Amenity Action Plan - Air Quality

Horn Lane, Acton

December 2012

Version 1.8

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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 potential sources responsible for the high PM10 particulate pollution levels recorded at Horn Lane. Some of these sources are sites regulated by the Environment Agency and the others falling to the LB of Ealing to regulate.

This report explains what measures we have already taken 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).

As result of this work we currently believe that the sites we regulate on Horn Lane are no longer are making a significant contribution to failures of local air quality. However we do recognise that given the proximity of sensitive residential receptors close to these sites, that an enhanced regulatory input is required to ensure this remains the case. We remain committed to support the London Borough of Ealing and other stakeholders where possible.

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

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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 had 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 were:

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.

As a result of the work detailed in this document we removed Horn Lane from the list of "priority sites" in April 2012.

Waste and Air Quality Working Group

Managing the impacts of these sites on local air quality is a complex process that involves 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

Local MPs and pressure groups have expressed concerns about the previous 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 early 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

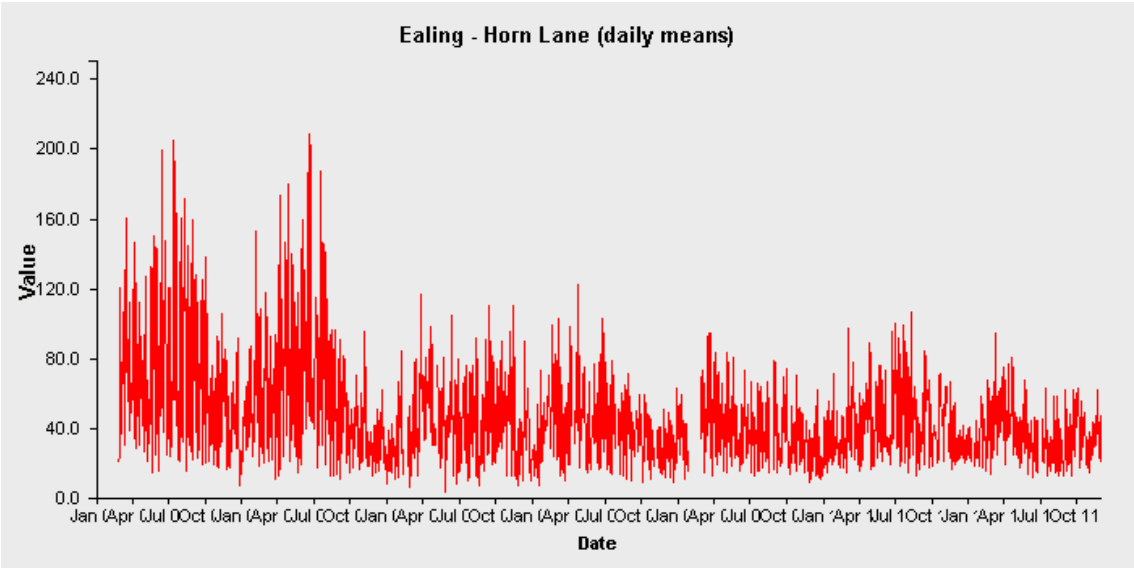
2011

Pollutant	Objective	Limit	Value observed
PM10 Particulate	*Annual Mean (gravimetric)*	40ug/m3	36
PM10 Particulate	*No. days 24hr mean >50ug/m3 (gravimetric)*	35 days	61

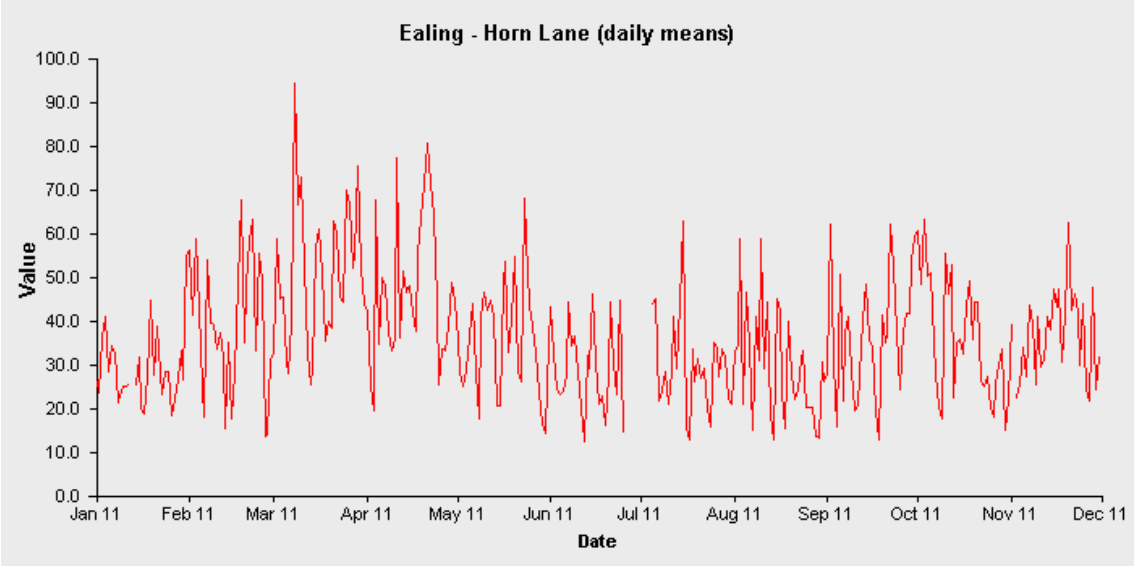
2012 (to date)

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

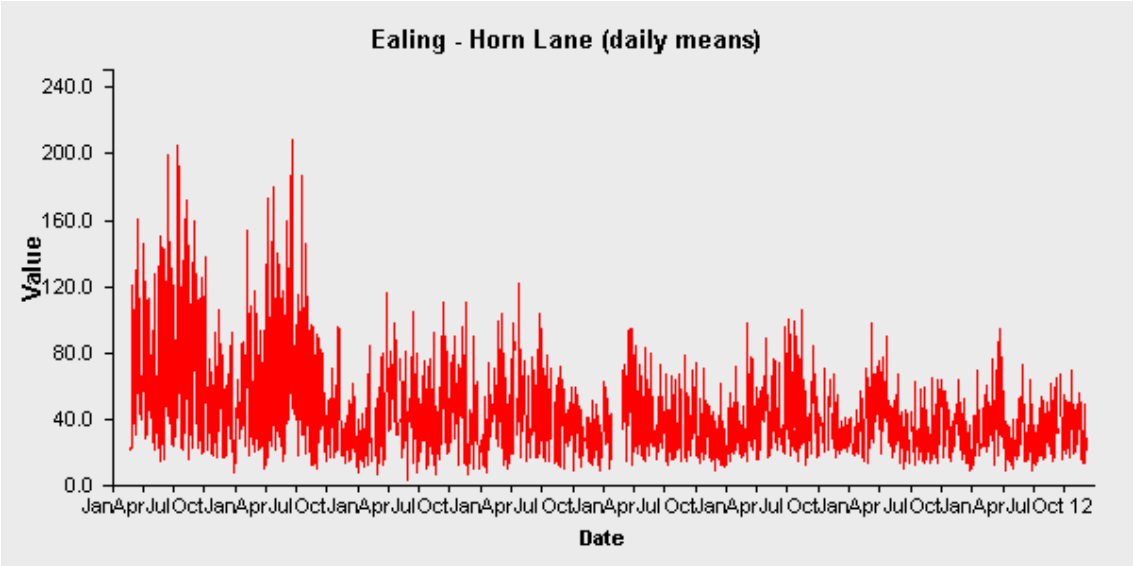
Graph 1 - 24 hour mean PM10 levels from January 2005 to December 2011



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



Graph 3 - 24 hour mean PM10 levels from 1st January 2005 to 14th December 2012



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 Amenity Action Plan for Air Quality to record our actions at Horn Lane. Our completed actions to date are listed below.

1) In June 2006, we 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.

2) In March 2007, we issued a formal warning to Gowing & Pursey after finding that waste was being stored outside of their waste transfer shed.

3) In June 2009, we issued a Regulation 36 Notice to Gowing & Pursey after finding that waste was again being stored outside of their waste transfer shed, and that they had not submitted monthly records of real-time dust monitoring data to us because the monitoring system had not been operational.

4) In December 2010, 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.

5) In December 2010, 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.

6) In December 2010, 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

7) In March 2011, we issued a Regulation 36 Notice to Gowing & Pursey after finding that breaches of trigger levels for dust had not been reported to us, that no action had been taken to stop waste activities giving rise to the emissions, and that the incident and action was not recorded in the site diary.

8) In March 2011, we worked with Gowing & Pursey 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.

9) In March 2011, 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.

10) In April 2011, 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.

11) In June 2011, Gowing & Pursey accepted a formal caution from us for failing to comply with the Regulation 36 Notice issued in March 2011.

12) In June 2011, we worked with Gowing & Pursey to update their Emission Management Plan (Dust and Particulates), and to produce a Noise Management Plan.

13) In July 2011, we worked with Gowing & Pursey to extend their shed.

14) In December 2011, we worked with Gowing & Pursey to update their Site Working Plan.

15) In May 2012 we worked with Yeoman Aggregates to produce a yard re-development plan and schedule of improvement works, including wheel wash maintenance and instructions, weighbridge relocation, parking and traffic management plan and an updated site management plan.

16) In July 2012, we supplied Gowing & Pursey and Yeoman Aggregates with stores of calcium magnesium acetate (CMA) for use at their sites and private haulage roads thanks to Clean Air Funding via Transport for London.

17) In September 2012, we reviewed the technical competence of site management at both Gowing & Pursey and Yeoman Aggregates to ensure they held appropriate WAMITAB certification for their operations.

18) In November 2012, two additional Environment Officers completed a health & safety induction at Yeoman Aggregates allowing them to conduct site inspections and to respond to incidents originating from the site.

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 Permits for Gowing & Pursey and Yeoman Aggregates, and the conditions of the exempt operation at Horn Metals, we continue to take enforcement action in accordance with the Offence Response Option and associated policy for any breaches of conditions.

2) We continue to inspect both Gowing & Pursey and Yeoman Aggregates more frequently than other regulated sites with similar risk profiles.

3) We continue to receive and respond quickly to reports/incidents relating to the sites we regulate, and keep the London Borough of Ealing informed of progress at all times.

4) We have regular contact with London Borough of Ealing officers and facilitate a joined-up approach through meetings and joint unannounced site inspections to regulated sites.

5) Mr Ward (Gowing & Pursey's Managing Director) intends to use 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. Regular meetings are held at Portcullis House with MP and local residents.

6) We request air quality data from Gowing & Pursey at the end of each calendar month, and subject this data to a quality assurance check with National Ambient Air Quality Team.

7) We request air quality data from Yeoman Aggregates every three months or when required in response to an incident. The site provides this data voluntarily as it is not yet a condition of their permit.

8) We are varying the terms of Yeoman Aggregate's Environmental Permit to require them to: install a dust analyser to monitor dust (PM10); install SMS and email alerts for breaches of trigger levels; tighten emission management arrangements; and to insist that monitoring is carried out to MCERTS standards. Yeoman Aggregates' analyser (Osiris) will be maintained by Turnkey and air quality data will be managed by Bureau Veritas (BV). A draft notice of permit variation is under consideration by Yeoman Aggregates and we aim to issue the permit variation by the end of December 2012.

9) Following the variation of Yeoman Aggregates permit, we will also ask them to provide supporting documentation including an effective Dust Monitoring Plan and an updated Site Working Plan.

10) The re-development of Yeoman Aggregates' yard and improvement works are expected to be complete by the end of December 2012.

11) 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 deep cleaning programme targeting PM10 using the London Borough of Ealing's road sweeping equipment;

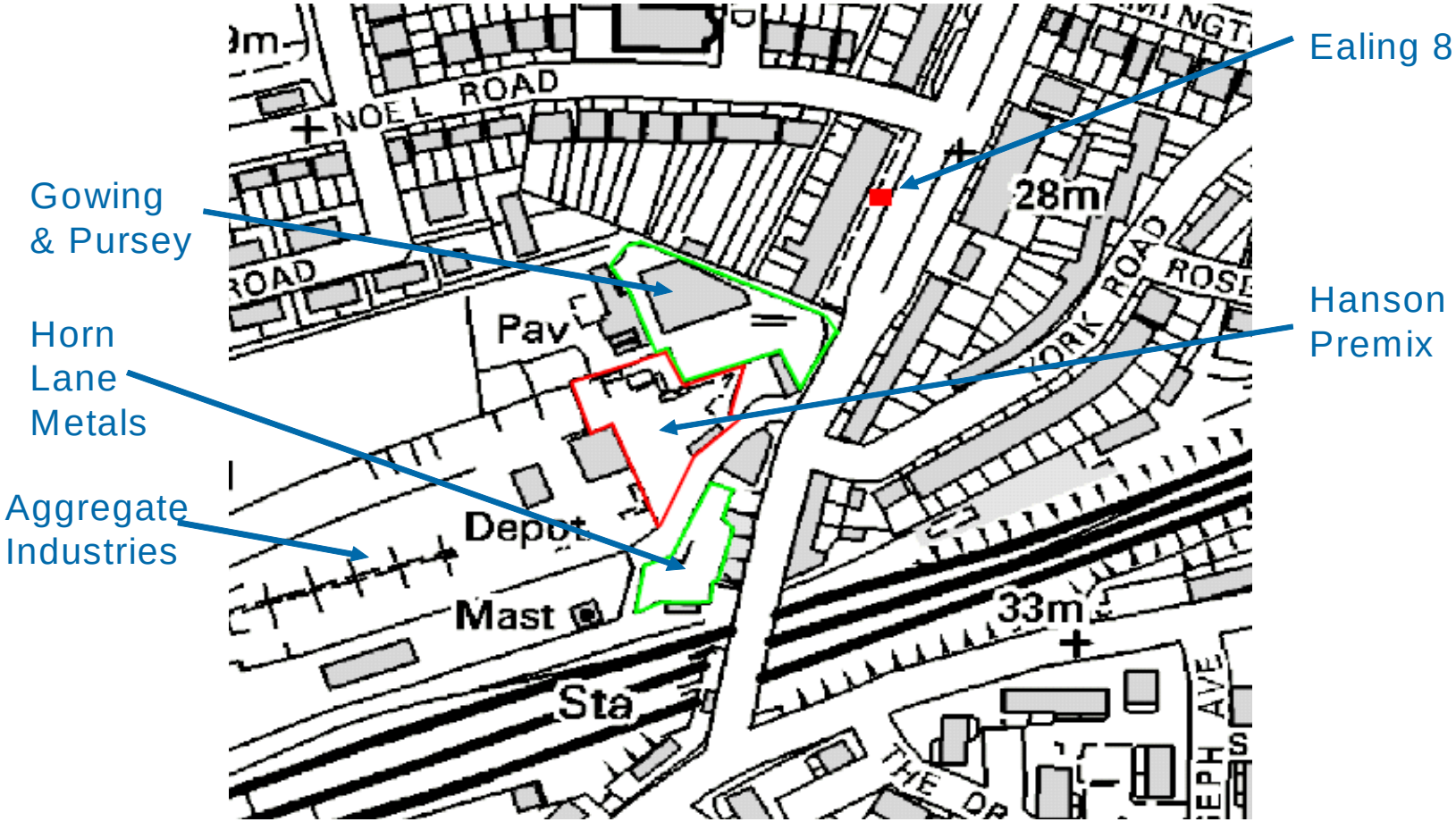
2. A further deep cleaning programme targeting PM10 using high specification road sweepers owned by Transport for London;

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

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

12) We are encouraging Gowing & Pursey and Yeoman Aggregates to use CMA dust suppressant in their yards and private haul roads, and have asked both sites to provide information on its use and effectiveness. Gowing & Pursey have not been able to use CMA because their road sweeper works on the public highway as well as their site. They do have a back-pack dispenser but have only been able to use it in their pedestrian areas. Yeoman Aggregates have been able to use CMA within their site but feel it is too early to say whether it is effective.

Location Plan



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