

West Oxfordshire Air Quality

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Why do we monitor

Part IV of the Environment Act (1995)

1. regularly review and assess air quality
2. determine whether or not the air quality objectives are likely to be achieved
3. Report annually to Defra
4. Make these reports available to the public

Required to monitor nitrogen dioxide (NO₂)

The national objectives set to protect health are:

- 40µg/m³ annual average
- 200µg/m³ hourly average



Where do we monitor

- Areas where we suspect residential premises are likely to be affected by levels exceeding national objectives
- Air Quality Management Areas where we have measured levels exceeding the annual average objectives (there have been no hourly exceedances)

Diffusion tube monitors

Low cost network across district

Easy to deploy

Minimal maintenance

Annual average data provided



Continuous monitors

- Previously used in AQMAs
- No excessive hourly averages monitored



Air Quality Management Areas

Bridge Street Witney



A44 Chipping Norton



What have we observed

Diffusion Tube Results

No exceedances of annual objective, other than:

- Chipping Norton
 - Which has been steadily reducing over the past five years
- Bridge Street
 - Steady but exceeding

Continuous Monitors

No exceedances of hourly objectives

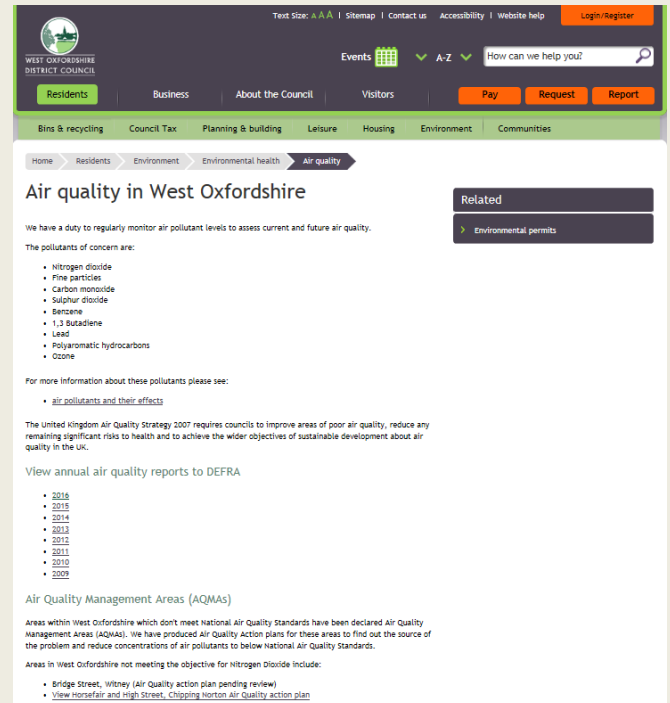
Hourly averages reducing in both AQMAs

What have we observed

- Average background levels are around 10- 15 $\mu\text{g}/\text{m}^3$
- Average busy roadside levels 30 - 35 $\mu\text{g}/\text{m}^3$
- AQMAs 32 - 48 $\mu\text{g}/\text{m}^3$, main culprit idling vehicles in traffic jams
- (National annual average objectives is 40 $\mu\text{g}/\text{m}^3$)

Detailed Information

- <http://www.westoxon.gov.uk/residents/environment/environmental-health/air-quality/>
- Reports are published every year



The screenshot shows the West Oxfordshire District Council website. The page title is "Air quality in West Oxfordshire". The breadcrumb trail is: Home > Residents > Environment > Environmental health > Air quality. The page content includes:

- A header with navigation links: Residents, Business, About the Council, Visitors, Pay, Request, Report.
- A secondary navigation bar: Bins & recycling, Council Tax, Planning & building, Leisure, Housing, Environment, Communities.
- A main heading: "Air quality in West Oxfordshire".
- A sub-heading: "We have a duty to regularly monitor air pollutant levels to assess current and future air quality."
- A section titled "The pollutants of concern are:" with a list:
 - Nitrogen dioxide
 - Fine particles
 - Carbon monoxide
 - Sulphur dioxide
 - Benzene
 - 1,3 Butadiene
 - Lead
 - Polyaromatic hydrocarbons
 - Ozone
- A section titled "For more information about these pollutants please see:" with a link: [air pollutants and their effects](#).
- A paragraph: "The United Kingdom Air Quality Strategy 2007 requires councils to improve areas of poor air quality, reduce any remaining significant risks to health and to achieve the wider objectives of sustainable development about air quality in the UK."
- A section titled "View annual air quality reports to DEFRA" with a list of years from 2009 to 2016.
- A section titled "Air Quality Management Areas (AQMAs)" with a paragraph: "Areas within West Oxfordshire which don't meet National Air Quality Standards have been declared Air Quality Management Areas (AQMAs). We have produced Air Quality Action plans for these areas to find out the source of the problem and reduce concentrations of air pollutants to below National Air Quality Standards."
- A section titled "Areas in West Oxfordshire not meeting the objective for Nitrogen Dioxide include:" with a list:
 - Bridge Street, Witney (Air Quality action plan pending review)
 - View Horsefair and High Street, Chipping Norton Air Quality action plan

2018 Levels in AQMAs

Bridge Street, Witney - 48 μgm^{-3}

Horsefair, Chipping Norton - 47 μgm^{-3}

High Street, Chipping Norton - 32 μgm^{-3}

Advancements in vehicle technology have reduced pollutant levels, but this mitigation has not yet sufficiently reduced levels in our two AQMAs

Chipping Norton Air Quality Action Plan

- Introduction of a weight limit?
- Re-routing of HGV traffic?

Oxfordshire County Council (OCC) feasibility study (2016), but financial constraints within OCC budgets have caused delays. An implementation schedule is still awaited.

Draft Action Plan for Witney

- Assumed that the Cogges Link Road would proceed, as per the planning consent, but the Department for Transport refused a compulsory purchase order for the land needed.
- Oxfordshire County Council (OCC) are now reconsidering alternative options which might address traffic flow within and around Witney. OCC LTP4, (Vol 2, Sect ii, Pages 77 - 85) details the proposals.

Examples of required measures in AQMA

- Raise awareness of the AQMAs – e.g. roadside signage
- Introduce measures to improve AQ – reduce traffic
- Educate widely re air pollution – involve schools (OCC STOP package)
- Ensure access to “active travel” facilities at new developments through Planning consents
- Involve the public re AQ and options
- Work closely with County Council and Public Health (England)

