London Borough of Brent

Air Quality Action Plan 2012-15

Executive summary

The link between poor health and air pollution is well established and for the last 13 years the Council has sought to improve air quality in the Borough for the benefit of Brent's residents and workers.

Air quality in Brent has generally improved over this time and action taken by the Council has reduced local levels of 1-3- butadiene, benzene, carbon monoxide, lead and sulphur dioxide such that further controls to reduce these pollutants are no longer required.

Air quality Action Plan 2005 – 2010

Measures to reduce oxides of nitrogen and particulates have been challenging and in 2005 the Council published its Air Quality Action Plan (AQAP) outlining specific measures to be taken to reduce levels of these pollutants in hotspots throughout the Borough. By 2010 the Council had completed 72% of the actions, the remaining actions being either impractical or no longer relevant.

The Council will maintain 9 fundamental elements of local air quality management in the new plan. These measures are considered essential for maintaining the reduction in pollution emissions achieved by the former plan and are summarised below in:

Fundamental measures

Action	Description
F.1	Monitor key air pollutants throughout the Borough
F.2	Reduce emissions to air from industrial installations and waste facilities
F.3	Implement all feasible options for reducing the impacts of idling engines from commercial and domestic vehicles
F.4	Implement measures to reduce carbon emissions in accordance with Council Carbon Strategies and promote the uptake of 'Green Deal' once it is introduced.
F.5	Review all new planning applications for potential air quality impacts and implement controls to limit impacts
F.6	Implement measures to restrict the burning of waste
F.7	Work with West London Partners to reduce emissions regionally and work towards limiting pollutant emissions from major infra-structure projects such as HS2 and Cross-rail.
F.8	Raise awareness, engage and educate stakeholders and residents about air quality issues
F.9	Support Mayoral, Government and EU initiatives to achieve emission reductions in the

	Borough

Air quality Action Plan Measures 2012 – 2015

The air quality management area remains unchanged since it was amended in 2006. Nitrogen dioxide and particulates remain the focus of the new plan since concentrations of these pollutants continue to exceed targets set. Further action is required to ensure that all areas in the Borough meet national air quality objectives.

The new plan integrates air quality with climate change measures and identifies additional opportunities for emissions reductions, not only from Council activities but also from Brent businesses.

Integration of air quality into the emerging public health agenda is a high priority. It ensures consideration is given to protecting the public from serious health threats from policy planning to its implementation.

The London Borough of Brent's revised and updated Air Quality Action Plan 2012-2015 outlines the measures the Council will take to reduce air pollution in the Borough. The Council will implement 15 new air quality action plan measures to further reduce pollutant emissions associated with specific sources.

Progress in delivering the plan will be reported annually in accordance with the National Review and Assessment process.

Air Quality Action Plan Measures

Action	Description	Timescale
A.1	Integrate local air quality improvements into emerging Borough public health plan	**Oct 2013**
A.2	Increase the number of suitable tree species planted in new developments	**Oct 2013**
A.3	Develop a cohesive corporate strategy to ensure all proposed energy from waste plant has a minimal Air Quality impact whilst achieving 20% carbon reduction from renewables.	**Mar 2015**
A.4	Update the Sustainable Development Checklist to reflect the Borough's commitment to reducing the environmental impact of new development on air quality	**Mar 2013**
A.5	Set carbon and nitrogen dioxide reduction targets for regeneration schemes	**Mar 2015**

A.6	Review planning policies to safeguard against environmental impacts of new and existing Waste Facilities	**Mar 2013**
A.7	Achieve on-going reduction in car use through modal shift to non-car modes	**Mar 2014**
A.8	Install electric charging points at strategic locations in Brent	**Mar 2014**
A.9	Reduce congestion associated with new or proposed traffic management schemes	**Mar 2015**
A.10	Facilitate the delivery of new car clubs in the borough through links with transport and planning policy	**Mar 2015**
A.11	Work with Brent businesses to achieve 10% reduction in energy use from their operations	**Mar 2015**
A.12	Secure a 20% decrease of energy use in Council housing stock and 25% reduction in emissions arising from Council service delivery	**Mar 2015**
A.13	Reduce use of fossil fuels in council buildings	**Mar 2015**
A.14	Secure 10% reduction in nitrogen dioxide, particulates and carbon dioxide from major commercial fleet operators in Brent	**Mar 2015**
A.15	Lobby government to raise awareness of challenges to implementing waste licensing controls whilst achieving National Air Quality targets	**Mar 2015**

New Air Quality Action Plan Measures

London Borough of Brent's revised Air Quality Action Plan 2012-2015 outlines the Council's plans to reduce air pollution over the next four years. The measures offer the potential to deliver the greatest health benefits for those who visit, work and live in the Borough.

Action measures

Following the implementation of the previous Air Quality Action Plan air quality in Brent has improved but further reductions in nitrogen dioxide and particulate matter are required. Many of the actions detailed in the previous plan have been completed or superseded by changes in technology and lifestyle.

The measures below build on the success of the previous Action Plan and describe a positive way forward to achieve further improvements.

Theme 1: Community

Action 1: Integrate local air quality improvements into emerging Borough public health plans

Action 2: Increase the number of suitable tree species planted in all new development.

Although air pollution is not confined by geographical boundaries local and regional sources can make a difference between acceptable levels and levels considered prejudicial to health. Any improvement in air quality will benefit everyone. However, some areas of the Borough are more likely to be affected by poor air quality than others as the wider problems of poverty; deprivation and general poor health make people more vulnerable to the effects of pollution. This contributes to an almost 9-year difference in life expectancy between the most affluent and least affluent wards in the Borough.

The council is committed to reducing this gap. **Action Measure 1** we seek to limit Council actions or activities which further reduce quality of life or amenity whilst promoting positive improvements. This will include limiting further exposure of those worst affected to sources such as energy from waste, industrial plant or transport and ensuring that future development is not concentrated in these areas alone. We will also ensure that all opportunities to integrate air quality improvement to measures arising from the Council's implementation of the Public Health White Paper are considered.

Improved public realms have a significant and positive impact on general health and mental wellbeing and can facilitate an increase in physical activity and local exercise. Green space in Brent occupies approximately 8% of the Borough which is well below the 15% London average. Trees form an integral part of the urban environment and the air quality

management area is recognised as generally being deficient in tree cover. Brent's high population density means many Brent residents have little or no access to green or open space. We seek to address this by increasing planting in the Borough, contributing more generally to the Councils' commitment for improving health and wellbeing and tackling health inequalities. In addition, the Council seeks to improve the walk-ability of key routes to encourage walking and to make the street and public transport viable and attractive travel options. **Action Measure 2** contributes to this agenda by promoting an increase in the provision of trees to enhance existing green spaces and routes wherever possible, particularly in new development areas.

Theme 2: Development

Action 3: Develop a cohesive corporate strategy to ensure all proposed energy from waste plant has a minimal Air Quality impact whilst achieving 20% carbon reduction from renewables.

Action 4: Update the Sustainable Development Checklist to reflect the Borough's commitment to reducing the environmental impact of new development on air quality

Action 5: Set carbon and nitrogen dioxide reduction targets for regeneration schemes

Action 6: Review planning policies to safeguard against environmental impacts of new and existing Waste Facilities

The Core Strategy allows for the development of over 10,000 new homes between 2010 and 2016 and this increase is likely to give rise to significant pollution emissions in the short-, medium-, and long- term unless properly controlled. Development policies to increase mixed-used development and ensure that town centres are easily accessible by public transport means that some areas which are subject to further development are already exposed to high levels of pollution. This will require particular care to ensure it is managed.

Council policy and supplementary planning documents already address the long-term sustainability of development control, particularly renewable energy and climate change impacts. **Action Measures 4 and 5** seek to enhance this approach by including Air Quality in the sustainability checklist and setting targets to limit the pollution impacts of new development.

Nowhere is this more pronounced than when considering future use, location and impacts from biomass and similar combustion plant. Local energy generation and district heating schemes whether fuelled by waste, biomass or fossil fuels have the potential to severely impact local Air Quality. **Action Measure 3** will ensure that sufficient controls are in place to minimise the impacts of such plant on Air Quality without losing the opportunities to reduce

local energy demand and landfilling of waste. In addition, to further minimise the potential impacts, consideration will be given to the most suitable locations for their placement.

The core strategy also supports substantial commercial development in the borough. We have and continue to take action to limit the air quality impacts from some commercial operations and recognise the significant contribution of waste facilities to particulates (as PM_{10}) measured locally. We do not meet the national targets set for this pollutant in some areas in the Borough and are unlikely to meet future targets for ultra-fine particles ($PM_{2.5}$). We estimate that fine particles have an impact on mortality equivalent to 133 deaths in Brent compared to a target for traffic related deaths of less than 10 a year. Through implementation of **Action Measure 6** we will seek to actively resist proposals for the location of such activities close to residential or other sensitive land uses. We will also use all regulatory powers available to limit emissions from existing processes in the borough and use our influence to seek to limit the impact of processes in neighbouring boroughs.

It is important to note that Action Measures 3, 4, 5 and 6 will be subject to the satisfactory outcomes of statutory consultation processes required for changes to existing planning policy.

Theme 3: Transport Measures

Action 7: Achieve on-going reduction in car use through modal shift to non-car modes

Action 8: Install electric charging points at strategic locations in Brent

Action 9: Reduce overall congestion, including that associated with new or proposed traffic management schemes

Action 10: Encourage the delivery of new car clubs in the borough through links with transport and planning policy

Traffic and transport is the largest contributor to air pollution in Brent, as accounting for at least 52% of emissions, hence measures to reduce their impacts remain our highest priority for action. Congestion, increases in town centre traffic from buses and heavy goods vehicles, increased private car use, and idling vehicles all contribute significantly to pollutant emissions. The Council recognises it has a significant part to play in the local control of traffic and transport. The Borough Spending Plan is designed to reduce traffic impacts, encourage modal shift and increase the use of travel plans in schools and businesses to encourage take up of more sustainable modes of transport than the private vehicle.

The Council will target the impacts of increasing car ownership by increasing modal shift in favour of more sustainable methods such as car clubs, public transport, walking and cycling. Implementation of **Action Measure 7** will ensure that all measures, ranging from travel planning for schools and business, the use of cycle lanes and the take-up and use of sustainable modes of transport is measured. The future aim of this measure is to facilitate and map the continued shift from private cars to cycles or walking from an established baseline giving regard to guidance such as 'The Brent Placemaking Guide'.

Many residents in the Borough who do not currently own a car aspire to do so in the future. 36% drive or are driven to work and the opportunity exists to reduce this by implementing measures to encourage people to use other modes of transport or consider less polluting options where such travel is necessary. Measures such as the use of car clubs and designating areas as car-free will serve to reduce private car ownership and therefore pollution and the delivery of new car clubs in appropriate areas throughout the Borough shall be met by implementing **Action Measure 10**.

Any shift towards increased car use would undermine all positive efforts taken to date to reduce pollution and increase congestion in town centres. It is therefore vital that the reduction of congestion underpins any proposal for a new scheme and the implementation of Action **Measure 9** for new and proposed traffic management schemes seeks to achieve this.

The Council will continue to review the development of new technologies and fuels to identify appropriate recharging infrastructure and inform future policies as technologies mature. The current tiered parking charging scheme favours small and low or zero emission cars and promotes more environmentally-friendly choices of vehicle or modal shift to non-car modes of travel.

High level support must be secured and robust Council policies written to ensure the successful implementation of such measures as efforts made to date have had only limited impacts on traffic volumes. As a result the review of planning and transport policies is essential.

Electric vehicles are considered much less polluting than petrol or diesel vehicles such that the Mayor of London aims to increase the number of vehicles in the London Fleet by over 98,000 vehicles. The Council is wholly supportive of this and **Action Measure 8** seeks to install a number of charging points around the Borough in support of this aim. The Council will also conduct an analysis of the reduction in pollution emissions secured before considering the locations for additional points.

Theme 4: Commercial Measures

Action 11: Work with Brent businesses to achieve 10% reduction in in energy use from their operations

Action 12: Secure a 20% decrease of energy use in Council housing stock and 25% reduction in emissions arising from Council service delivery

Action 13: Reduce use of fossil fuels in council buildings

Action 14: Secure 10% reduction in nitrogen dioxide, particulates and carbon dioxide from major commercial fleet operators in Brent

Action 15: Lobby government to raise awareness of challenges to implementing waste licensing controls whilst achieving National Air Quality targets

The Council seeks to exemplify best practice by reducing pollutant emissions generated by our operations and activities. We can then demonstrate the measures that could be appropriately adopted by local businesses. Although initially driven by the, now defunct, Best Value Performance Indicators our commitment to lead by example remains a core Council priority, building upon the gains of previous initiatives. **Action Measure 11** will achieve a measurable reduction in pollutant emissions from energy use by Brent Businesses throughout the life of the plan and beyond. The Council has established a baseline from which to reduce pollution emissions generated by energy use in the future and the data gathered to inform this process will also be invaluable for establishing realistic emission reduction targets for Brent businesses from the use of heating, lighting and transport.

Through the implementation of **Action Measure 14** we will secure reductions in emissions of nitrogen dioxide, particulates and carbon dioxide from commercial fleets. Transport and energy emissions are the main sources of air pollution in Brent and we recognise the role local businesses can play in securing reductions in pollution. Brent serves as a transport hub with the North Circular Road serving as a main arterial road connecting London and other main routes to key cities in the United Kingdom. Whilst the London Low Emission Zone helps to reduce the number of worst polluting vehicles from entering the Borough the opportunity exists to reduce fleet emissions further still. Using existing resources and with support from Transport for London, WestTrans and West London Freight Partners, the Greater London Authority will work with businesses in Brent to identify their contribution to local air quality options for reducing the impact of this. We will initially focus this work on those with large fleet operations.

Council operations and, more particularly, our ageing stock of housing are significant contributors to pollutant emissions,. The majority of these emissions come from old and inefficient boilers in Council Offices, Schools and social housing. **Action measures 12 and 13** seek to address this issue by reducing fuel use through the promotion of improved boilers

and buildings and more efficient modes of service delivery. We will also support the uptake of alternative energy sources and district heating schemes.

We recognise that not all Air Quality improvements can be delivered directly by our actions and a particular area of concern is the licensing of Waste Facilities such as those on Neasden Lane. Current National and London wide policies seek to promote greater recycling, reuse and energy reclamation from waste. It is likely that these pressures will result in more waste infrastructure in Brent. **Action Measure 15** will seek to ensure that further development of waste infrastructure does not result in more pollution in Brent. This will be achieved by continuing to strengthen and deepen our working relationships with the Environment Agency, DEFRA and the GLA as well as lobbying for improvements in the relevant licensing regimes.

Air Quality Action Plan Summary

Action	Action measure	Key Performance indicator(s)	Delivery	Completion Date	Lead	Review period
A.1	Integrate local air quality improvements into emerging Borough public health plan	Air quality reduction measures incorporated into public health action plan	Review core measures in emerging strategies and quantify potential benefits of air quality actions in areas targeted Ensure air quality regularly communicates progress to Public Health Board Evaluate impact of the improvements on the plan	Oct 2013	Brent Public Health Board Safer Streets	Annual
A.2	Increase the number of suitable tree species planted in new developments	Revised Supplementary Planning Document published and adopted Planting programme established Street trees maintenance contract revised	Devise list of most suitable species Create map of planting areas and align with planting programme Devise co-ordinated plan for the maintenance of each tree planted Evaluate environmental impacts of the planting programme	Jun2012	Planning and Transport Strategy Safer Streets	Mar 2012 Mar 2012 Oct 2013

A.3	Develop a cohesive corporate strategy to ensure all proposed energy from waste plant has a minimal Air Quality impact whilst achieving 20% carbon reduction from renewables.	Published Brent Biomass Strategy Achieved carbon reduction from onsite renewables.	Devise Strategy for determination of applications for energy from waste plant. Quantify provision of renewables required to meet target and monitor progress every 6 months	Oct 2012 Oct 2013	Planning and Transport Strategy	Oct 2012 Annual
A.4	Update the Sustainable Development Checklist to reflect the Borough's commitment to reducing the environmental impact of new development on air quality	Published Brent Biomass Strategy	Quantify reduction in air pollution secured by implementation of the Checklist	Mar 2013	Planning and Development	Annual
A.5	Set carbon and nitrogen dioxide reduction targets for regeneration schemes	Published guidance Reduction targets are set for carbon and nitrogen dioxide	Evaluate impacts of targets set	Mar 2015	Safer Streets Planning and Development	
A.6	Review planning policies to safeguard against environmental impacts of new and existing Waste Facilities	Adoption of Joint West London Waste DPD Publication of new planning policies	Protocol set up for joint approach to monitoring impacts of waste facilities New waste transfer facilities are monitored and appropriately located	Nov 2012 Mar 2013	Planning and Transport Strategy	Mid-term review

A.7	Achieve on-going reduction in car use through modal shift to non-car modes	Achieve walking modal share of 31.40% and cycling of 1.05%	Count number of additional walking schemes implemented, Count number of additional cycling schemes implemented	Mar 2014	Transportation	Annual
A.8	Install electric charging points at strategic locations in Brent	Annual increase electric vehicle charging points across the borough.	Count, number of points installed	Mar 2014	Transportation	Annual
A.9	Reduce overall congestion associated with new or proposed traffic management schemes	Evidence of reduced congestion in Harlesden	Comparison with baseline congestion map	Mar 2015	Transportation	Annual
A.10	Facilitate the delivery of new car clubs in the borough.	Increase in number of car club vehicles in use	Facilitate take-up and use via planning policy and actions Review planning and transport policies to require the installation of additional car clubs in key locations Review options for incorporating low emissions vehicles in the fleet	Mar 2014 Mar 2014	Transportation Planning and Transport Strategy	Annual

A.11	Work with Brent businesses to achieve 10% reduction in energy use from their operations	10% reduction in energy use in businesses surveyed	Work with Brent Businesses to determine local baselines and measures required to secure reduction Devise Action Plans for achieving target Monitor progress with Action plan	Mar 2015	Environmental Projects and Policy	Annual
A.12	Secure a 20% decrease of energy use in Council housing stock and 25% reduction in emissions from Council service delivery.	20% reduction in energy use 25% reduction in Council emissions	Survey Council stock and core activities to determine local baseline and measures required to secure reduction Devise Action Plan for achieving target Monitor progress with Action plan	Mar 2015	Environmental Projects and Policy Brent Housing Partnership	Annual
A.13	Reduce use of fossil fuels in council buildings	Reduction in council energy derived from fossil fuels	Secure target reduction council energy derived from fossil fuels	Mar 2015	Environmental Projects and Policy	Annual

A.14	Secure 10% reduction in NO_2, PM_{10}, CO_2 from major commercial fleet operations in Brent	20% reduction secured	Determine baseline for fleet operators selected Devise Action Plans for achieving target Monitor progress with Action plan	Mar 2015	Transportation	Annual
A.15	Lobby government to raise awareness of challenges to implementing waste licensing controls whilst achieving National Air Quality targets	Improvement measures identified and addressed	Work with Stakeholders/ Partners to identify key issues Determine mechanism for reporting	Mar 2012	Safer Streets	Annual

Fundamental measures

This Council will continue to report on actions that are essential to local air quality management which need to be carried over from the original plan. These nine Fundamental Measures demonstrate the Councils continued commitment to reducing pollution from its activities as well continuing to protect public health and the environment from polluting emissions. They will enable the Council to maintain the emission reductions achieved by the former Air Quality Action Plan (2005-2010). They will be subject to annual review for the lifetime of the Air Quality Action Plan (2012-2015) and are listed below:

Action F1: Monitor key air pollutants throughout the Borough

The Council will continue to regularly review the local air quality monitoring network to ensure that its scope remains responsive to changes in legislation and local needs whilst providing the most useful data. The Council remains committed to monitoring the key pollutants associated with health effects in the Borough and will continue to report progress in the form of annual progress reports demonstrating the trends in pollution emissions. Currently the potential impacts of $PM_{2.5}$ are being debated and it has been established that these finer particles are associated with greater health impacts than PM_{10} which is currently measured as a proxy for particulate matter. Although the target set for $PM_{2.5}$ is 2020, and therefore monitoring is not mandatory, the potential for significantly greater health impacts arising from these emissions requires the Council to consider the implications of such emissions as soon as practicable.

Action F2: Reduce emissions to air from industrial installations and waste sites using regulatory powers

The Council has a legal duty to regulate emissions to air from the operation of some industrial processes, such as petrol stations and dry cleaners in the Borough under the Environmental Permitting Regulations 2007. The emissions from larger processes with greater polluting potential are regulated by the Environment Agency and the Council remains committed to working with the Agency to ensure that any processes operating within Brent do not increase local air pollution or otherwise operate at significant detriment to the local amenity. The use of such sites is necessary if we are to meet increasingly stringent targets for waste recycling and reuse and responsibly dispose of waste whilst the cost of disposal increases and the finite amount of space left for facilitating disposal dwindles. However, this should not be to the detriment of local residents or amenity and the council will continue to take enforcement action to limit the impacts of existing operations whilst making every effort to ensure that proposals for new facilities are considered carefully.

Action F3: Implement all feasible options for reducing the impacts of idling engines from commercial and domestic vehicles

The Council will continue to investigate complaints regarding idling engines and, using powers available, take action to limit the air quality impacts of idling engines wherever possible. We will proactively target areas where idling is a common occurrence, such as outside schools and at taxi ranks and bus stands, to raise awareness about the contribution this makes to air pollution.

Action F4: Implement measures to reduce carbon emissions in accordance with Council Carbon Strategies

Mitigation and adaptation to climate change impacts is fundamental to the sustainability of the Councils operations and future service provision. In addition, it is established that synergies and conflicts exist between climate change and air quality objectives and it is necessary to ensure that compliance with one does not detrimentally impact the other. The Council will ensure that all air quality actions contribute to our climate change objectives and that measures identified will provide the greatest reductions in greenhouse gases and air quality emissions. The Government's proposed 'Green Deal' programme is designed to improve energy efficiency in homes, common spaces and businesses. The programme involves property owners investing in energy saving measures. It applies to privately owned, privately tenanted as well as commercially rented properties. The programme is due to be launched in Autumn 2012 and it is hoped it will include residents in social housing. If introduced the Green Deal has potential to reduce energy use which will reduce nitrogen dioxide and carbon emissions. In addition, any proposals for reduction of greenhouse gases, such as the provision of an energy strategy for new development or installation of new combustion plant will be subject to an impact assessment to ensure that air quality impacts are quantified and eliminated as far as is practicable.

Action F.5: Review all new planning applications for potential air quality impacts and implement controls to limit impacts

The Council shall continue to review all applications for major development to ensure that future residents are not subject to poor air quality and that the development itself is not a source of poor air quality. Planning applications are concentrated in the south of the Borough, already subject to the worst air pollution, greatest traffic impacts and significantly occupation. Careful consideration of potential cumulative impacts will be undertaken for all future development in the borough with every effort made to improve the air quality in

specific hotspots in the south of the borough. To facilitate this we have ensure that air quality improvements are intrinsically linked to the Local Development Framework.

We will continue take action to minimise the impacts of emissions arising from construction sites including from the use of plant such as generators and mobile plant as well as from the activities themselves such as concrete crushing or the transfer of dusty materials; the Civic Centre development is an example of good practice. Where development is large-scale or of long duration consideration will be given to requiring air quality monitoring and action to mitigate against impacts that are considerable.

Inclusion of biomass plant in local development is increasing. It is established that some plant may increase pollutant emissions and therefore the use, installation and nature of biomass suggested must be carefully considered, especially where proposals for installation are within highly developed urban areas. The Council will continue to review applications for planning permission to ensure that such plant is only installed where it can be demonstrated that their impacts are minimal. The Council will also ensure that policy is reviewed regularly and is responsive to outcomes of ongoing research into the impacts of biomass plant and bio-fuel

Action F.6: Implement measures to restrict the burning of waste

Burning leads to the emission of gaseous pollutants and can lead to complaints of nuisance if uncontrolled or burning of certain materials is undertaken. We seek to reduce these and this will include continuing to encourage residents to dispose of waste more sustainably. Although the impact of this measure alone on reducing air pollution may be small. The Council would seeks to reduce impacts of any pollutant source wherever they occur.

Action F.7: Work with West London Partners to reduce emissions regionally

The London Borough of Brent has worked in partnership with other West London Boroughs to identify and implement measures to reduce pollutant emissions across the region. This strategic approach enables participating boroughs (the London Boroughs of Hammersmith and Fulham, Harrow, Ealing, Hillingdon, Hounslow and the Royal Borough of Richmond) to consider trans-boundary issues such as freight and air travel, wider impacts of local policy and ensure that where achieved the benefits of air quality improvements are experienced across as wide a geographical area as possible. However, major infra-structure projects such as Cross-rail and HS2 may result in increased pollutant emissions for limited duration. For example, delivery of large pre-fabricated concrete sheets for tunnel lining at Westbourne Park will need to be brought to the site by articulated lorries through Harlesden Town Centre and Harrow Road, which will result in increased traffic congestion and pollution emissions. We will continue to work closely with neighbouring boroughs and Transport for

London to identify and establish the best options in order to limit such impacts as well as bring about greater improvements across the West London region.

Action F.8: Raise awareness, engage and educate stakeholders and residents about air quality issues

The Council recognises the importance of personal behavioural change in securing a long term reductions in pollutant emissions and aims to communicate this widely to all sectors of the community. We will continue build on the successes of projects such as the Walk-it sustainable route planner and the Airtext pollution notification system to engage and educate Brent residents and stakeholders about air pollution and their potential influence to reduce pollutant emissions.

Appendix 2

Chronology of Air Quality Review and Assessment Work in Brent

1999- *Stage 1: Review and assessment* – concluded carbon monoxide, particulates, sulphur dioxide (SO_2) and nitrogen dioxide (NO_2) required further assessment at stage 2.

2000- *Stage 2: Review and assessment* - concluded that no further action was needed for carbon monoxide. Further investigation required for SO_2, fine particles as PM_{10} and NO_2.

2000 to 2001 - *Stage 3: Review and assessment* - predicted that levels of NO_2 and PM_{10} would exceed National Air Quality objectives. Brent declared parts of the as Air Quality Management Areas (AQMAs) in April 2001.

2002 to 2003- *Stage 4: Detailed Assessment and Updating and screening assessment* - identified exceedences of the annual mean NO_2 objective and the annual mean for PM_{10}. The major source of emissions was road transport.

The updating and screening assessment (USA) concluded that a further Detailed Assessment was necessary to identify air quality exceedences predicted outside of the AQMA declared.

2004- *Detailed Assessment* - confirmed air quality objectives for NO_2 and PM_{10} will not be met at many locations including two key locations outside the existing Air Quality Management Area – Wembley Hill Road and Ealing Road.

Neasden Lane was also identified as an area of very high PM10 concentrations and control of emissions in this area recommended as a priority.

The impact of diesel train emissions from the Chiltern Line on SO_2 concentrations was determined as unlikely to breach the objectives and therefore no AQMA declared for this pollutant.

2005- *Air Quality Action Plan* - outlined the Council's commitment to reduce the impact of poor air quality in AQMA. 98 actions and annual reporting undertaken to chart progress.

2005- *Updating and screening assessment* - confirmed NO_2 and PM_{10} concentrations continue to exceed the annual mean objective where there is relevant exposure. Additional monitoring in the Council's area indicates that the annual mean objective is exceeded outside of the AQMA.

2006-**2008**- *Progress Reports* - confirm air quality objectives for NO_2 and PM_{10} exceeded at locations with relevant public exposure identified.

Brent Council extended the Air Quality Management Area in 2006 following further assessment to confirm that the objectives for NO_2 and PM_{10} would not be met in these areas

Further monitoring also indicates concentrations of ozone exceeded in the north of the Borough.

2008- *Further Assessment* - confirmed NO_2 and PM_{10} concentrations continue to exceed the annual mean objective where there is relevant exposure.

2009- *Updating and screening assessment* - concluded the need for a Detailed Assessment for nitrogen dioxide at Harrow Road, and at junction of Shaftesbury Avenue and Woodcock Hill.

Traffic and transport remained the key contributor to air quality exceedences within Brent. The annual and hourly mean objective for NO_2 and PM_{10} continue to exceed the objectives in air the current quality management areas in the Borough.

2010- *Progress Report and Detailed Assessment* - confirm air quality objectives for NO_2 and PM_{10} exceeded at locations with relevant public exposure identified.