

Contents

1. Welcome to eZine Issue 1

2. Bringing us up to date

Why should we care about air?

What is being done?

Free Advice

3. Monitoring Air Quality

4. Next Steps

Welcome

Welcome to the first edition of the Sheffield Care4Air eZine – a regular update about what's happening in Sheffield to improve air quality.

Contrary Sheffield's popular image, the City has a long history of air quality improvement. The City Council has been measuring Sheffield's air for around 100 years, and it is a little known fact that during the 1960s and 70s that Sheffield was known as the cleanest industrial city in Europe. Even today the City Council is still regarded as being at the forefront of air quality work in the UK.

"This town of Sheffield is very populous and large, the streets narrow, and the houses dark and black, occasioned by the continued smoke of the forges which are always at work"

Daniel Defoe in 1724

Some important dates from air pollution control in times past are listed below:

- 1819** – first fines imposed for burning of coke in the open air without a flue.
- 1829** – police advise steam engine owners that prosecution would be taken against offenders for excessive smoke emissions.
- 1853** – Lord Palmerston approves Sheffield's smoke byelaws.
- 1855 to 1865** – 445 convictions for smoke related offences.
- 1940s** – estimates and measurements of dust calculate that 40 tons per square mile fall on the City.
- 1952** – Great London Smog of December kills an estimated 40000 in the capital.
- 1956** – In response to the Great London Smog, the Government introduces its first Clean Air Act. This Act was aimed at controlling industrial smoke, and domestic sources of smoke pollution by introducing smokeless zones. In these areas, smokeless fuels had to be burnt.
- 1959** – Sheffield creates smokeless zone number 1 (central area). In all 27 smoke control areas were created with almost 100,000 households had appliances converted to operate smokeless. By the end of the programme, the total amount of grants paid to carry out conversions was £2.3 million. (this is repeated below) 1968 – The Clean Air Act of 1968 introduced the basic principle for the use of tall chimneys. The higher the chimney, the better the dispersal of the air pollution. The 1968 Act also allowed local authorities, for the first time, to prosecute not only end users, but also the suppliers of non-smokeless (unauthorised) fuels.
- 1979** – 75% of the public converts their open fires to gas fired appliances.
- 1982** – New pollutants such as Lead and traffic related gases recognised as needing investigation.
- 1989** – Sheffield Council purchases first automatic continuous air monitors to measure traffic pollution.
- 1992** – European Commission publishes "Impact of Transport on the Environment".



▲ Bringing us up to date...

Sheffield City Council's Environmental Protection Service measures the air at over 50 sites in the City. Some are fully automated un-staffed sites that work 24 hours a day, 365 days a year. These sites produce over 1.5 million bits of information a year. The information gathered is used to inform developers, planners, transport experts, the local community, health experts and the Government about the air quality of the area, which is in turn used by them in decision making.

▲ Why should we care about our air?

Today's air pollution problems are less obvious to both see and detect. Generally the levels of these pollutants are much less than in the past. So why should we be concerned about air pollution in the 21st century?

Put simply, the sources and types of pollution are different. The problems caused by sulphur dioxide and smoke from coal burning has been eradicated, only to be replaced with fine particles, nitrogen dioxide and a cocktail of other substances mostly coming from vehicle exhausts. If the predicted increases in summer temperatures come true, we will also see an increase in ground level ozone levels. An early warning of this was shown in 2003 where the long summer saw a sharp increase

in ozone due to the hot weather. Estimates vary on the health impact of air pollution on f the UK population, but one figure on air pollution related increased deaths issued by the Department of Health puts the impact as high 40,000 per year.



▲ What is being done about air quality in Sheffield now?

The new Care4Air campaign has been developed to raise awareness of what Sheffield City Council and its partners in the region are doing to improve air quality throughout South Yorkshire, whilst raising awareness with local residents about what THEY can do to improve the environment. Care4Air

will highlight a number of successful air quality initiatives over the coming months.

▲ Free advice available to businesses to prepare travel plans

The City Council has recently appointed Katherine Silk. Katherine's role is to work with existing local companies and organisations to help them to develop and implement a tailor-made company travel plan. By developing travel plans, companies will be able to ensure they use their resources to maximum effect and encourage the use of public transport by their employees whilst limiting the impact of traffic congestion and consequent air pollution resulting from the use of vehicles for their businesses.

Katherine Silk can be contacted on 0788 764 1266. e-mail Katherine.silk@sheffield.gov.uk





▲ Monitoring Air Quality in people's backyards

A successful air quality monitoring project, initially piloted in the Tinsley area for over 5 years has been successfully rolled out to a number of areas of Sheffield.

The East End Quality of Life Initiative is working with the Environmental Protection Service of Sheffield City Council – who are responsible for measuring air pollution across the city – and with South East Sheffield Primary Care Trust. Working through local community forums, local people are able to identify where air pollution is worst, and then work with the Council's Environmental Protection team to look at ways of improving air quality.

As a result of the successful initiative, additional areas were identified to roll out the programme in Brinsworth, Handsworth, Catcliffe, Darnall and Burngreave in Summer 2003. A further Programme started in November 2003 in Heeley, Parkhill and Broomhall.

Community quality monitoring of nitrogen dioxide has been taking place in Tinsley for the past five years using diffusion tubes in residents' backyards. The simple devices are changed monthly and recordings are logged in order to assess current air pollution levels and allow both residents and the council to be aware of any significant changes. The log sheets are sent with the exposed tubes to the laboratory for analysis. The laboratory results are then sent back to communities every month usually in the form of a chart. The whole process usually takes volunteers no more than one hour per month.

It is hoped that the scheme will extend further across the city in the coming months.

Any communities that are interested in getting involved will be asked to identify around 5 sites for the monitoring tubes (Diffusion Tubes) at or near where people live in the areas being investigated. They should contact Neil Parry at East End Quality of Life Initiative on 0114 285 9911.

▲ And there's more...

Air quality monitoring is only one aspect of what is done to help clean up and protect the air we breathe. For example, during 2003 Sheffield City Council helped coordinate the South Yorkshire Vehicle Emissions Testing (SYVET) Campaign.

The Campaign tested some 3000 vehicles at the roadside to ensure that their exhausts were not pumping out polluting gases above the MOT standard. The majority (90%) of vehicles passed, and the remaining ones had to be tuned. Having your car tuned helps protect the environment and prevents your car's engine wasting fuel by incorrect running.



Next Steps

Continuing the long tradition of protecting and, where possible, improving our air, Sheffield City Council is carrying out a wide range of duties in connection with this. One of the major tasks that has been employing the air quality team for the past couple of years has been responding to the Government's request for local air quality review and assessment. In essence this requires all local authorities to find out, as accurately as possible what levels of air pollution exist and where hotspots are likely to occur.

These hotspots had to be assessed to see if air pollution levels in them would be higher than Government targets set to protect health. If these targets were predicted to be exceeded an Action Plan had to be produced stating how air quality could be improved. This work has now been done and a summary of it, together with details of the action plan is being put into practice will be covered in depth in the next issue of Sheffield Care4Air News.

Want to know more about what's happening to improve our air in Sheffield?

Contact the Air Quality team on 0114 2734655 or register to be on our e-mail list -

mark.daly@sheffield.gov.uk

www.sheffield.gov.uk/environment/waste-and-pollution

To find out how you can do your bit to help the environment you can download a pdf from the website below:

www.airquality.co.uk/archive/yourbit.pdf



Sheffield
City Council



Useful Websites

Sheffield City Council

www.sheffield.gov.uk/environment/waste-and-pollution

Sheffield City Centre Clean Air Partnership

www.sheffieldairaction.com

M1 Corridor Clean Air Partnership (Sheffield & Rotherham area)

www.m1airaction.com

The UK National Air Quality Information Archive:

www.airquality.co.uk

Air Quality Management

www.air-quality-management.co.uk

Department of Health

www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/AirPollution/fs/en

Current Air Quality Forecast

www.airquality.co.uk/archive/Current_Bulletin.php