Air Quality Action Plan

Horn Lane, Acton

December 2011

Version 1.4

We are the Environment Agency. We protect and improve the environment and make it **a better place** for people and wildlife.

We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

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Executive Summary

The London Borough of Ealing installed an air quality monitoring station to monitor PM10 particulates on 25 February 2005 at Horn Lane. This is called 'Ealing 8 – Horn Lane' and forms part of the London Air Quality Network organised by Kings College London.

PM10 particulate pollution levels recorded at Ealing 8 – Horn Lane are above the Government's Air Quality Strategy Objectives.

There are numerous sources responsible for the high PM10 particulate pollution levels recorded at Horn Lane. Some of these sources are sites regulated by the Environment Agency. We are seeking to reduce particulate emissions from our regulated sites.

This report explains what measures we have taken so far to reduce the particulate emissions for the sites we regulate and what actions we intend to take in the future. It does not attempt to form a definitive record or plan of our actions (given the investigative nature of the work, it is likely to change on a regular basis).

To request the latest version of this action plan, please contact our North East Thames office at Apollo Court (address above).

Contents

Chapter	Subject	Page
	Executive Summary	iii
1	Air quality	1
2	Waste management facility emissions	3
3	Horn Lane, Acton	4
4	Air quality improvements	5
5	Completed actions	7
6	Ongoing and future actions	9

1 Air quality

Part IV of the Environment Act 1995 requires the Secretary of State to publish a national Air Quality Strategy and establish a system of Local Air Quality Management (LAQM).

Air Quality Strategy

The Government and the Devolved Administrations published the first National Air Quality Strategy in 1997. The Strategy was revised in 2000 to become the Air Quality Strategy for England, Wales, Scotland and Northern Ireland (AQS) and an addendum was published in February 2003.

The Strategy has had a major review and the Government published a revised version in July 2007. The Government and the Devolved Administrations have overall responsibility for ensuring that the UK meets the various limit values that have been set by the EU Air Quality Directives and Daughter Directives. The Government uses data from an extensive UK network of air quality monitoring stations (many of which are operated by local authorities) and modelling to assess compliance with AQS objectives and EU limit values.

Local Air Quality Management

The Local Air Quality Management (LAQM) process places a statutory responsibility on local authorities to review and assess local air quality for seven pollutants: particles; nitrogen dioxide; sulphur dioxide; benzene; 1,3-butadiene; carbon monoxide and lead. If the objectives for these pollutants are not likely to be met then the local authority must declare an Air Quality Management Area (AQMA). They must then produce an Action Plan (AQAP) to work towards meeting the air quality objectives.

Local authorities have now carried out several rounds of full air quality review and assessments, as well as updating and screening assessments. They will continue to follow this mechanism for the foreseeable future.

Over 200 local authorities have declared AQMAs in England and Wales and the majority of these are for traffic-related nitrogen dioxide and particulates (PM10). The Government are now encouraging local authorities to incorporate any traffic-related AQAPs into their Local Transport Plans, and many have done so.

Significant improvements have been achieved in air quality over many years. These improvements have benefited public health and the environment, but the Government recognises that more needs to be done.

The UK air quality objectives are expected to be met with the exception of small areas in central London due to high levels of particulate matter (PM10 - particulate matter less than 10 microns in diameter). Defra and the Mayor of London have submitted evidence to the Commission showing how the UK will reach full compliance with EU limits by the end of 2011.

Our commitments

We are committed to ensuring that any industrial installation or waste operation we regulate will not contribute significantly to breaches of an AQS objective.

It is a mandatory requirement of Environmental Permitting Regulations that we ensure that no single industrial installation or waste operation we regulate is the sole cause of a breach of an European Union air quality limit value. Additionally, we have committed to guarantee that no installation or waste operation will contribute significantly to a breach of an European Union air quality limit value.

We will ensure that best available techniques (BAT) and other appropriate measures are used to deliver the maximum improvements to air quality where UK exposure reduction objectives or European Union air quality target values are being exceeded.

2 Waste management facility emissions

We have a duty to ensure that sites we regulate do not make a significant contribution to any breach of a UK air quality objective. The main potential air quality issues relate to the releases of nitrogen oxides (NOx) and particulates (PM10).

In practice, the biggest issue is particulates and we have identified three locations or 'priority sites' in London where sites that we regulate are contributing to breaches of a UK air quality objective. The three locations are:

1. Horn Lane, Acton, in the London Borough of Ealing;
2. Neasden Lane, Neasden, in the London Borough of Brent;
3. Manor Road, Erith, in the London Borough of Bexley.

Operators of waste sites near these locations are required to do all that is feasible to minimise particulate emissions.

Waste and Air Quality Working Group

Managing the impacts of these sites on local air quality is a complex process that involved both the Environmental Permitting Regulations and the Town and Country Planning Act. We have therefore set up a working group, which includes local authorities with priority sites, specialist national monitoring staff, Environment and Business staff, Transport for London, Greater London Authority (GLA) and Environmental Research Group from Kings College London.

This group is also steering a research and development project examining the effectiveness of various abatement measures. Our regular meetings allow us to monitor progress and ensure particulate emissions continue to reduce at these sites.

We also meet on a monthly basis with the GLA and the effected London Boroughs to discuss the process being made to reduce the emissions.

3 Horn Lane, Acton

The London Borough of Ealing has monitored air quality along Horn Lane since 2005. The monitoring site, known as Ealing 8, has identified high levels of PM10.

There are several sources of PM10 close to the Ealing 8 monitoring site, including:

1. traffic on Horn Lane and on the A40 (Western Avenue)
2. buses using the bus stand and bus stop on Horn Lane
3. trains on the adjacent railway line
4. Hanson Premix (concrete production)
5. Yeoman Aggregates (aggregate supply and railway track ballast recycling)
6. Gowing and Pursey (waste transfer station)
7. Horn Lane Metals (scrap metal merchants)

While the local authority has overall responsibility for air quality in the area, and for developing management plans to improve air quality, we are responsible for regulating the following sites:

1. Yeoman Aggregates (except for two mobile crushing plants that the London Borough of Ealing regulate)
2. Gowing and Pursey
3. Horn Lane Metals

We have used air quality monitoring results from the Ealing 8 monitoring station to support our regulation of these sites, such as requiring the site operators to install wheel washes, dust suppression systems and dust screening. We have also increased our inspection frequency and are continuing discussions with the operators and the London Borough of Ealing about the best options for improvements (including fully enclosing waste activities within a building).

We have been working in close partnership with the London Borough of Ealing to resolve the issues at these priority sites. This has included carrying out joint unannounced visits, which began in December 2010. We continue to share information following our visits.

Public interest

Recently, local MPs and pressure groups have expressed concerns about the breaches. Angie Bray, the local MP for Horn Lane, arranged an Adjournment Debate in the House of Commons with Richard Benyon (Parliamentary Under-Secretary of State at the Department for the Environment, Food and Rural Affairs).

4 Air quality improvements

The London Borough of Ealing has created an Air Quality Action Plan which explains how they intend to manage the air quality within their borough. In summary, this document covers the entire borough and focuses on:

1. traffic reduction
2. reducing the need to travel
3. the promotion of cleaner technology and alternative fuels
4. improving environmentally friendly forms of transport
5. non-traffic measures
6. awareness raising

Since September 2006 there has been a reduction in the levels of PM10 measured at Horn Lane, largely as a result of our regulatory efforts.

The day-to-day levels recorded can be affected by local factors, such as wind direction, traffic, levels of industrial activity on or around the site, and other factors such as air pollution that is imported from Europe. We are committed to working in partnership with the London Borough of Ealing to achieve the necessary improvements for the environment and residents of Horn Lane.

2005

Pollutant	Objective	Limit	Value observed
PM10 Particulate	*Annual Mean (gravimetric)*	40ug/m3	84
PM10 Particulate	*No. days 24hr mean >50ug/m3 (gravimetric)*	35 days	230

2006

Pollutant	Objective	Limit	Value observed
PM10 Particulate	*Annual Mean (gravimetric)*	40ug/m3	74
PM10 Particulate	*No. days 24hr mean >50ug/m3 (gravimetric)*	35 days	224

2007

Pollutant	Objective	Limit	Value observed
PM10 Particulate	*Annual Mean (gravimetric)*	40ug/m3	53
PM10 Particulate	*No. days 24hr mean >50ug/m3 (gravimetric)*	35 days	173

2008

Pollutant	Objective	Limit	Value observed
PM10 Particulate	*Annual Mean (gravimetric)*	40ug/m3	49
PM10 Particulate	*No. days 24hr mean >50ug/m3 (gravimetric)*	35 days	137

2009

Pollutant	Objective	Limit	Value observed
PM10 Particulate	*Annual Mean (gravimetric)*	40ug/m3	38
PM10 Particulate	*No. days 24hr mean >50ug/m3 (gravimetric)*	35 days	72

2010

Pollutant	Objective	Limit	Value observed
PM10 Particulate	*Annual Mean (gravimetric)*	40ug/m3	42
PM10 Particulate	*No. days 24hr mean >50ug/m3 (gravimetric)*	35 days	93

Graph 1 - 24 hour mean PM10 levels from January 2005 to December 2011

Graph 2 - 24 hour mean PM10 levels from January 2011 to December 2011

5 Completed actions

In 2005, it became clear that the sites we regulate at Horn Lane could potentially be contributing to failures of the local air quality objectives. Since then, we have created an Environment Agency Air Quality Action Plan to record our actions at Horn Lane.

Our completed actions to date are listed below (ongoing and future actions are listed in chapter 6).

1) We have varied the terms of the Environmental Permit issued to Gowing & Pursey. These variations impose particulate management limits and a cycle of review and improvement to enable operations that cause high levels of particulates to be changed or removed from the site.
Completed June 2006

2) We varied the terms of the Environmental Permit issued to Gowing & Pursey to reduce the permitted tonnages from 210,000 to 36,000 tonnes per year, tighten emission management arrangements and insist monitoring is carried out to MCERTS standards.
Completed April 2011.

3) We worked with Gowing & Pursey to install an Air Quality Monitoring System alarm - a system to turn on/off the alarm system when the site is closed. This measure ensures the alarm system does not go off out-of-hours causing a noise nuisance to neighbours.
Completed December 2010.

4) We worked with Gowing & Pursey to install four dust monitoring trigger-alarm light beacons. These were installed along the western and southern perimeter fence, inside the waste transfer station and inside the site office.
Completed December 2010

5) We worked with x to move the Air Quality Monitoring System to a more suitable location and to get it certificated and calibrated by Turnkey consultants. The system is now managed by Turnkey.
Completed March 2011

6) We worked with Gowing & Pursey to remove and replace the perimeter fence (the green mesh netting) that forms part of the western and southern perimeter fence. The original fence was replaced with a ply fence with additional dust meshing and concrete push wall
Completed December 2010.

7) We worked with Gowing & Pursey to extend their shed.
Completed July 2011

8) We asked Gowing & Pursey to update their Working Plan, and Dust Monitoring Plan. We also asked them to produce a Noise Management Plan along with a schedule of works.
Completed March 2011.

9) We insisted that Gowing & Pursey did not operate their trommel until comprehensive dust/noise surveys were carried out and we had confirmed that its operation was acceptable.

Completed March 2011.

10) Gowing & Pursey Enforcement Action - we have prepared a case file for failing to comply with the Regulation 36 Notice.
Completed January 2011 – warning letter sent

6 Ongoing and future actions

Levels of particulates have reduced dramatically since our focussed work began (set out in chapter 5 above), but ongoing actions are still required to ensure a continued reduction of particulate levels.

We have detailed below the actions we intend to take in the short to medium term. Please be aware that these actions could change as additional information comes to light - as a result we regularly review the document. To request an up-to-date copy, please contact the local area office at Hatfield.

1) To ensure compliance with the conditions of the Environmental Permit for Gowing & Pursey, Yeoman Aggregates and the exempt operation at Horn Metals, we intend to take enforcement action in accordance with the Offence Response Option and associated policy for any breaches of conditions.
Ongoing.

2) Establish regular contact with the London Borough of Ealing officers and facilitate a joined up approach through regular contact and meetings.
Ongoing.

3) Request air quality data from Gowing & Pursey at the end of each calendar month (data to be subjected to a quality assurance check with National Ambient Air Quality Team).
Ongoing.

4) - Mr Ward (Gowing & Pursey's Managing Director) has now introduced himself on the local residents' chat room (http://groups.yahoo.com/group/StopHornLanePollution) to discuss and answer some of the various issues they face at Gowing & Pursey and on Horn Lane. The site intends to keep local residents informed of the actions they are taking to address their concerns over noise and particulates. The local MP also plans to arrange a meeting with all stakeholders, potentially in March 2011.
Ongoing – regular meetings held at Portcullis House with MP and local residents

5) We have arranged joint compliance visits with the London Borough of Ealing.
Ongoing.

6) We continue to receive and respond quickly to reports/incidents relating to the site.. We will keep the London Borough of Ealing informed of progress at all times.
Ongoing.

7) Yeoman Aggregates provideus with air quality data every three months or when we request it (site provides data voluntarily - it is not a condition of their permit).
Ongoing.

8) We are varying the terms of Yeoman Aggregate's Environmental Permit to tighten emission management arrangements and to insist that monitoring is carried out to MCERTS standards.
Ongoing.

9) We are encouraging Gowing & Pursey and Yeoman Aggregates to apply for a CMA dust suppressant for the yard and private haul roads.
Ongoing.

10) We are supporting Transport for London in offering a Clean Air Fund Package to the London Borough of Ealing for use at Horn Lane. This is to include:

1. a PM10 targeted deep cleaning programme using the London Borough of Ealing's road sweeping equipment;

2. further PM10 targeted deep cleaning using high specification road sweepers owned by Transport for London;

3. the use of CMA dust suppressant on Horn Lane (applied by Transport for London).

4. the continued funding of the Ealing 8 monitoring station until December 2012.

Ongoing.

Location Plan

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