Rotherham MBC
Air Quality Action Plan

Draft for Statutory Consultation

In fulfilment of Part IV of the
Environment Act 1995
Local Air Quality Management

2016

Local Authority Officer	Julie Kent
Department	Regeneration and Environment
Address	Riverside House
Telephone	01709823193
E-mail	julie.kent@rotherham.gov.uk
Report Reference number	RMBCAQAP2016
Date	30 June 2016

Consultation

Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed below. The response to our consultation will be given in Appendix A after the consultation period. The consultation period will end on 14 August 2016.

Statutory consultees:

- the Secretary of State
- the Environment Agency
- the highways authority and Highways England
- all neighbouring local authorities

If you have comments on this AQAP please send them to Julie Kent at:

Community Safety and Street Scene, Riverside House, Main Street, Rotherham, S60 1AE

Email:julie.kent@rotherham.gov.uk

Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in Rotherham MBC between 2016-2020.

The Air Quality Action Plan (AQAP) follows the standard format published by Defra in statutory guidance (LAQM 2016). This action plan replaces the previous action plans which ran from 2002-2015. Some of the measures which have been developed over the last few years include:

- The South Yorkshire Care4air campaign
- ECO Stars Fleet Recognition Scheme
- Improvements to the bus fleet
- Delivering Air Quality Good Practice Planning guidance

Cleaner Euro 6 buses are now operating through our Fitzwilliam Road AQMA, The engagement with fleet operators through the ECO Stars Fleet Recognition Scheme is recognised nationally, and many other local authorities in England and Scotland have followed suit. However there are still challenges as the proportion of diesel vehicles in the fleet continues to rise, which increase the emissions of nitrogen oxides.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas[1,2].

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion[3]. Rotherham MBC is committed to reducing the exposure of people in Rotherham to poor air quality in order to improve health.

Air quality does not respect administrative boundaries. This is why Rotherham MBC works in partnership with other South Yorkshire Councils to improve air quality.

We have developed actions that can be considered under eight broad themes:

- Environmental permitting
- Policy guidance and development control
- Promoting low emission transport
- Promoting travel alternatives
- Public information
- Transport planning and infrastructure
- Traffic management
- Vehicle fleet efficiency

[1] Environmental equity, air quality, socioeconomic status and respiratory health, 2010
[2] Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006
[3] Defra. Abatement cost guidance for valuing changes in air quality, May 2013

Our priorities are the mitigation of air quality impacts though the planning process (Development Control); promoting low emission transport, in particular cleaner buses; taxi licensing; the installation of Electric Vehicle recharging infrastructure; promoting travel alternatives to the private car, raising public awareness especially of the impact of diesel vehicles on air quality in our towns and cities; and improving the efficiency of the Rotherham MBC Vehicle Fleet.

In this AQAP we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence such as vehicle emissions standards agreed in Europe and the proportion of diesel vehicles in the vehicle fleet, but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Rotherham MBC's direct influence.

Responsibilities and Commitment

This AQAP was prepared by Community Protection, Regeneration and Environment Directorate of Rotherham Metropolitan Borough Council.

However, much of the action plan has been developed regionally by the South Yorkshire (now Sheffield City Region) Air Quality and Climate Group which has membership from the Environmental Health, Public Health, and Transportation teams of the South Yorkshire local authorities and from the South Yorkshire Local Transport Plan Central Team and also the Sheffield City Region. Air quality action planning is a continuous process and this action plan will be updated regularly.

This AQAP will be approved by the senior leadership team after the consultation

period is complete.

This AQAP will be subject to an annual review, appraisal of progress and reporting to the Cabinet member for Regeneration and Environment and Director of Public Health. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Rotherham MBC, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Julie Kent at:

Community Safety and Street Scene, Riverside House, Main Street, Rotherham, S60 1AE

01709 823193

Email:**julie.kent@rotherham.gov.uk**

Table of Contents

List of Tables

List of Figures

1. Introduction

This plan presents the actions which are being planned or carried out by Rotherham Metropolitan Borough Council (Rotherham MBC), in partnership with the other South Yorkshire authorities, the South Yorkshire Passenger Transport Executive, and other local bodies and agencies in pursuit of the Air Quality Objectives in the metropolitan borough of Rotherham. If follows the Department for Environment, Food and Rural Affairs statutory LAQM (TG16) Air Quality Action Plan format.

Rotherham should be a place where the air is healthy for all to breathe. Rotherham Metropolitan Borough Council is committed to help improve the health and wellbeing for the people of Rotherham, and a key component of this is protecting and improving air quality. Elevated levels of air pollution have a negative impact on our health, particularly on the young and the elderly, resulting in significant levels of illness, early death and financial costs to the NHS and wider society.
Rotherham MBC's key priorities include:

- *every child makes the best start in life*
- *we have a strong community a clean, safe environ*ment

Air quality indicates the level of air pollution. When air quality is acceptable we mean a low level of air pollutants, specifically nitrogen dioxide (NO_2) and fine particles ($PM_{2.5}$) are present in the air we breathe. Unacceptable air quality exists where these pollutants exceed National and European Union thresholds.

Central Government has consistently predicted air quality will improve as vehicle technology improves. In reality this has not occurred as forecast improvements on emission levels have been shown to be over-optimistic. The areas with the highest levels of air pollution are those particularly close to busy roads.

However, there can be some optimism regarding the prospect of improving air quality in Rotherham and the rest of South Yorkshire. The case for alternative fuels has never been stronger and work has started on some innovative and ground-breaking schemes to improve air quality.

This Action Plan has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process. It updates and refreshes the previous Rotherham AQAPs, which were produced in 2002, 2007 and 2014.

This Plan will be reviewed every two years and progress on measures set out within this Plan will be reported on annually within Rotherham MBC's air quality Annual Status Report as required by the Department for Environment, Food and Rural Affairs.

2. Summary of Current Air Quality in Rotherham

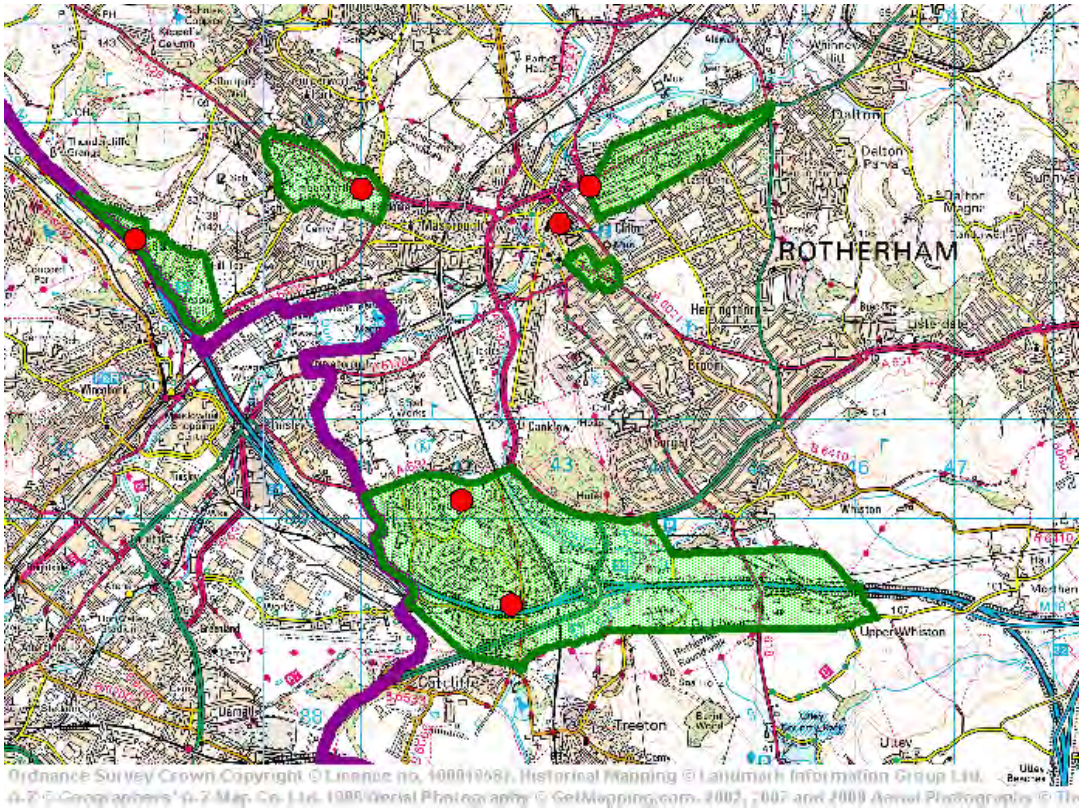
Central Government has predicted for several years that air quality will improve as vehicle technology improves. In reality this has not occurred as forecast improvements on emission levels, particularly NOx, have been shown to be over-optimistic, particularly for diesel vehicles. The areas with the highest levels of air pollution are those closest to busy roads.

Air Quality Management Areas

Rotherham MBC has previously produced air quality action plans for the M1 and Rotherham Town Centre Air Quality Management Areas (AQMAs). This Air Quality Action Plan covers the whole of the borough. There are approximately 30,000 people resident in the Rotherham AQMAs. However, not all people resident in an AQMA are exposed to the highest levels of air pollution. The designated AQMAs are as follows:

- M1 AQMA for annual average nitrogen dioxide (July 2001)
- Wales M1 AQMA for annual average nitrogen dioxide (July 2003)
- A630 AQMA for annual average nitrogen dioxide (November 2004)
- A6021 (Wellgate) AQMA for annual average nitrogen dioxide (November 2004)
- A629 (Bradgate) AQMA for annual average nitrogen dioxide (November 2004)
- Amendment to the M1 AQMA for annual average nitrogen dioxide to include the additional area of Blackburn (March 2010)

Figure 1 Map of AQMA Boundaries – 2016



(**Note - This does not include the Wales AQMA which is to the south close to the M1 motorway**)

3. Rotherham MBC's Air Quality Priorities

3.1 Public Health Context

Air pollution affects people's health. The impact is not equal, more impact is felt by the young, the old, and those with pre-existing health conditions. Air pollution is now ranked the 5th cause of reduced lifespan in UK towns and cities. There are no safe levels of particulate matter and it is toxic well below the EU and UK standards. Any improvement in air quality will have positive health benefits for the population.

During the last 10 years, the scientific understanding of the health effects of ambient air pollution has changed dramatically as a result of thousands of studies. The population effects of air pollution are now quantifiable and in 2010, the Department for Health Committee on the Medical Effects of Air Pollution concluded that fine particles ($PM_{2.5}$) led to an annual loss of 340,000 life years in the UK. A Public Health Indicator based on levels of fine particles ($PM_{2.5}$) was introduced in the Public Health Outcomes Framework. Rotherham Public Health has carried out a Health Impact Assessment of air quality. This found that there is a link between health outcomes in the borough and poor air quality.

The recent Public Health England Report, Estimating Local Mortality Burdens associated with Particulate Air Pollution (April 2014) indicated that Rotherham is the second worst place in the Yorkshire &Humber region for anthropogenic $PM_{2.5}$ – attributing ~140 deaths per year or ~1400 years of life lost each year as a result of (man-made) air pollution.

3.2 Planning and Policy Context

The Council's Sites and Polices Document includes Delivering Air Quality- Good Practice guidance, which sets out the importance of good design for new developments and emissions reduction good practice.

3.3 Source Apportionment

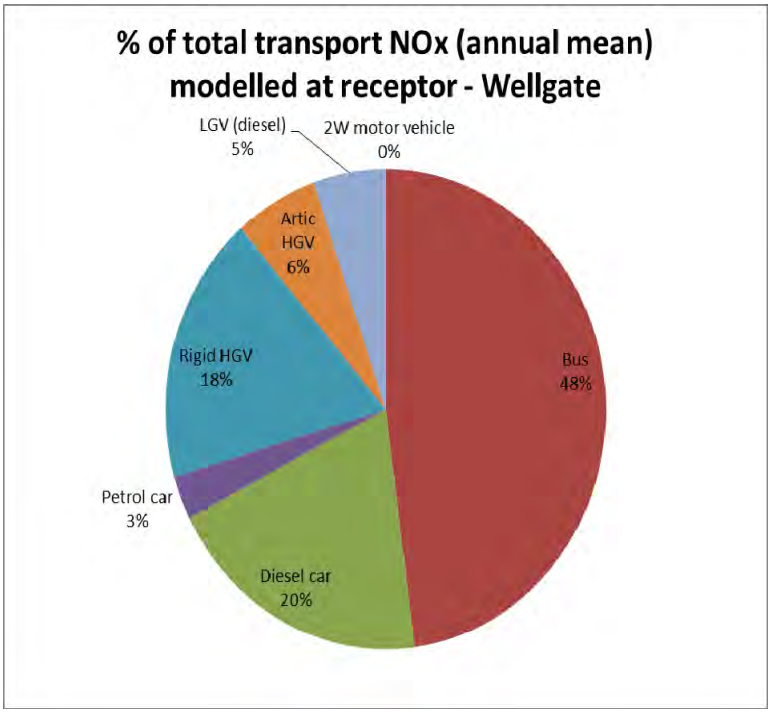
The AQAP measures presented in this report are intended to target the predominant sources of emissions of NOx and fine particulate matter in Rotherham.

Source apportionment was carried out by Rotherham MBC in 2015. Breakdown of total oxides of nitrogen (NOx) emissions in South Yorkshire, using dispersion modelling, estimates that 53% of emissions within the county are attributable to industrial, commercial and domestic sources, whilst the remainder (47%) are due to road transport emissions. All AQMAs in Rotherham have been declared because of road transport emissions.

Road traffic emissions have been further modelled, in order to calculate the percentage contribution of each vehicle type to the transport sector emissions in each AQMA. These results are presented below for each of the Rotherham town centre AQMAs

The percentage source contributions (modelled) follows for a sensitive receptor in each town centre AQMA:

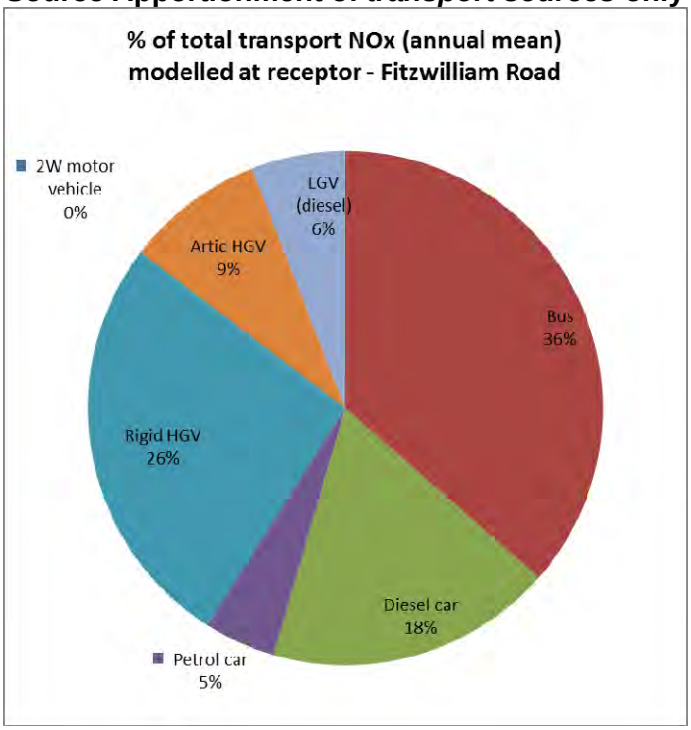
Figure 2 Wellgate (A6021) AQMA Source Apportionment
Source Apportionment of *transport sources* only



Note: Receptor used - Wellgate grid reference 443076 392666
% Petrol Car 56%, Diesel Car 44% (Urban NAEI).
Concentration at receptor 40.3µg/m^3.

Figure3 Rotherham St Ann's/Fitzwilliam Road AQMA Source Apportionment

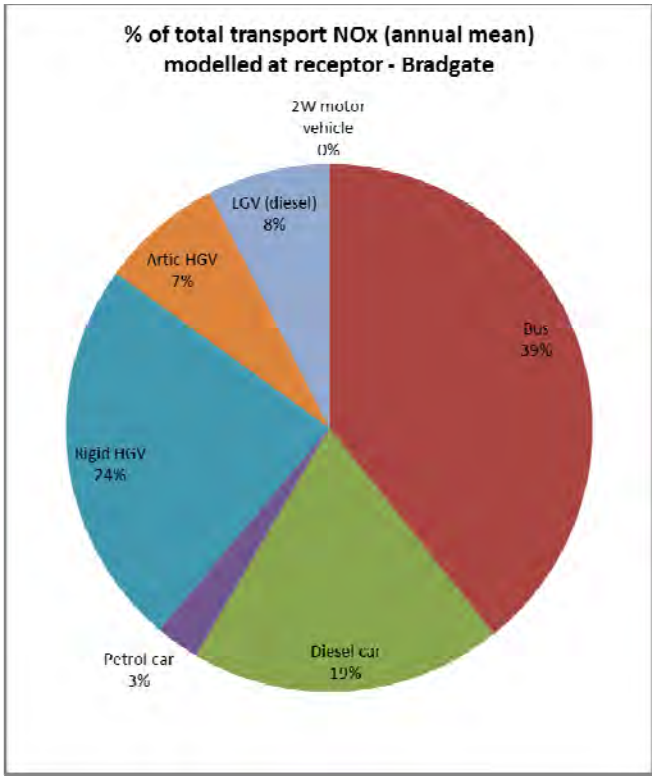
Source Apportionment of *transport sources* only



Note: Receptor used Fitzwilliam Road 443330 393408
% Petrol Car 56%, Diesel Car 44% (Urban NAEI). Concentration at receptor 46.1µg/m^3
Fitzwilliam Road (A630)

Figure 4 A629 Bradgate Air Quality Management Area Source Apportionment

Source Apportionment of *transport sources* only Wortley Road AQMA



Note: Receptor used Wortley Road 441333 393323
% Petrol Car 56%, Diesel Car 44% (Urban NAEI).
Concentration at receptor 52.6µg/m^3

Source appportionment shows the significance of the emissions from diesel vehicles (buses and diesel cars and vans).

3.4 Required Reduction in Emissions

The reductions in NOx required in order to achieve compliance with the National Objectives for everyone living in the town centre AQMAs have been calculated in line with Technical Guidance LAQM.TG16 and follow in Table 3.1

Table 3.1

Air Quality Management Area	% reduction in 2015 road NOx levels required for compliance with national standards
Fitzwilliam Road	21.4%
A629/Bradgate	36.6%
Wellgate	11.9%
M1 (Blackburn, Highways England)	43.5%

3.5 Key Priorities

The areas which are prioritised for action are:

- Priority 1 – Implementation of Policy Guidance and mitigation of air quality impacts though Development Control
- Priority 2 - Promoting Low Emission Transport in particular cleaner buses, taxi licensing and recharging infrastructure
- Priority 3 - Promoting Travel Alternatives to the private car
- Priority 4 - Raising public awareness through Public Information
- Priority 5 - Efficiency of the Rotherham MBC Vehicle Fleet

4 Development and Implementation of the Rotherham MBC AQAP

4.1 Consultation and Stakeholder Engagement

Rotherham Metropolitan Borough Council (Rotherham MBC), works in partnership with the other South Yorkshire authorities, the South Yorkshire Passenger Transport Executive, and other local bodies and agencies to improve local air quality. We work with other local authorities, agencies, businesses and the local community. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. The response to our consultation stakeholder engagement will be given in Appendix A after the consultation period.

Table 4.1 – Consultation Process

Yes/No	Consultee
	the Secretary of State
	the Environment Agency
	the highways authority
	all neighbouring local authorities
	other public authorities as appropriate, such as Public Health officials
	bodies representing local business interests and other organisations as appropriate

The consultation period ends on 14 August 2016.

4.2 Steering Group

The Sheffield City Region Air Quality and Climate Change Steering Group (previously the South Yorkshire LTP3 Air Quality and Climate Change Steering Group which has membership from the South Yorkshire Local Transport Plan Central Team, the Sheffield City Region, Rotherham MBC, Sheffield CC, Doncaster MBC, and Barnsley MBC highways and transportation and air quality officers, South Yorkshire Passenger Transport Executive, the Safer Roads Partnership and Public Health has led on the development of many of the measures in this AQAP. The group meets bi monthly.

During 2016, Rotherham MBC will be establishing a Rotherham AQAP Steering Group which will include RMBC transportation, planning, community protection and public health officers. Highways England and the Environment Agency will be invited. Air quality action planning is a continuous process, as measures are developed and implemented and funding opportunities become available, the AQAP will be updated.

The South Yorkshire ECO Stars Steering Group (Rotherham MBC, Sheffield CC, Doncaster MBC, Barnsley MBC and other Local Authority Scheme Managers) meets bi-monthly to take the ECO Stars scheme forward.

5 AQAP Measures

1 Rotherham MBC Low Emission Strategy

Rotherham MBC's Low Emission Strategy forms Appendix B of the Rotherham Air Quality Action Plan 2016

2. Smart M1 Motorway Scheme

Highways England (HE) is constructing a smart motorway between J32 and J35A through Rotherham, which will add extra capacity to the M1 to allow for future traffic growth. The proposed scheme converts the Hard Shoulder permanently to a running lane with speed control across all lanes using Variable Mandatory Speed Limits and brings the traffic closer to receptors living in the M1 AQMA. HE recognized that this growth will need to be managed to ensure that additional traffic does not make air quality significantly worse for local people living near the motorway. HE consulted on introducing a maximum upper 60mph speed limit on the M1 between junction 28 and 35a, between 07.00 and 19.00 7 days a week which was predicted to constrain traffic growth to a level that would not cause new problems within Rotherham's M1 Air Quality Management Areas or make matters worse for local people.

However, in September 2015, HE produced the M1 J28 to 35a Smart Motorway Updated Operating Regime Environmental Assessment Report. Following completion of the challenge period, on the 8th of July 2014, the Secretary of State for Transport (SoS) gave the following position: '*The Secretary of State has not accepted this approach as the Government's preferred option for managing local air quality on the M1 and tasked Highways England to identify other measures which achieved the necessary reduction. Speed restriction is to be used only to the extent that is absolutely necessary*'.

The consultants Mouchel were instructed by Highways England (HE) to model alternative mitigation measures and progress the proposed scheme through its Determination process, whilst construction of the scheme progressed during the next 2015-2016. The mitigation option preferred by HE is now -60mph weekday AM and PM peak, 70mph at all other times. HE's own modelling shows that this could increase annual mean nitrogen dioxide in Rotherham by 2ug/m^3 at the worst affected receptors in the Rotherham M1 AQMA. The Council has no powers with respect to the motorway.

As a result of development of cleaner engines and the uptake of these into the fleet, in future years it is envisaged that the air quality will improve and at that stage HE can remove the upper speed limit and revert to the national speed limit again.

The Highways Agency project page http://www.highways.gov.uk/roads/road-projects/m1-junctions-32-35a/ provides further information.

3. ECO Stars Fleet Recognition Scheme

The ECO Stars (Efficient and Cleaner Operations) Fleet Recognition Scheme is a free, voluntary scheme designed to provide recognition, guidance and advice to operators of goods vehicles, buses and coaches to help them reduce fuel use and emissions. The core of the scheme is a 'road map' of measures designed to help operators improve their performance. The measures include both vehicle improvements and operational improvements.

The scheme was first set up in South Yorkshire as part of the Clean Air Campaign Care4Air, and has now been rolled out to a number of other authorities including the City of York, Thurrock, Mid Devon and Nottingham. The scheme in South Yorkshire has over 80 members operating over 7,000 vehicles between them. A comprehensive quantitative and qualitative assessment of the scheme has been undertaken in order that operators can more accurately assess their environmental and air quality impacts.
http://www.ecostars-uk.com/

4 Sheffield City Region – Electric Vehicle Recharging Infrastructure Project

This proposed project is subject to funding and aims to increase the number of rapid Electric Vehicle charging points in South Yorkshire. It will build on the previous "Inmotion" Electric Vehicle project which was funded by the Department for Transport's Local Sustainable Transport Fund .

5 Compressed Natural Gas vehicles/ CNG refuelling infrastructure

A feasibility study has been carried out in South Yorkshire to establish the most suitable sites for compressed natural gas (CNG) refuelling stations. There are several excellent potential sites in South Yorkshire where the high pressure gas main is suitably close to the surface on a fleet operator's premises, close to the major road network.

One of the potential CNG refuelling sites is in Rotherham on Hellaby Industrial estate close to the M18. CNG refuelling stations require considerable investment and realistically the private sector will need to invest to develop this technology. Potential private investors have shown interest in South Yorkshire's sites.

6 Hydrogen vehicle re-fuelling infrastructure and vehicle trial

ITM Power has opened a publically available hydrogen fuel cell vehicle refuelling station at the Advanced Manufacturing Park in Rotherham. Rotherham Council will participate in the FCEV Fleet Support Scheme run by the Office for Low Emission Vehicles Hydrogen Vehicle trial project if successful in gaining funding.

7. Rotherham MBC Public Health/Community Protection Project: $PM_{2.5}$ Monitoring and a Health improvement Plan

Public Health/Community Protection will lead on developing an evidence-based plan of various measures which the Council can carry out to reduce exposure to $PM_{2.5}$. This could include such measures as street works, changes to street cleansing, low emission routes, changes to taxi licensing, green infrastructure etc., which could reduce exposure to harmful particulate pollution and improve health. The project will build on the Health Impact Assessment of Air Quality in Rotherham published in 2014. Further information and health advice will be made available during periods of high air pollution.

8- Air Quality Monitoring

Rotherham Council takes its Local Air Quality Management duties seriously and has a network of automatic monitoring stations measuring nitrogen dioxide located within its AQMAs. Monitoring is essential in order to measure changes in levels of air pollution and will continue. The Council will also measure levels of nitrogen dioxide through the use of diffusion tube surveys which enable a much greater spatial coverage of the borough. Monitoring of $PM_{2.5}$ within the town centre AQMAs is also a priority.

9- Air Quality Modelling

The Council has developed a sophisticated air quality model using the Swedish Meteorological and Hydrological Institute's Airviro system. The emissions database and modelling work is carried out in partnership with the other South Yorkshire local authorities and it is essential for predicting future levels of air pollution, predicting the impacts of developments and transport schemes. The impacts of changes to the composition of the vehicle fleet can also be modelled.

10 - Care4air Campaign

The South Yorkshire Care4air Campaign uses social marketing to inform and to try to influence behaviour.
http://www.care4air.org/

Care4Air
South Yorkshire Clean Air Campaign

11 Enforcement of the Clean Air Act 1993 with regards to industrial smoke

The enforcement of Clean Air Act 1993 with regards to industrial smoke impacts on levels of $PM_{2.5}$ in particular.

12 Enforcement of the Clean Air Act 1993 with regards to domestic smoke control

The enforcement of Clean Air Act 1993 with regards to industrial smoke impacts on levels of $PM_{2.5}$ in particular.

13- Rotherham Bus Partnership

Rotherham Bus Partnership brings together Rotherham Metropolitan Borough Council, South Yorkshire Passenger Transport Executive, and local bus operators First South Yorkshire, Stagecoach Yorkshire and East Midlands, Powells and TM Travel, in a bid to improve bus services in the town and surrounding area.

The aim is to make bus travel in Rotherham better by offering reliable, convenient and coordinated services with value for money fares. It will provide better access to jobs, schools, hospitals and leisure activities by creating a customer-focused bus network that offers an alternative to the car – which could help to reduce congestion and delays on the town's roads and contribute to improving air quality.

The partnership has developed a new bus network for Rotherham and a selection of new coordinated tickets that can be used on any bus in the town.

http://www.rotherhambuspartnership.co.uk/

14 Local road schemes – Waverley link road/ Tinsley Link

New link roads confirmed to date:

- a high quality Bus Rapid Transit (BRT) service connecting Rotherham and Sheffield and with existing and proposed development sites in the Lower Don Valley
- a new highway link under the M1 (the "Tinsley Link") between Meadowhall Way and Sheffield Road
- highway modifications to provide BRT priorities at congested sections of the route
- revised junction layouts and intelligent traffic signal control to provide BRT priority at junctions
- high quality low emission vehicles purpose built bus stops with real-time passenger information and off-vehicle ticketing facilities

15 Delivering Air Quality Good Practice Planning Guidance

Rotherham MBC's Delivering Air Quality Planning Guidance forms part of the council's Sites and Policies document and can be found at:

http://rotherham.limehouse.co.uk/file/3139862

16 Green infrastructure

Green infrastructure is the network of accessible "greenspaces" and natural habitats which occur both within and which can connect towns and villages. Within built-up areas, green infrastructure assets include public parks, recreation grounds, playing fields, woodland, living screens, street trees, allotments, informal open green

spaces, churchyards and cemeteries. Outside built-up areas green infrastructure broadly comprises natural and semi-natural green spaces such as woodlands and local nature reserves.

Green Infrastructure functions in many different ways and provides multiple benefits for wildlife, improved health and well-being of people, local food production, mitigating climate change (such as flood alleviation) and for the local economy (by providing a high quality environment to help attract further economic investment).

17 - Rotherham MBC Fleet Improvement

Rotherham MBC's current fleet is recognised as the best local authority fleet in South Yorkshire having achieved a 4 star ECO Stars rating. The Council currently leases its fleet and from 2015 began a vehicle replacement process. A key factor in future vehicle selection will be vehicle efficiency and emissions reduction ensuring most vehicles comply with the latest Euro emissions standards (currently Euro6) as soon as possible.

18 – Control Industrial Emissions

The Council will work closely with the Environment Agency and with the industrial process operators regulated by Rotherham MBC to control emissions to air and reduce them wherever improvement is required as new pollution abatement technology becomes available.

19 – Improvements to Bus Services through AQMAs

The Council does not operate buses. Improvements to the bus fleet operating in AQMAs have the potential to improve air quality through reductions in emissions. The x78 bus service which runs through the Fitzwilliam Road AQMA, has a brand new fleet of Euro 6 buses. The impact on air quality will be monitored. Other schemes in South Yorkshire include the Clean Vehicle Technology Fund Thermo Management Technology (TMT) retrofitting scheme, which reduces existing NOx emissions by raising exhaust-gas temperatures. See http://www.care4air.org/news/clean-vehicle-technology-fund/

20 – Taxi Licensing

Improving the hackney carriage and private hire fleet in Rotherham is a key priority. It will contribute to community safety and to tackling local air quality issues, by encouraging taxi operators to improve their vehicles. The council aims to ensure that taxi and private hire vehicles are of a good standard. In the interests of passenger safety and comfort, and in support of these policies, the council will introduce both vehicle emission standards and age requirements for licensed hackney carriage and private hire vehicles as part of the licensing process.
http://www.rotherham.gov.uk/news/article/511/new_taxi_licensing_policy_agreed

21 SCR Sustainable Transport Transition Year Fund

The Sheffield City Region Combined Authority has been awarded funding from the Sustainable Transport Transition Year Fund: for “Active, Connected, Efficient” The fund supports local sustainable transport initiatives that can demonstrate they will: support the local economy; reduce carbon emissions (and improve air quality); improve access to education and employment; and increase physical activity through cycling and walking.

In addition to the funding awarded to the SCR, Rotherham was also part of a successful collaborative bid Led by Birmingham City Council to provide local *Living Streets* coordinators. The “Walk To” project is an extension of an LSTF project that worked with schools, businesses and communities to increase levels of walking. The success of the project in 2015-2016 led to increases in walking to school in all the schools targeted. Community street audits demonstrated barriers to walking which are being addressed using a dedicated allocation of LTP funding. Areas suffering traffic congestion are being targeted, this should help to reduce emissions and improve air quality.

Table 5.1 below shows the Rotherham MBC AQAP measures, formatted as required by the Department for Environment Food and Rural Affairs.

Please see future Annual Status Reports for regular annual updates on implementation of these measures.

Table 5.1 – Air Quality Action Plan Measures

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
1	Rotherham MBC's Low Emission Strategy	Promoting Low Emission Transport	Other	Rotherham MBC	complete	2016-2020	N/A	Low[1]	Complete	2020	Appendix B
2	M1 HE smart motorway scheme Mitigation of air quality impacts through speed management	Traffic Management	Strategic highway improvements	Highways England	complete	2017-2030	N/A	Highways England -for opening year, not to worsen air quality	Design complete. Construction phase 2015-2017	Scheme operational 2017	Highways England modelling predicts up to 2ug/m^3 increase at receptors in Rotherham as a result of the scheme in the opening year, 2017.
3	ECO Stars Fleet Recognition Scheme	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	Barnsley MBC on behalf of the 4 South Yorkshire Councils	complete	2008-present	No of members No of vehicles	Low[1]	100 members	On-going	
4	Infrastructure for refuelling low emission vehicles (1) Electric Vehicle Infrastructure	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging,	Sheffield City Council on behalf of the 4 South Yorkshire Councils	2016	2016-2019	No of EV vehicles re-charging points and interactions	Low[1]	NA	2020	2016

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
5	Develop the infrastructure for refuelling low emission vehicles (2) CNG refuelling infrastructure	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Sheffield City Council is lead partner, Rotherham MBC, Barnsley MBC and Doncaster MBC are partners	Subject to investment	Subject to investment	N/A	N/A	Feasibility	2020-2025	
6	Develop the infrastructure for refuelling low emission vehicles (3) Hydrogen vehicle re-fuelling infrastructure and vehicle trial	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	ITM Power	complete	Vehicle trial 2016-2019	Publically accessible H2 filling station	Low[1]	Installation of filling station complete and open to the public	2016 for the filling station; Vehicle trial 2016-17	OLEV funding required for the H2 vehicle trial
7	Public Health/Community Protection $PM_{2.5}$ and Health Improvement Plan	Public Information	via other mechanisms	Rotherham MBC	ongoing	2016-2020	PHOF 3.1	reduction in emissions of $PM_{2.5}$ in AQMAs	Options appraisal	2020	Funding needed for mitigation measures
8	Air Quality Monitoring	Other	Other	Rotherham MBC	N/A	2016-2020	PHOF 3.1	N/A	See Annual Status Report 2016	N/A	
9	Air Quality Modelling	Other	Other	Rotherham MBC	N/A	2016-2020	PHOF 3.1	N/A	See Annual Status Report 2016	N/A	

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
10	Care4air	Public Information	via the Internet	South Yorkshire Councils	Complete	ongoing	NA	NA	www.care4air.org	2020	Funding required
11	Enforcement of the Clean Air Act 1993 with regards to industrial smoke	n/a	n/a	Rotherham MBC	n/a (ongoing)	ongoing	No suitable indicator can be determined	No suitable target annual emission reduction measure can be determined for this measure	ongoing	NA	Contributes to general emission reduction, but not targeted to AQMAs, therefore difficult to quantify
12	Enforcement of the Clean Air Act 1993 with regards to domestic smoke control	n/a	n/a	Rotherham MBC	n/a (ongoing)	ongoing	No suitable indicator can be determined	No suitable target annual emission reduction measure can be determined for this measure	ongoing	NA	Contributes to general emission reduction, but not targeted to AQMAs, therefore difficult to quantify
13	Rotherham Bus Partnership	Transport Planning and Infrastructure	Public transport improvements -interchanges stations and services	Rotherham Bus Partnership Rotherham MBC, SYPTE, Bus operators	Complete	2015-2020	%Euro 5 or better in Rotherham bus fleet	High[1]	Euro 6 buses on high frequency route through A630/Fitzwilliam Road AQMA	2020	Air Quality Monitoring on key routes will be used to measure improvements in air quality
14	Local road schemes – Waverley link road/ Tinsley Link Road	Traffic Manage-ment	Other	Rotherham MBC	Complete	2015-2017 Tinsley Link Road	NA	Low[1]	Feasibility (Waverley) Construction started Tinsley Link	2017	
15	Emissions and Air Quality Planning Guidance	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	RMBC	Complete	2015	N/A	Medium[1]	Delivering Air Quality – Good Practice Guidance http://rotherham.limehouse.co.uk/file/3139862	2020	

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
16	Promoting green infrastructure	Transport Planning and Infrastructure	Other	Rotherham MBC	complete	2015-2020	N/A	Exposure reduction	Sites identified	2020	
17	Rotherham MBC Fleet Improvement Programme	Vehicle Fleet Efficiency	Other	Rotherham MBC	ongoing	ongoing	ECO Stars Fleet Rating	Low[1]	New fleet of refuse collection vehicles	2020	
18	Control Industrial Emissions (Part B and A2 processes)	Promoting Low Emission Plant	Emission control equipment for small and medium sized stationary combustion sources / replacement of combustion sources	Rotherham MBC	Installation dependent	Installation dependent	No suitable indicator can be determined	No suitable target annual emission reduction measure can be determined	ongoing	n/a	Contributes to general emission reduction, but not targeted to AQMAs, therefore difficult to quantify
19	Improvement to bus services through AQMAs	Vehicle Fleet Efficiency	Vehicle retrofitting programmes	SYPTE	Project dependent	Project dependent	% NOx reduction	High[1] Project dependent	2 large retrofitting projects in South Yorkshire	2020	
20	Taxi licensing	Vehicle Fleet Efficiency	Other	Rotherham MBC	Complete	2016-2020	% improvement in NOx emissions	Medium[1]	http://www.rotherham.gov.uk/news/article/511/new_taxi_licensing_policy_agreed	2020	

Measure No.	Measure	EU Category	EU Classification	Lead Authority	Planning Phase	Implementation Phase	Key Performance Indicator	Target Pollution Reduction in the AQMA	Progress to Date	Estimated Completion Date	Comments
21	Sustainable Transport Transition Year fund-SCR Cycling and walking Scheme	Promoting Travel alternatives	Promotion of cycling; Promotion of walking	SCR	Complete	2016-2017	NA	Emissions of NOx and $PM_{2.5}$ in Rotherham should be reduced but a target reduction has not been determined	N/A	2017	

[1]Target Pollution (Emissions) Reduction in AQMA : low -0-1%; medium 1-2%; high >2%.

Note -target emissions reduction can only be accurately quantified where very local and specific measures are implemented; for example when specific detail about vehicle replacement is planned and operated on a fixed route. This is well documented in many national and local plans across the UK, therefore in line with this is has not been possible to accurately predict an accurate target reduction for some action plan measures. The plan contains some strategic and policy measures covering the whole borough or the whole of South Yorkshire; in these cases, an attempt has been made to estimate the likely impact of the kind of reduction across the borough that may be expected.

Appendix A: Delivering Air Quality Good Practice Guidance

http://rotherham.limehouse.co.uk/file/3139862

Appendix B: Rotherham Low Emission Strategy

Appendix C: Response to Consultation

Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response

Appendix D: Reasons for Not Pursuing Action Plan Measures

Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
RMBC	Rotherham Metropolitan Borough Council

References

Part IV of The Environment Act 1995 sets provisions for protecting air quality in the UK and for local air quality management.

The Air Quality (Standards) Regulations 2010 transpose into English law the requirements of Directives 2008/50/EC and 2004/107/EC on ambient air quality. Equivalent regulations have been made by the devolved administrations in Scotland, Wales and Northern Ireland.

The Air Quality (England) Regulations 2000 set national objectives for local authorities in England.

The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom. The Committee on the Medical Effects of Air Pollutants (COMEAP) (2010) https://www.gov.uk/government/publications/comeap-mortality-effects-of-long-term-exposure-to-particulate-air-pollution-in-the-uk

Public Health England. (2013). Health Protection: http://www.phoutcomes.info/public-health-outcomes-framework#gid/1000043/pat/6/ati/101/page/8/par/E12000002/are/E06000008

Department for Environment, Food and Rural Affairs, *Communicating with the public on air pollution - A guide for Directors of Public Health*, February 2015

Policy Guidance LAQM.PG16 http://laqm.defra.gov.uk/supporting-guidance.html

Technical Guidance LAQM.TG16 http://laqm.defra.gov.uk/supporting-guidance.html

Environmental equity, air quality, socioeconomic status and respiratory health, 2010

Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

Defra. Abatement cost guidance for valuing changes in air quality, May 2013

Sheffield City Region Combined Authority, February 2016, draft Air Quality and Climate Action Plan 2016-2021

Defra, December 2015, Improving air quality in the UK – Tackling nitrogen dioxide in our towns and cities, UK overview document

Defra, December 2015, Air Quality Plan for the achievement of EU air quality limit value for nitrogen dioxide (NO_2) in Yorkshire and Humberside (UK0034)