors can be dealt with correctly and the identification of gaps in traffic can be considerably more effective than D-system VA.

MOVA is being used by almost all Authorities who have responsibility for traffic signals, and is a requirement on new signal installations and major refurbishments on trunk roads. MOVA can be used in conjunction with any controller conforming to Departmental Specification TR2210 and it is available in one of the following forms:

- Add-on unit that connects to the controller via the standard UTC interface,
- 'Semi integral' where MOVA and the Controller are separate but have a dedicated communication link,
- Integral where the MOVA kernel software is incorporated into the Controller (although MOVA still effectively remains a separate component).

DRD Roads Service will make a final decision on the upgrade of the traffic control system at Circular Road in 2013.

3. To use vehicles, fuel and technology which optimize the balance of efficient operations, output emissions and environmental impact, with regulatory compliance as a minimum standard.

Indicator - To achieve an average road fleet age of 8 years and a retirement age of 12 years for coaches and 18 years for buses by 2013

Lead – Translink

Robert Magill, Manager of Translink Service Delivery Manager for Dungannon provided information on the age and Euro Class of the fleet of buses operating in Dungannon in 2011/2012. See below.

Depot	Number of Vehicles Allocated	Euro Class Percentage					
		Pre Euro	Euro 1	Euro 2	Euro 3	Euro 4	Euro 5
Dungannon	43	2.33%	6.98%	0.00%	39.53%	34.88%	16.28%

Percentages above relate to just 1 pre-euro vehicle in Dungannon which would expect to be phased out within 18 months. Classes 3,4 and 5 are at the upper end of the scale which would show Translink well in advance of Government targets with 90 % of fleet Euro 3+ as per 2006 in lieu of the EU target goal of 98 grams of CO₂ per kilometer by 2020.

Tier	Date	Test cycle	CO	HC	NO _x	PM	Smoke
Euro I	1992, < 85 kW	ECE R-49	4.5	1.1	8.0	0.612	
	1992, > 85 kW		4.5	1.1	8.0	0.36	
Euro II	October 1996		4.0	1.1	7.0	0.25	
	October 1998		4.0	1.1	7.0	0.15	
	October 1999 EEVs only	ESC & ELR	1.0	0.25	2.0	0.02	0.15
Euro III	October 2000	ESC & ELR	2.1	0.66	5.0	0.10	0.8
						0.13*	
Euro IV	October 2005		1.5	0.46	3.5	0.02	0.5
Euro V	October 2008		1.5	0.46	2.0	0.02	0.5
Euro VI	January 2013		1.5	0.13	0.4	0.01	

* for engines of less than 0.75 dm³ swept volume per cylinder and a rated power speed of more than 3,000 per minute. EEV is "Enhanced environmentally friendly vehicle".

At present more than 90% of our vehicles would meet the very strict requirements to operate within the London zone.

The company is also committed to the Eco- driving scheme throughout 1012/13 which will specifically train our staff on fuel efficient driving techniques.

4 Air Pollution Monitoring.

Indicator - Long Term reduction of NO₂ in annual monitoring results

Lead - Dungannon and South Tyrone Borough Council

As of July 2012 Dungannon and South Tyrone Borough Council are up to date with monitoring and all necessary reports have been submitted to DOENI with approval from their appointed appraising consultants. Council will continue to monitor NO₂ emissions at current locations during 2012.

5. Remove a number of the parking spaces on the 'downside' direction on Church Street.

Indicator - Redesign included in drawings submitted to Northern Ireland Planning Service as part of Public realm Scheme in Dungannon. Number of Car Parking spaces reduced. Long term reduction of NO2 in annual monitoring results.

Lead - DRD Roads Service (NI)

This was proposed as part of the Dungannon Public Realm Scheme which was temporarily postponed due to costing issues. However the scheme is supposed to be back on track and work is due to commence on the ground works of the scheme in August 2012. The Council will continually review progress of the on site works associated with the objectives contained in the action plan.

6. Investigate possibility of 'Pay & Display' system on Church Street.

Indicator - DRD & Dungannon and South Tyrone Borough Council to report back to AQMA stakeholder committee on possible measures.

Lead - Dungannon and South Tyrone Borough Council

DRD Roads informed the Stakeholders at the early stages of the Action Planning process that the council would be responsible for on-street parking following RPA and therefore didn't want to commit themselves to this objective. However when RPA was suspended the remit returned to DRD Roads. Nothing has been done to date and RPA has since been re-ignited which means this objective could remain in limbo until authority for it has been granted. DRD Roads Service has commented that there are currently no plans to charge for on-street parking at Church Street or Perry Street in Dungannon.

7. To investigate the possibility of designating a number of free parking spaces in Market Square for electric/hybrid vehicles only.

Indicator - Included in drawings submitted to Northern Ireland Planning Service as part of Public realm Scheme in Dungannon. Ducting laid for electricity supply of recharging points and Road Works completed at Market Square. Long term reduction of NO2 in annual monitoring result.

Lead - Dungannon and South Tyrone Borough Council

DRD Roads Services advised the Stakeholder group that any change that would give priority parking to one particular type of motor vehicle would require a change in legislation. At this particular time, DRD Roads Service are not prepared to push for a change to the legislation as the requirement is not viable given the low numbers of electric and/or hybrid vehicles currently in the Northern Ireland fleet. However, DRDNI does support the installation of

electric vehicle recharging points within towns and cities in Northern Ireland where a requirement exists.

In early 2012 the Department of regional Development established an electric car charging point in conjunction with the Donnelly Group in Dungannon. The charging point is at the front of the Donnelly Groups Honda dealership and is within easy reach of the M1 at Junction 15. This charging point is a 'rapid e-car charger' which allows electric vehicles to recharge in 20-30 minutes. Dungannon and South Tyrone Borough Council supports the installation of recharging points throughout the Borough and will continue to do so.

Notices

<http://www.tyronetimes.co.uk/news/local/electric-car-charging-stations-appear-in-dungannon-1-3646932>

http://www.donnellygroup.co.uk/Company/AboutUs/NewsAndEvents/First_Electric_Car_Charger_Northern_Ireland.aspx

<http://www.facebook.com/ecarNI>

8. To investigate the possibility of creating a Low Emissions Zone within Dungannon Town Centre

Indicator - Dungannon and South Tyrone Borough Council & DRD to report back to AQMA stakeholder committee on possible measures.

Lead – D&STBC and DRD Roads

No work has been completed on this objective as yet. However, research shows the cost of such a proposal is excessive, with minimal return for places the size of Dungannon.

9. Investigate the possibility of a 'Park and Ride' scheme for shoppers and employees on the outskirts of Dungannon.

Indicator - Percentage of parking spaces being used on a daily basis. Long term reduction of NO2 in annual monitoring results

Lead – DRD Roads & Translink

A proposal exist for the provision of a Park And Ride Scheme close to the M1 junction at Stangmore and Tamnamore. Dungannon and South Tyrone Borough Council are awaiting verification of planning permission obtained by DRD Roads Service and the provision of a start date for construction of park and ride facilities at these sites.

10. Use the Northern Ireland Planning Service to ensure potential air quality issues are assessed with new developments before problems arise.

Indicator - Long term reduction of NO2 in annual monitoring results. Number of consultations on planning application by Dungannon and South Tyrone Borough Council

Lead - Dungannon and South Tyrone Borough Council)

There is a continual review of Planning Applications with concern for AQ emissions. Air Quality assessments of planning applications have been completed by SGECH AQ Officer on referral from D&STBC. Applications that have been referred to the AQ Officer during 2012 have included a supermarket in Coalisland and a crematorium.

11. Air quality assessment of vehicle emissions**Indicator - Long Term reduction of NO2 in annual monitoring results****Lead - Dungannon and South Tyrone Borough Council**

The AQ proposes to contact Alastair or Arlene at Belfast CC to source equipment for assessing vehicle emissions. This exercise is likely to take place at places of work such as council offices and other government agencies to begin with.

12. Cleaning up Council Vehicles**Indicator - Long term reduction of NO2 in annual monitoring results****Lead - Dungannon and South Tyrone Borough Council**

Clarification from Fleet Manager required.

13. Investigate the use of alternative fuels where possible.**Indicator - Report to be produced by Council on the viability of using alterative fuels for Council vehicles. Long term reduction of NO2 in annual monitoring results****Lead - Dungannon and South Tyrone Borough Council**

Clarification from Fleet manager required.

14. Vehicle upgrading/renewal programme to comply with EURO 5 emission standards.**Indicator - Two new Bin Lorries purchased to replace two older models being removed from service****Lead - Dungannon and South Tyrone Borough Council**

Clarification from Fleet manager required.

15. Develop better travel planning amongst Council employees.**Indicator - Travel plan produced and implemented by Council****Lead - Travelwise NI**

Travelwise NI have held a meeting with D&STBC and process of drawing up the travel plan is underway. Michael Lindsay of Travelwise NI stated in an update in August 2012 that further preliminary work on the travel plan needs

to be carried out in the coming months before the travel plan can be initiated, including an assessment of employee travel habits.

**16. Bin Collections to be restricted during peak traffic periods in Church Street.
Indicator - Instruction to be disseminated through Operational Services and placed on schedule of works.**

Lead - Dungannon and South Tyrone Borough Council

Clarification from Fleet Manager/Operational Services required.

17. Sustainable Development.

Indicator - Long Term reduction of NO2 in annual monitoring results

Lead - Dungannon and South Tyrone Borough Council

Continuous process organised via Sustainability Officer through Council Sustainability Policies.

18. Industrial Pollution Control

**Indicator - Long term reduction of NO2 in annual monitoring results.
Percentage of IPPC inspections completed by Dungannon and South Tyrone Borough Council.**

Lead - Dungannon and South Tyrone Borough Council

The council continues to investigate complaints through its environmental health functions and in association with Southern Group Environmental Health Committee. There were 39 premises in the Dungannon and South Tyrone Borough permitted under LAPPC. 100% of the required inspection programme was completed for these sites 2011-2012. There has been no significant increase or decrease in NO2 relative to bonfires within the AQMA.

19. Nuisance policy for dealing with burning of commercial and domestic waste.

Indicator - Long Term reduction of NO2 in annual monitoring results

Lead - Dungannon and South Tyrone Borough Council

The council continues to investigate complaints through its environmental health functions and in association with Southern Group Environmental Health Committee. There were 39 premises in the Dungannon and South Tyrone Borough permitted under LAPPC. 100% of the required inspection programme was completed for these sites 2011-2012.

20. Air Quality Awareness Promotion Campaign

Indicator - Production of visual, verbal and written materials for dissemination to general public highlighting air quality issues through various media.

Lead - Dungannon and South Tyrone Borough Council & Translink

April 2013

Dungannon and South Tyrone Borough Council

The provision of awareness campaigns is largely dependent on funds available for such projects. With the economic downturn there has been a decrease in the amount of funding available for organising such projects. However the council continues to support awareness of cycle schemes and use of public transport by piggy backing on the Travelwise initiatives. Literature, promotional material and merchandising are distributed to Council staff from Travelwise NI via the AQ officer on a regular basis.

Further Information

Dungannon and South Tyrone Borough Council intend to add 2 new actions to the AQMA and reissue an updated version of the Action Plan with the new objectives included. The 2 new actions will be numbered as Action 22 and Action 23. Details are given below.

Action 22 – Air dispersion modelling of sites where changes to air quality monitoring are proposed or for sites that have identified where a breach of the air quality objectives may occur.

Action 23 – Council lobbying for further electric vehicle recharging points within AQMA's.

Action 24 – The Council will encourage the installation and of new and bicycle stands at large supermarkets located within Dungannon and will promote the use of existing bicycle stands.

Action 25 – The Council will promote the benefits of Electric and Hybrid Vehicles to staff and the general public.

Action 26 – The Council will promote sustainable energy use which benefits local air quality through the STEM II project.