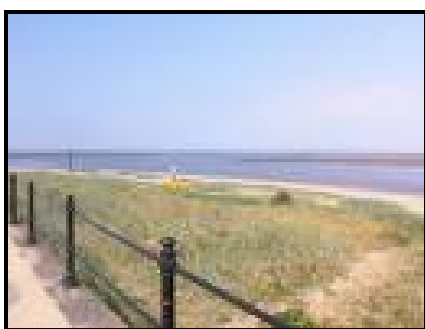




Wyre Borough Council

Air Quality Draft Action Plan

February 2011



Local Authority Officer	Neil Martin
--------------------------------	-------------

Department	Environmental Protection
Address	Civic Centre, Breck Road, Poulton-le-Fylde, Lancs, FY6 7PU
Telephone	01253887452
e-mail	pollution@wyrebc.gov.uk

Report Reference number	Action Plan 1
Date	February 2011

Contents

Executive Summary	- 4 -
Background	- 5 -
Duties for Local Air Quality Management.....	- 5 -
Requirements of an Action Plan.....	- 5 -
Review and Assessment of air quality in Chapel Street Poulton-le-Fylde.	- 7 -
Screening reviews and assessments of local air quality	- 7 -
Declaration of an air quality Management Area in Poulton-le-Fylde	- 7 -
Further Assessment Report.....	- 7 -
Monitoring of local air quality carried out in Chapel Street.....	- 8 -
The Air Quality Problem in Chapel Street Poulton-le-Fylde	- 9 -
Main sources of air pollution within Chapel Street AQMA	- 9 -
The Findings of the Further Assessment Report (August 2010)	- 9 -
Required reductions in NO _x air pollution	- 10 -
Other Local Factors to Consider	- 10 -
Congestion	- 10 -
Source apportionment	- 10 -
Topography	- 10 -
Other Policies	- 11 -
Local Plan	- 11 -
Community Strategy	- 11 -
Air Quality Strategy	- 11 -
The consultation process.....	- 12 -
Options suggested for improving air quality.....	- 13 -
Additional Actions for measuring the effectiveness of the AQAP.....	- 13 -
Assessment of air quality measures	- 14 -
Conclusions.....	- 15 -

Executive Summary

This Action Plan has been developed in recognition of the legal requirement of the Local Authority to work towards air quality objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part.

Wyre Borough Council is required to produce an Air Quality Action Plan (AQAP) following the declaration of an Air Quality Management Area (AQMA) covering Chapel Street, Poulton-le-Fylde and the Further Assessment Report published in August 2010.

This air quality action plan:

- Identifies and assesses potential air quality options for improving local air quality within the designated AQMA.
- Proposes implementation of those options that are relevant to Local Air Quality Management and are capable of bringing about improvements in air quality within the AQMA.

Public Consultation

This draft AQAP is now open for public consultation until the **28th March 2011**. Any comments should be sent to Wyre Borough Council's Environmental Protection Team either:

Online at <http://consult.wyrebc.gov.uk/public/aqap>

by post to:

Wyre Borough Council
Environmental Protection
Civic Centre
Breck Road
Poulton-le-Fylde
FY6 7PU.

or e-mail: pollution@wyrebc.gov.uk

Background

Duties for Local Air Quality Management

This Action Plan has been developed in recognition of the legal requirement of the Local Authority to work towards air quality objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part.

Following the Updating and Screening Report in 2009 Wyre Borough Council (The Council) carried out a detailed assessment of Chapel Street, Poulton-le-Fylde. The results of this detailed Assessment led to the declaration of an Air Quality Management Area (AQMA) for breach of the annual Nitrogen Dioxide air quality objective, full details of the AQMA are given in Appendix A.

Preceding the declaration of the AQMA the authority undertook a Further Assessment of the area to:

- Confirm the original assessment thus ensuring the Council were right to declare an AQMA.
- Identify the contributory sources of pollution to the local air quality.
- Determine how much of an improvement is required to meet the objective.

This action plan is the next step in the process of improving the air quality within the designated AQMA.

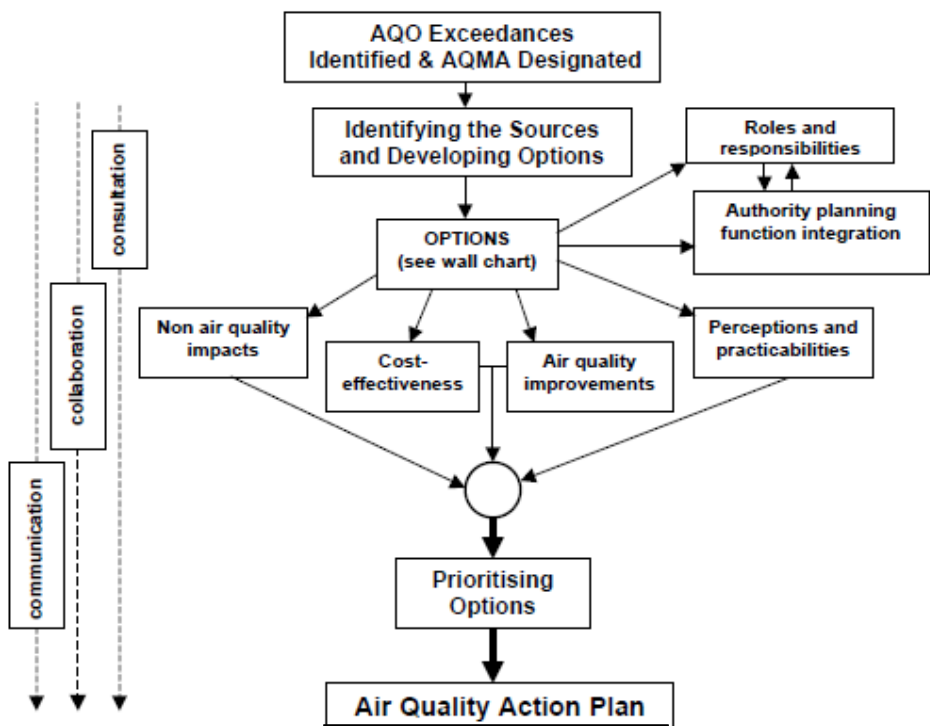
Requirements of an Action Plan

Where stage 4 of the LAQM process, a Further Assessment Report, confirms that any of the air quality objectives are unlikely to be achieved the relevant responsible local authority is required to produce a written Air Quality Action Plan (AQAP). This action plan must set out the actions the authority intends to take in pursuit of the air quality objectives, including a timetable for implementing the plan.

The action plan should also contain simple estimates of the costs and feasibility of implementing the identified scenarios, including the non-health impacts of each scenario. This will allow the authority to identify the most cost-effective ways of improving air quality.

Public consultation should then be undertaken on the draft AQAP. An outline of the action planning process is shown below in Figure 1.

Figure 1: The Process for Developing Air Quality Action Plans



Review and Assessment of air quality in Chapel Street Poulton-le-Fylde.

This section summaries the process followed, key actions and conclusions reached by Wyre Borough Council during the review and assessment of Chapel Street.

Screening reviews and assessments of local air quality

The Council undertook a Detailed Assessment of Chapel Street, Poulton-le-Fylde in 2008 following the results of earlier diffusion tube monitoring that showed a likely exceedence of the annual average nitrogen dioxide objective of $40 \mu\text{g}/\text{m}^3$ in the area. The detailed assessment confirmed the likely exceedence of the average annual objective.

Declaration of an Air Quality Management Area in Poulton-le-Fylde

As a result of the detail assessment an Air Quality Management Area was declared. The Air Quality Management Area for Chapel Street, Poulton-le-Fylde came into force on the 1st August 2009 following the Council's publication of its Progress Report in April 2009 and subsequent acceptance by DEFRA. The AQMA is shown in Figure 2.

Figure 2.



Further Assessment Report

Following the declaration of the air quality management area (AQMA) in August 2009 Wyre Borough Council employed the Air Quality Management Resource Centre, of the University of West England to undertake a further assessment of the declared AQMA. The findings of this report are reported in the next chapter. However following completion of this work in August 2010 it was suggested that due to some problems with the data (mainly missing diffusion tube results and limited traffic data), that a further assessment be carried out when more data was available. This is due for completion in early March 2011.

Monitoring of local air quality carried out in Chapel Street.

The Council monitors the local air quality in Chapel Street using a number of diffusion tubes located in triplicate along the Street. Additional diffusion tubes are also located on the corner of Queens Square and Hardhorn Road leading into the Chapel Street and on Breck Road and Tithebarn Street leading away from Chapel Street. The results for the diffusion tubes on Chapel Street and Breck Road have shown a measureable exceedence of the nitrogen dioxide (NO₂) annual mean objective concentrations at relevant locations.

The Council intends to maintain the current monitoring locations within the area. Monitoring will also help to assess the effectiveness of actions to reduce the air pollution exposure within the AQMA.

The Air Quality Problem in Chapel Street Poulton-le-Fylde

Main sources of air pollution within Chapel Street AQMA

Background levels of air pollutants within Wyre Borough are relatively low by comparison to other parts of the country, and while a few industrial processes do exist within the Borough which have a potential to cause air pollution, the major source of air pollution is due to local traffic emissions.

The Findings of the Further Assessment Report (August 2010)

The findings of the August 2010 Further Assessment Report can be summarised as follows:

- Based on the data available the report concludes that the AQMA is valid.
- The model suggests that the national objective will be exceeded beyond the currently declared AQMA into Queens Square to the South and Breck Road to the North.
- As a result of the monitoring carried out in 2010 and the dispersion modelling undertaken, the AQMA should be extended North to encompass relevant receptors along the Southern End of Breck Road from the junction with Chapel Street, Vicarage Road and Ball Street to the Railway station.
- The model also suggests exceedences of the hourly objective ($60\mu\text{g}/\text{m}^3$) at the North end of Chapel Street, although evidence does not suggest there are any relative receptors at this site, i.e. outdoor locations where members of the public might reasonably be expected to spend one hour or more.
- The largest contributor to the elevated Nitrogen Dioxide levels can be attributed to HGV's. (based on an estimated 10% HGV component) HGV contribution to Nitrogen Dioxide levels in the area is $23\mu\text{g}/\text{m}^3$ or 50.3% on Chapel Street and $22\mu\text{g}/\text{m}^3$ or 49.7% on Breck Road.
- Based on measured 2009 concentrations to achieve the annual mean objective a reduction of greater than $5.2\mu\text{g}/\text{m}^3$ is required on Chapel Street and greater than $3.9\mu\text{g}/\text{m}^3$ reduction is required on Breck Road. This equates to 13% and 12% reduction in the road traffic component of nitrogen dioxide concentration at Chapel Street and Breck Road respectively.
- Any development that will adversely affect the flow of traffic along Chapel Street or Breck Road, either by increasing traffic volume or congestion or by reducing traffic speeds will make it more difficult to achieve the air quality objective.

Required reductions in NO_x air pollution

The modelling of the Chapel Street AQMA contained within the 2010 Further Assessment Report was used to calculate the reduction in oxides of nitrogen that would be required in order to achieve the annual mean air quality objective of 40 µg/m³ within the AQMA.

Without accounting for any reduction in background concentrations in future years, and based on the modelling in the 2010 Further Assessment Report, it is predicted that reductions in nitrogen dioxide emissions of 12% are required on Chapel Street and 9% on Breck Road to achieve the air quality objective. This equates to a reduction in the traffic component of 13% and 12% respectively.

Other Local Factors to Consider

Congestion

Road traffic through the AQMA, and the surrounding road network, is prone to congestion, queuing and delayed journey times especially during the morning and afternoon peak times. The majority of the traffic appears to be through traffic to other areas of the borough.

Source apportionment

The vast majority of the emissions within the AQMA come from heavy duty vehicles despite their contribution to the traffic flow being estimated at only 10% of the total flow. Furthermore evidence suggests that the majority of the traffic travelling along Chapel Street does not stop in Poulton-le-Fylde and is in fact through traffic on its way to Carleton, Thornton Cleveleys, Fleetwood or over Wyre.

Topography

Chapel Street is a narrow congested one-way street running in a south – north direction through the small market town of Poulton-le-Fylde, forming part of the main route taken through the town. It has a slight incline to the junction at its northern end where traffic either continues along Breck Road and down towards the A585 towards Thornton Cleveleys, Fleetwood and 'Over Wyre', or left along Ball street towards the towns main car-park and residential area of Carleton. Due to the surrounding properties the street produces a typical canyon effect.

Existing Policies and impacts of the Action Plan

Local Plan

The existing Local Plan makes the following statements concerning air quality:

“The Structure Plan aims to improve the quality of the built environment by improving air quality....”

“Effective traffic management can also reduce pollution and congestion in urban areas. The plan seeks to increase the amount of road space allocated to, and improve facilities for, pedestrians, cyclists and public transport vehicles in town centres.”

In addition through the development control process air quality has been identified as a material consideration in a number of proposed developments, requiring air quality assessments to be carried out and imposing planning conditions where necessary to protect the health and comfort of future occupants.

Implications of AQAP:

The AQAP will help towards achieving the aims of the Local Plan although it is noted that the Local Plan addresses transport, and economic prosperity as well as environmental concerns.

Community Strategy

Wyre's Strategic Partnership includes members from the community both voluntary and business sectors and other organisations in the public sector have produced Wyre's Sustainable Community strategy. The strategy includes a number of priorities which relate to this action plan.

- improve road safety,
- Encourage active community involvement in enhancing the natural and built environment in Wyre.
- To support people to make healthy lifestyle choices.
- To ensure that the wider determinants of health are being tackled through partnership working, e.g. housing, poverty, employment and environment.
- Secure improvements to Wyre's transport infrastructure – (particularly the A585).
- Promotion of green travel

Implications of AQAP:

The AQAP will help to deliver against Community Strategy objectives. No specific conflicts have been identified.

Air Quality Strategy

The air quality strategy has a number of objectives which affect this action plan from minimising air pollution within the borough, developing the wider understanding of the effects of air pollution on public health and environmental sustainability and importantly working and consulting with businesses, residents and other interested parties to encourage improvements in air quality.

Implications of AQAP:

The AQAP will help to deliver against most of the Air Quality Strategy Objectives.

The consultation process

The formulation of this draft action plan follows meetings with local representatives including local councillors, residents, Lancashire County Council Highways Officers, Wyre Borough Council Officers, the Health Protection Agency and local bus operator. As a result a number of options have been identified and decisions taken as to the likely effectiveness and costs of these options.

In order to ensure that all stakeholders have a degree of ownership of this document which in turn improves the likelihood of the plan succeeding in reducing pollution levels, and to ensure that no reasonable options for improvement has been missed, comments on this plan are sought from any interested party.

This report has already been sent to the following bodies for consultation, any further views are sought from any other interested body.

Secretary of State
Lancashire County Council Highways Department
Local Ward Councillors
Wyre Strategic Partnership
Primary Care Trust
Health Protection Agency
Internal departments of Wyre Borough Council
Concerned Residents of Poulton (CROP)
Member of the public,

The consultation process on the draft action plan will last 4 weeks ending on the **28th March 2011**. A review of all comments received will then be made and a revision of the action plan will take place.

The final action plan will be published in early April 2011.

Any comments regarding the content of this Draft Action Plan, the shortlisted options chosen, timescales or any additional options identified should be sent to

Online at <http://consult.wyrebc.gov.uk/public/aqap>

by post to: Wyre Borough Council
Environmental Protection
Civic Centre
Breck Road
Poulton-le-Fylde
FY6 7PU.

or e-mail: pollution@wyrebc.gov.uk

Options suggested for improving air quality

Guidance on preparing Air Quality Action Plans (AQAP) does not specify which measures should be included or excluded. It only requires that they should be clear, reasonable and achievable.

In order to identify the various options available to improve the air quality within the designated AQMA a meeting was held with relevant representatives of the area. The attendees included Wyre Borough Council Officers, Lancashire County Council Highways Officers, The Health Protection Agency, The local Bus operator, Local Councillors, and local residents.

The options suggested at this meeting have been reproduced in Appendix A attached to this report, an assessment of each option was subsequently carried out looking at the likely impact of the option on air quality, the estimated costs involved and any other issues identified with the option.

Following the above meeting, assessment of the identified options and further discussions with Lancashire County Council Highways officers and Local Councillors, the options identified and those that will be taken forward to improve the air quality within the AQMA are showed in Appendix B attached to this report, along with estimated time scales for implementation.

Additional Actions for measuring the effectiveness of the AQAP

The following measures are proposed to help measure reductions in road traffic volumes and emissions in order to gauge the effectiveness and progress of the AQAP.

1. Continue with the passive monitoring of air pollution within the AQMA to inform decisions and monitor progress towards achieving the air quality objective currently exceeded.
2. Carry out additional traffic count surveys as required to identify any change in traffic volume along Chapel Street.

Assessment of air quality measures

The Council working with partner agencies is required to assess the costs and effectiveness of proposed actions for reducing air pollution in working towards the air quality objective.

This has been done in consultation with the County Highways department by estimating the likely effect on air quality and estimated cost of the measure.

The potential positive effect on air quality has been rated using the following key:

√√√√√	Large
√√√√	Moderate
√√√	Small
√√	Very Small
√	Negligible

Costs have been estimated for each action using the following key:

££££££	>£1million
£££££	£100K- 1million
££££	£10-100K
££	£1-10K
£	>£1K

Conclusions

The 2010 Further Assessment for Chapel Street Poulton-le-Fylde predicted that a reduction in the emissions of nitrogen dioxide in the region of 12% would be required to meet the nation objective level for relevant receptors at the worse case sites on Chapel Street. The further assessment identified that the most likely cause of the exceedence as the congestion of traffic on Chapel Street.

As expected the shortlist of chosen options for improving air quality within the AQMA have mainly revolved around changes and improvements to the highway network in Poulton-le-Fylde. Before any further action can be taken further modelling of these options must be undertaken to ensure that air quality is not adversely affected in other areas of the town.

Once this modelling work has been undertaken and the chosen options confirmed as suitable to reduce the pollution level within the declared AQMA without adversely affecting other areas work can begin to implement the options.

Appendix A

List of suggested options and assessment of likely impact on air quality and costs.

Identified Options	Potential Impact on Air Quality	Estimated Costs of Options	Other issues/problems	Realistic to Implement
Congestion charges	√√√√	£££££	Will affect local as well as passing traffic. Adverse effect on trade in Poulton.	No
Re-direct HGV's/buses	√√√√	£££	Can't redirect buses travelling down Breck Road towards Railway station, bus company against change. Turn into Blackpool Old Road from Hardhorn Road.	Partly
Encourage the greater use of public transport	√	£	Lack of Public transport	Yes
Improve signage in the area to re-direct traffic around Poulton	√	££		Yes
Re-design the road layout at Breck Road roundabout to keep traffic moving,	√√√√	££££	Funding may be an issue.	Not at this time
Re-design the road layout to remove traffic from Chapel Street by directing traffic along Higher green/Station Road	√√√√	£££	Funding issue, Public acceptance, Need to ensure air quality problem is not moved.	Yes
Re-design the road layout to remove traffic from Chapel Street by building a relief road through Hardhorn car park.	√√√√	££££	No funding available, No impact on Breck Road air quality	Yes, in conjunction with other options.

Wyre Borough Council

Build a by-pass around Poulton-le-Fylde	√√√√√	£££££	Lack of available routes, destruction of Green space	Not at this time
Pedestrianise Chapel Street	√√√√√	££££	Bus routes, particularly access to the Railway Station	Partly
Reverse the traffic flow around Poulton-le-Fylde	√√√	£££	Problems with access for buses & HGV's	No
Remove the on-street parking	√	£	Opposition from shop owners on Breck Road	No
Impose weight restrictions to Chapel Street	√√√	££	Enforcement issues, bus access to Breck Road	No
Restrict Chapel Street to buses and taxis only	√√√√	£££	Opposition from shop owners on Breck Road, redirected traffic would result in problems on Vicarage Road	Yes, in connection with other schemes.
Restrict the top of Breck Road to buses and taxis only	√√√√√	£££	Issues with public accessing the railway station	Yes
Introduce residents parking	√√	£££	Commuter parking	No – as a stand alone option, possibly in conjunction with others.
Restrict access to Chapel Street at certain times of the day	√√√√	££	Enforcement would be problematic as residents and shop owners still need access. Shop owners are likely to oppose restrictions.	Yes
Buses replaced by cleaner vehicles, whole fleet replaced by 2020	√√	££££	Reliant on bus companies. (cost with the bus operators)	Yes

Wyre Borough Council

Plant more trees in Vicarage park, place tree preservation orders on the existing trees	√	££		Yes
Re-direct buses only?	√√	£	Bus companies against changes, can't alter routes for buses to railway station.	No
Park & Ride Scheme?	√	£££	Nowhere to site park and ride scheme. Most traffic is through traffic therefore would not use park and ride	No
Stop traffic entering/exiting Vicarage Road	√√√	££	Potential access issues to businesses on Vicarage Road	Yes
Provide off-street parking for Station Road	√	£££	Doesn't affect Chapel Street but needs to be addressed to implement changes to traffic flows.	Yes
Use of experimental traffic order to redesign traffic flows	√√√√	££££		Yes
Stop taxis waiting on Chapel Street	√	£	Licensing enforcement issue	Yes
Re-look at Booths proposal for link road	-	££££	Air quality on Chapel Street likely to be worse	No
Purchase residential properties along Breck Road	√√√√√	££££££	Objections from residents, limited funding available	No
Install cycle routes to encourage bike use over motor vehicles	√√	£££		Yes

Wyre Borough Council

Free use of the council car park	√	£££	Most traffic is through traffic, likely to increase traffic to Poulton than reduce it. Politically it won't happen.	No
Parallel parking on Chapel Street to keep traffic moving	√	£	Opposition from Shop keepers on Chapel Street	No
Reduced – rate parking for public car parks for station users.	√	£	May help implement other options discounts already available.	Yes

Appendix B

Shortlisted Options to be taken forward as part of the action plan.

Identified Options	Potential Impact on Air Quality	Estimated Costs of Options	Lead Agency	Other issues/problems	Realistic to Implement	Estimated Time-scales
Encourage the greater use of public transport	√	£	LCC/ WBC	Lack of Public transport	Yes	Already underway and ongoing
Improve signage in the area to re-direct traffic around Poulton	√	££	LCC Highways		Yes	November 2011
Re-design the road layout to remove traffic from Chapel Street by directing traffic along Higher green/Station Road	√√√√	£££	WBC/ LCC Highways	Funding issue, Public acceptance, Need to ensure air quality problem is not moved.	Yes	November 2012
Re-design the road layout to remove traffic from Chapel Street by building a relief road through Hardhorn car park.	√√√√	££££	WBC/ LCC Highways	No funding available, No impact on Breck Road air quality	Yes, in conjunction with other options.	March 2015
Restrict the top of Breck Road to buses and taxis only	√√√√	£££	WBC/ LCC Highways	Issues with public accessing the railway station	Yes	November 2012
Buses replaced by cleaner vehicles, whole fleet	√√	££££	Bus Operator	Reliant on bus companies. (cost with the bus operators)	Yes	Already underway

Wyre Borough Council

replaced by 2020						
Provide off-street parking for Station Road	√	£££	WBC	Doesn't affect Chapel Street but needs to be addressed to implement changes to traffic flows.	Yes	November 2012
Stop taxis waiting on Chapel Street	√	£	WBC Licensing /LCC Highways	Licensing enforcement issue	Yes	March 2013