Air Quality

Air Quality Controls and Assessments - Statutory Requirements Placed upon the Council

Why we Assess Air Quality

Where we assess Air Quality

Air Quality Monitoring - How we are Doing?

Future Plans- Development of Air quality Policy Guidance

Role of Steering Group



Air Quality - Statutory Requirements Placed upon the Council to monitor and regulate Air quality

Environment Act 1995 - Part IV of the Environment Act 1995 requires the Secretary of State to produce a National Air Quality Strategy.

The strategy incorporates the European Directives on air quality and are under constant review since its initial adoption in 1997.

Air Quality (England and Wales) Regulations 2010 – This sets out the EEC directives on Air Quality and stipulates the air quality objectives

Local Air Quality Management Technical Guidance Notes- These notes give direction to local authorities on how to report and review air quality. The latest Guidance LAQM TG 16 requires local authorities to submit an Annual Status Report and report on measures to minimise PM2.5

Regulation of Polluters provided by

Clean Air Acts 1993 (Amended)- introduction of smoke control zones, Environmental Permitting Regulations 2010 (Amended)- controlling emissions of industrial processes



Table of Air Quality Objectives

Pollutant	Measured As	Objective
Benzene	Annual Mean	5.00 ug/m3
1, 3-butadiene	Running annual mean	2.25 ug/m3
Carbon Monoxide	Maximum Running 8 hour mean	10 ug/m3
Lead	Annual mean	0.25 ug/m ³
Nitrogen Dioxide	1 hour mean	200 ug/m3 not to be exceeded more than 18 times a year
	Annual Mean	40 ug/m ³
Fine particulates (PM ₁₀)	24 hour mean Annual Mean	50 ug/m3 should not be exceeded more than 35 times a year
	Allitual Meall	40 ug/m ³



Table of Air Quality Objectives (Continued)

Pollutant	Measured As	Objective
Very Fine Particulates (PM _{2.5})	Annual Mean	25 ug/m3 ** No safe limit, Local Authority to work towards reducing emission levels. (stipulated in TG Note 16: April 2016)
Sulphur Dioxide	15 minute mean	350 ug/m³ not to be exceeded more than 35 times a year
	24 hour mean	125 ug/m³ not to be exceeded more than 3 times a year
	1 hour mean	266ug/m3 not to be exceeded more than 24 times a year



Why measure Pollution- Health Effects of Pollution

World Health Organisation (WHO) estimate 1 in 8 deaths are as a result of air pollution.

Pollution effects lung function, asthma and cardio vascular conditions.

Public Health England have a public health outcome framework indicator for very fine particulates known as PM2.5.

It is estimated that PM2.5 has a 4.8% contribution to mortality in North Tyneside compared to 5.6% in England.



Where We Assess Air Quality and How

Monitoring Locations Criteria Used

Where people are exposed to the pollutant

Main source – Busy Roads with traffic flows greater than 10000 vehicles per day

Industrial sources

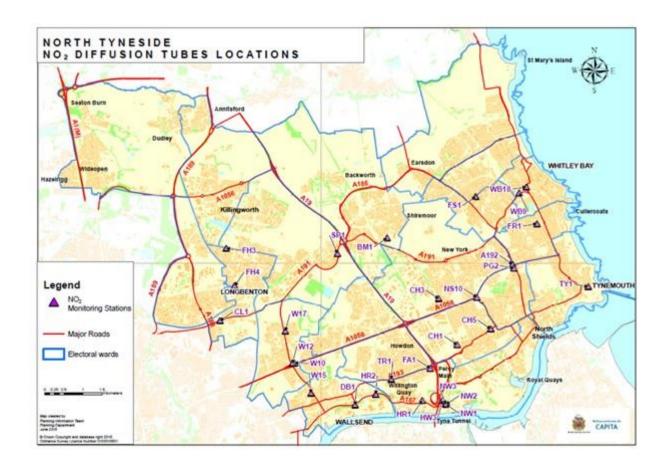
Long Term Trends in Air Quality





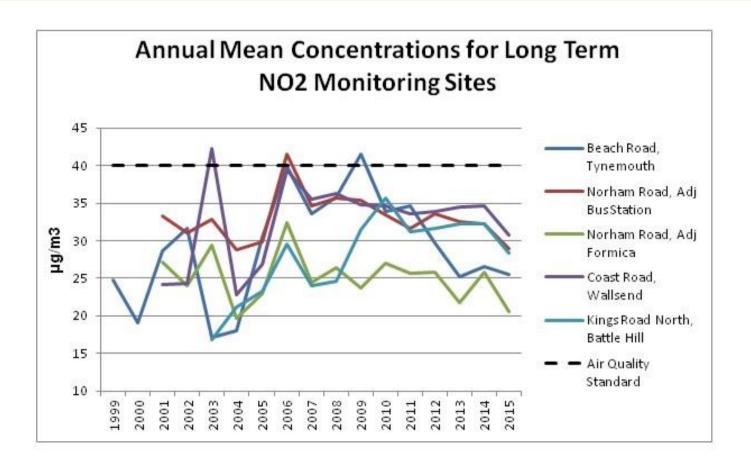
Real time Monitoring Stations- Measuring Particulates and Nitrogen Dioxide





Nitrogen Dioxide Diffusion Tube Monitoring

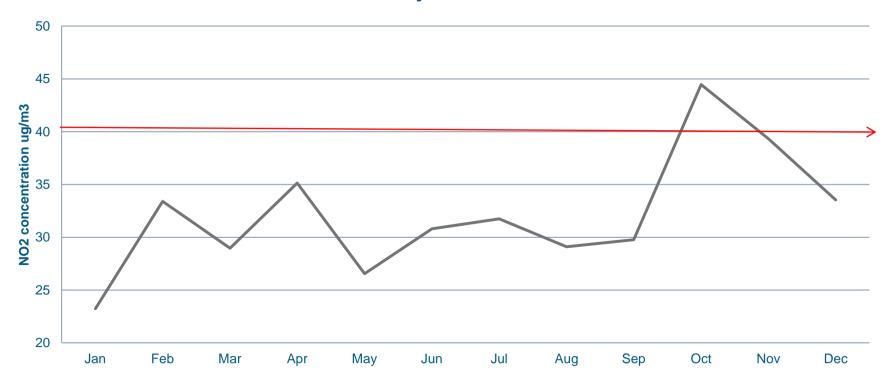




Long Term Trends in Air Quality in North Tyneside



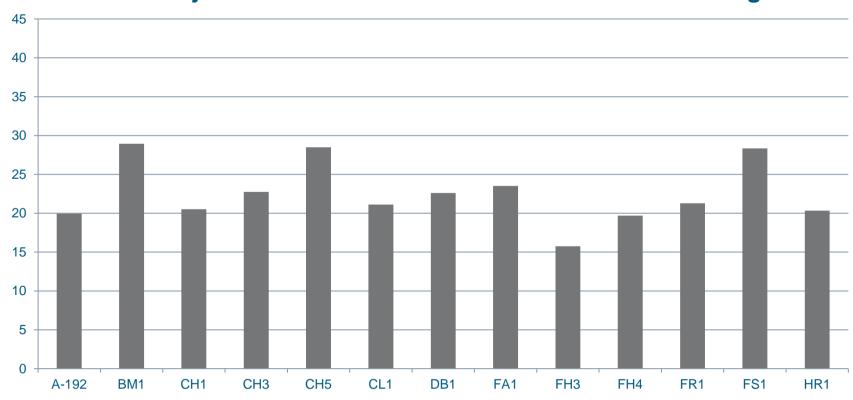
Graph Showing Monthly N02 Results in 2015 about Norham Road Bus Terminus Bias Adjustment 28.95 Annual Mean





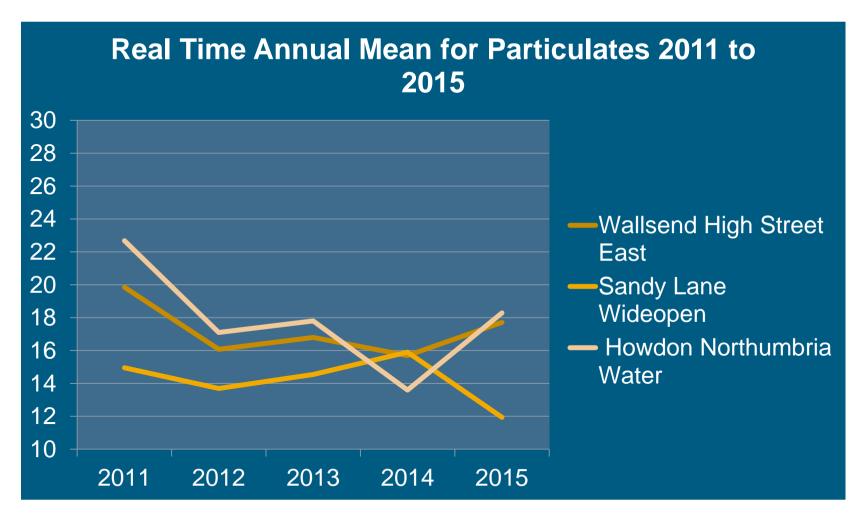
Nitrogen Dioxide Results for 2015

Bias Adjusted Annual Mean for NO2 Indicative Monitoring





Particulate Monitoring At Real Time Stations 2011 to 2015





Future Plans

North Tyneside Council expects the following measures to be completed over the course of the next reporting calendar year

The Local Plan is due to be adopted in early 2017. The local plan will incorporate the air quality policy guidance. The policy will ensure all future development takes into account air quality impacts and incorporates appropriate mitigation for minimising those impacts.

An air quality working group is to be established. This group will identify actions to drive forward key air quality improvement initiatives. Membership comprising of key players including Public Health, Transport and Strategic Planners, Climate Change team and Environmental Health.

The North Tyneside Air Quality Strategy: "Improving Air Quality Policy Guidance" will be finalised.

Transport management schemes on the A191 designed to improve traffic flows from Four Lane Ends to Tyne View Park is being progressed. This will involve changes to the traffic signals and creating new westbound lanes.



Role of Air Quality Steering Group

The Air Quality steering group will identify actions and measures to reduce very fine particulates PM2.5. Each member of steering group will be tasked to identify actions for improving air quality.

Such measures to include for example:

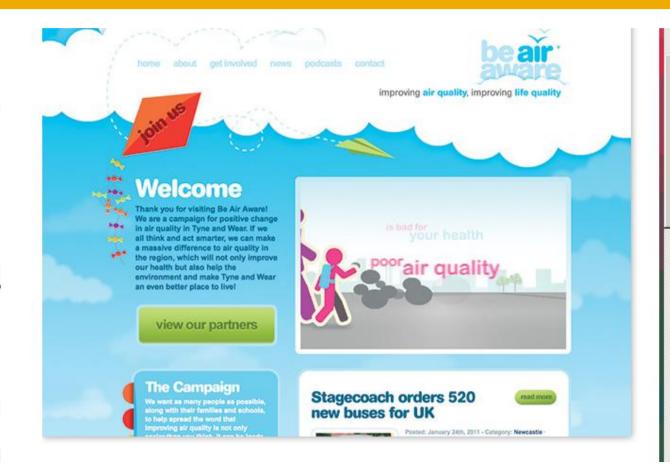
- Promoting Air Quality to enable the public to make informed choices- improved website. As a group a website was developed to promote air quality- Be Air Aware now defunct
- Regulate and control pollution
- Integration of Air Quality in Local Plan and planning policy by mitigating emissions from new developments (during the construction phase and in subsequent use) and existing buildings by implementing energy efficiency measures and affordable warmth schemes to reduce heat loss and drive down fuel bills.
- Reduce emissions from road transport; this includes encouraging alternatives to the car, reducing emissions from vehicles on the road and encouraging the uptake of alternative 'low emission' vehicles. Other measures to consider include the introduction of electric charging points, and parking charges,
- Promotion of alternative modes of travel e.g. public transport, cycling initiatives, car sharing schemes, introduction of green travel plans.



the 'Be Air Aware' website to increase awareness of air pollution in the local area. The site is designed to encourage Primary School children, parents and teachers to play their part in improving air quality in the areas of Gateshead, Newcastle, North Tyneside, South Tyneside and Sunderland.

The website commissioned by the Local Transport Plan provides practical ways of improving air quality at a grass roots level. A new module 'Walk to the World Cup' has been built to encourage walking levels amongst primary children in order to reduce traffic congestion outside the school gates.

With 32 Primary Schools and 9,300 children competing for the top position, league tables display each school as a country on the website and it looks like it's going to be a photo finish.



Be Air Aware promotion website in 2010



Questions?

