



# London Borough of Newham Air Quality Action Plan *Consultation Report*



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**Submission date of Report:** 28<sup>th</sup> March 2003

## Overview

Under the National Air Quality Strategy (NAQS), Newham Council is required to assess the air quality within the borough. The NAQS provides objectives and target dates for various pollutants, which the council must achieve. Where it is unlikely that these objectives will be met the council must declare an Air Quality Management Area (AQMA). Under section 84(2) of the Environment Act 1995, where an AQMA is declared Newham Council must agree an Action Plan to work towards the objectives given.

Newham Council has been reviewing its air quality since 1998 and has just completed stage IV of this review and assessment process. Stage III identified that Newham Council will not meet the objectives for PM10 (24hr rolling mean) and nitrogen dioxide (annual average) and so the council declared an AQMA in March 2002. As road traffic is the primary source of pollution, the AQMA falls along major roads in the borough. Government Guidelines (2000) state that air quality action plans (AQAP) should be in place 12 to 18 months following an AQMA designation.

This Action Plan has been produced using guidance from the National Society for Clean Air and Environment (NSCA), the London Mayors Air Quality Strategy (MAQS) and the Action Plan Appraisal checklist developed by Casella-Stanger (acting on behalf of DEFRA). It has also involved co-operative working with departments throughout Newham Council and other London boroughs.

Although this is an 'Air Quality' action plan, widespread and continuing consultation and participation are essential, both within the council and externally with relevant stakeholders and the public. An effective Action Plan, that will achieve its targets, is one that has achieved member and corporate commitment and support.

As per the MAQS, measures within this AQAP "*need to be at the centre of Local Authority policy making*". Many of the actions proposed are already in place or are planned, such as the information provided in Newham's Transport Strategy (part of Newham's Interim Local Implementation Plan - ILIP). This draft is intended to highlight concepts and activities that can be adopted throughout the council. It is anticipated that this plan will be a working document that will prompt additional ideas and transform existing policies to improve air quality across the council and beyond.

A list of the actions and proposed actions are given in Appendix 6, together with a broad banding of the action impact on air quality, general cost implications, timings and department(s) responsible for delivering each action.

### Key Actions:

- Considering and potentially establishing a Low Emission Zone (2.3)
- Restricting Development within Air Quality Management Areas (4.5)
- Modernisation of Council Fleet (2.13)
- Establishing a Travel Plan (2.13)
- Corporate Procurement (4.6)
- Reallocating Road-space (2.8, 2.9 and 2.10)
- Road Transport Promotion, Education and Awareness Raising (2.16)

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# Section One

## Introduction to Air Quality Management and Action Plans

### Summary of the problem to be addressed by this Action Plan

The Review and Assessment process has shown that the London Borough of Newham will not meet the National Air Quality Strategy (NAQS) objectives for two of the eight pollutants listed, these are the PM10, 24hr rolling mean and the Nitrogen Dioxide, Annual Average. This action plan will attempt to illustrate Newham Council's approach to meeting these objectives

The main source of these pollutants is from road vehicles and the stage IV review and assessment has provided the technical justification for this finding and action plan.

### **1.1 Air Quality Management and Statement of the Problem**

The NAQS has identified eight pollutants that have implications for health and outlines measures to reduce the levels of those pollutants. These pollutants are Nitrogen Dioxide, PM10 (particulates), Benzene, 1,3-Butadiene, Lead, Sulphur Dioxide, Carbon Monoxide and Ozone. The strategy can be viewed by visiting [www.defra.gov.uk/environment/airquality/strategy/index.htm](http://www.defra.gov.uk/environment/airquality/strategy/index.htm).

The air quality objectives and objectives laid down in the Air Quality Regulations 2000 (see appendix 1) and the Environment Act 1995 places a duty on local authorities to locally '*review and assess*' the key pollutants. It is then the responsibility of the council to put into place plans that will achieve these objectives. (See Appendix 2 for a list of air quality related legislation, guidance and roles of local authorities as well as Action Plan guidance and its relevance)

There are numerous stages to this '*review and assessment*' process; Newham Council has conducted three stages and in parallel with the production of this Action Plan has completed the fourth stage.

With increased detail through the stages of the assessment, Newham Council has looked at the seven pollutants identified by the government as having particular human health effects.

**Stage I:** Newham Council conducted a 'desk-based' study to identify potential sources of air pollution in the borough. It was identified that Newham has numerous busy roads that will significantly contribute to air pollution levels. It also has industrial sources of air pollution. Newham Council therefore progressed to stage II of the assessment process.

**Stage II:** Monitoring data was used to assess the levels of pollution in the borough. Following this stage, as some pollutants were found to exceed future targets, Newham Council progressed to stage III.

**Stage III:** At this stage, working together with other East London councils, a detailed investigation was conducted using monitoring results and computer modelling to predict future pollution levels. The review and assessment process showed that Newham Council will not meet the given objectives for nitrogen dioxide and PM10.

The level of predicted exceedence is discussed within this section (full details are given in Appendix 3) and the sources and effects of air pollutants are shown in Appendix 4.

Where, following stage III, pollutants are forecast to be above government levels, local authorities must declare an air quality management area (AQMA). Based on the findings of stage III, the London Borough of Newham therefore declared an AQMA in March 2002. As the principal source of fine particles and nitrogen dioxide is from motor vehicles, the highest levels of pollution and therefore the AQMA, is along the busiest roads as shown on the map below.

**Figure 1: London Borough of Newhams AQMA**



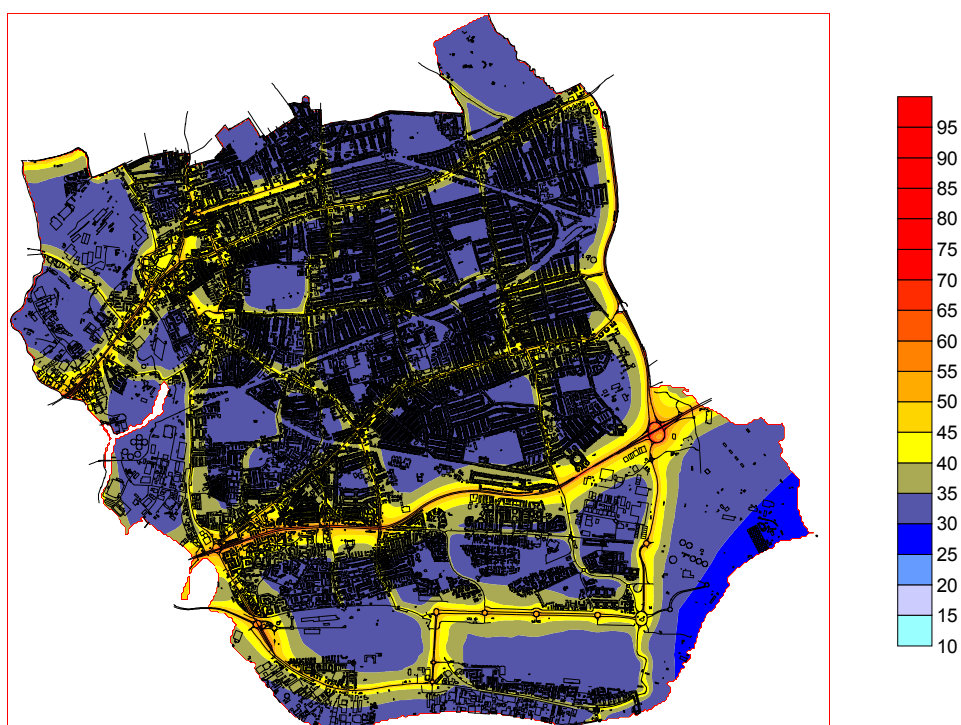
**Stage IV** comprises a 'further air quality assessment' enabling local authorities such as Newham, to supplement information obtained in the preceding stages. Newham Council has conducted stage IV of the review and assessment in parallel to the development of this action plan. The assessment provides the technical justification for the measures included in the action plan. Stage IV involved an investigation into:

- The degree of improvement necessary inside the AQMA to meet objectives
- The percentage of pollution from various sources (source apportionment)
- A re-evaluation to take account of recent national and local policy developments and scientific/technical improvements, which may influence previous findings.
- Further monitoring and use of monitoring data gained during earlier stages.

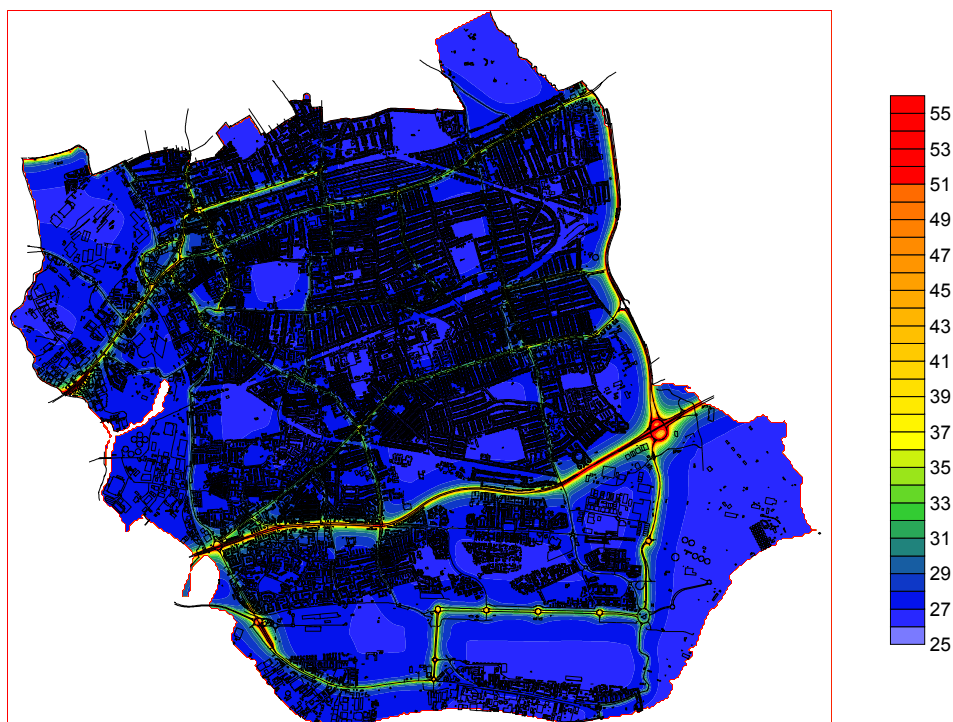
Stage IV has allowed Newham to re-evaluate and check the AQMA designation. Following this stage of review and assessment, the following areas for Annual Average NO<sub>2</sub> and PM<sub>10</sub> 24hr rolling mean, have been predicted to exceed the objective guidelines. This may result in the council re-declaring its AQMA.



**Figure 2: Annual Mean Nitrogen Dioxide (microgrammes per cubic metre,  $\mu\text{g}/\text{m}^3$ ) for 2005 based on 1999 meteorology**



**Figure 3: Number of days with daily mean  $\text{PM}_{10}$  exceeding 50 microgrammes per cubic metre ( $\mu\text{g}/\text{m}^3$ ) for 2004 based on 1996 meteorology**



Road transport is the main source of pollutants that exceed the guidelines, however other sources of air pollution were identified. Stage IV of the review and assessment process established the percentage of pollution from each source. Source apportionment was considered at 14 sites across the borough for NO<sub>x</sub> and PM<sub>10</sub> within the stage 4 modelling. The detailed results are in Appendix 3. The tables which follow summarises the source apportionment findings of stage IV.

**Table 1: Summary of NO<sub>x</sub> Source Apportionment**

<b>NOX % contributions</b>	<b>maximum</b>	<b>minimum</b>	<b>average</b>
Road	63.2	47.5	55.49
Other transport	2.54	0.19	0.54
Industrial	10.8	1.22	2.9
domestic	6.9	0.98	2.8

**Table 2: Summary of PM<sub>10</sub> % Source Apportionment**

<b>PM10 % contributions</b>	<b>maximum</b>	<b>Minimum</b>	<b>average</b>
Road	32	1.8	17.87
Other transport	<0.05	<0.05	<0.05
Industrial	2.2	0.53	1.42
Domestic	<0.05	<0.05	<0.05

By declaring an AQMA Newham Council are obliged to prepare an Action Plan that will set out the councils approach to meeting the targets set and reduce air pollution. The technical justification for this Action Plan is contained in Stage IV.

Although Newham Council has a statutory requirement to produce this Action Plan, the question remains: **Why is this Plan Important?**

Firstly, the aim of the plan is to reduce emissions from road transport vehicles at source and to encourage modal shift to more sustainable means of transport such as low emission vehicles, walking, cycling and public transport.

Secondly, many of the proposed actions within this plan are already in place within existing council policies and plans, for example the ILIP and the UDP. This action plan therefore provides an umbrella for air quality actions throughout the council.

Thirdly, as the AQMAs are situated along the major roads, many of the actions will focus on ways to reduce pollution from this source. In doing this, transportation issues will be addressed; these in turn will deal with additional issues within the borough, for example noise, congestion and safety

A synergistic relationship is created as a plan to improve one area (e.g. air quality), will directly improve another (e.g. road safety).

Fourthly, the NAQS identified pollutants that have a direct impact on health. The action plan aims to reduce levels of, and exposure to, air pollution, which impacts directly on respiratory health and general well-being. As per the MAQS, this action plan needs to play *“an important role in addressing health inequalities and delivering*



*health improvements*". The plan is also important for flora and fauna biodiversity, which is adversely affected by poor air quality.

This Action Plan is therefore not only important for air quality, but for the associated plans, policies and benefits it supports as well as being in accordance with the councils vision statement.

## **1.2 Developing Newham's Air Quality Action Plan**

In order for this action plan to be effective all relevant service areas of the council were involved in the preparation of the plan, with one service area co-ordinating it's development. The action plan will then be adopted by the Mayor and council and form strategic policy.

Using the guidance produced by the NSCA and government, officers across the council looked at a range of options available to improve air quality. Many are already in place or are proposed within existing policies, plans, strategies and practices. This draft action plan has therefore evolved from and integrates with other key council documents. These include:

- Unitary Development Plan (UDP)
- Interim Local Implementation Plan / Local Implementation Plan (ILIP/LIP) – which includes the councils Transport Strategy
- Corporate Procurement Strategy
- Fleet Management Strategy
- Borough Spending Plan (Produced on an annual basis)

The main aim of the action plan is to reduce emissions from road vehicles. The plan focuses on balancing supply and demand measures e.g. improved walking, cycling and public transport vs. traffic restraint and regulation. These measures form integral parts of the above strategies.

Transport plays a significant role in our daily lives, so it is essential that policies and plans regarding transport and this action plan as a whole integrate with other council initiatives in supporting the achievement of the council's 7 priorities, which are:

- Crime and Anti Social Behaviour
- Regeneration
- Street Scene
- Educational Achievement
- Social Services
- Health and Wellbeing
- HR Strategy and Business Strategy

Sub sections of these main priorities include, promoting and improving health of adults and children within the borough, affordable and accessible transport, including public transport (vital for economic growth and social inclusion) and reviewing processes and systems, such as the council's approach to addressing air quality

Proposal 64 of the Mayors Air Quality Strategy (MAQS) urges that borough action plans and strategies implement all relevant proposals in the strategy at a borough level. In developing this action plan, the proposals within the Mayors Strategy have been addressed under the appropriate sections. Additional guidance is contained within the Mayor's Transport Strategy and Strategy for Spatial Development. These

strategies are key for improving air quality both locally and across London. Along with the mayors other strategies, they can be viewed at: [www.london.gov.uk/mayor/strategies/index.jsp](http://www.london.gov.uk/mayor/strategies/index.jsp)

It is also vital that the council works in partnership with the community, business, other boroughs, health professionals, agencies and regional and national government in order to achieve the required improvements in air quality. All departments within Newham council strive to have inter-borough liaison and cluster groups to attempt joined up thinking and approaches.

In achieving air quality improvements and developing this plan it is essential that Newham Council works in partnership to meet its own aims and the aims of others. Such Partnerships allow the exchange of information, benchmarking, best practice and helps to address the transboundary issues involved with tackling air pollution.

Newham operates within the framework of the London Air Quality Network, pollution study group and chairs the East London Air Quality and Part B (EPA, part 1) cluster groups. The council also works with the South East Institute of Public Health (SEIPH) and Environmental Research Group (ERG) in the review and assessment of air quality. Through vehicle emission testing and adjustment regimes the council works with the Vehicle Inspectorate and Green Flag.

In addition to the above groups, the council's is working and involved with numerous partnerships and schemes, for example:

#### Partnerships

- Thames Gateway London Partnership
- Canning Town Partnership
- London Lee Valley transport Working Group

#### Schemes

- London Bus Priority Network / Initiative
- The Bus Priority Partnership
- Strategic Walking Routes in London
- London Cycle Network

To develop this action plan, relevant stakeholders have been involved. Further to this, the aims and objectives of partnerships and schemes the council is involved with have been taken in to account. Via the consultation process, additional stakeholders will have the opportunity to consider the content of this document, the findings of which will be incorporated into its later revision.

### **1.3 Structure of this Report**

Casella-Stanger has been appointed by DEFRA as consultants to review and appraise the Air Quality Action Plans (AQAPs) produced by local authorities. Each of the options included within the Casella-Stanger checklists have been explored within this action plan and have informed the structure of this document under the following 'checklist' headings:

- Road transport measures
- Other transport measures (including airport measures)
- Non transport measures, including industrial measures, domestic measures and Land Use Planning

- Implementing, Cost Effectiveness and Monitoring Outputs from Newhams Air Quality Action Plan

The proposed action(s) associated with each section is summarised at the start of each section. Following the proposals, an air quality impact summary for the proposed actions(s) is given. The impact on air quality for group of actions has been divided into three classifications, as described overleaf:

**Table 3: Classifications of Air Quality Impact**

<b>Low</b>	The impact of the proposal(s) on improving air quality is not considered significant, but together with the other proposals within the action plan, the proposal(s) would provide a net benefit.
<b>Medium</b>	The impact of the proposal(s) on improving air quality is considered important, and benefits from the proposal(s) would be clearly seen.
<b>High</b>	The impact of the proposal(s) on improving air quality is considered significant and the proposal(s) are seen as the core elements of this action plan.

Following the proposals and summary of the air quality Impact, each section contains a discussion of the issues and justification associated with the proposals.

## Section Two

### Road Transport Measures

Transport plays a significant part in our daily lives so it is essential that policies and plans regarding transport integrates with other Council initiatives in supporting the achievement of the council's priorities.

The Government's White Paper, 'A New Deal for Transport' opens with the words **"Our quality of life depends on transport"**. This plan recognises the human, social and economic costs caused by increasing congestion, pollution and fragmented public transport systems.

The greatest level of air pollution arises from road transport emissions, particularly on the Transport for London Road Network (TLRN). The council do not control such roads and so plans to control air pollution from these sources needs to be in partnership with Transport for London (TfL) who do. The council can however introduce measures on roads within their control and lobby for improvements on others.

Many actions which need to be implemented, need be introduced London-wide. The Mayor's Transport Strategy tackles this issue and is currently implemented at a local level through the Interim Local Implementation Plan (ILIP).

The sections that follow consider the various measures that Newham Council proposes as a means to limit the impact of road transportation and work towards the air quality objectives.

#### **2.1 Physical Traffic Management: speed & flow**

<b>Physical Traffic Management: speed &amp; flow - Proposed Actions</b>	
<b>2.1A</b>	Continue with, and expand, road hump schemes within the borough and ensure that all humps in the borough are the optimum height and distance apart to minimise the level of pollution produced from braking vehicles.
<b>2.1B</b>	Increase the number of traffic speed cameras, and CCTVs associated with bus lanes and lobby for the decriminalisation of traffic offences so that CCTV use can be extended beyond the pilot scheme currently in place.
<b>2.1C</b>	As a means to extend the councils air quality monitoring network and ensure that the air quality associated with traffic management schemes is monitored, NO2 and PM10 levels will be monitored prior to, during and after some schemes are implemented.

#### ***Air Quality Impact: LOW***

Road calming schemes, such as humps, have been shown to increase localised emissions and may only displace traffic elsewhere; however, the potential improvement in air quality by reducing traffic volumes, congestion etc (as outlined), means that these schemes still play a part in vehicle emission management. The overall impact on improving air quality would be minimal, but such schemes would contribute to the net aim of this Action Plan.

A vehicle travelling at 70 mph produces significantly more emissions of NO<sub>2</sub> compared with a driving speed of 50mph. By controlling the speed and flow of vehicles, the council hopes to limit the volume of vehicles and exhaust emissions.

It is important to remember that any small increases in localised emissions (by vehicles racing between humps for example) are potentially outweighed by:

- the overall improvement in air quality;
- traffic reduction and congestion;
- change in traffic type, including HGVs and LGVs;
- reduction in road accidents due to decreased speed;
- reduction in traffic related noise; and
- general improvement in neighbourhood quality.

The Road Traffic Regulation Act 1984 (RTRA) allows highway authorities to regulate road traffic by means of Traffic Regulation Orders (TROs). Schedule 22 of the Environment Act 1995 permits TROs for improvements in air quality. Measures are used by the council to slow traffic and deter vehicles from certain areas, given below.

**20mph zones** exist within the borough eg Little Ilford and Upton Lane and two new schemes are currently being implemented in the Plashet and Wakefield areas. Additional areas are planned and the impact of schemes on air quality is being monitored using NO<sub>2</sub> diffusion tubes. Speed is controlled within these areas and others by the following means:

**Humps** –In order to minimise emissions, 75 mm humps are thought to be the optimum height, many locations within the borough have road humps (not exceeding 80mm) and include Lonsdale Avenue, Fourth Avenue, and Capel Road.

**Raised Tables:** used as entering treatment for 20mph schemes e.g. Upton Lane and Home Zones, which can incorporate 10-15 mph zones, as the street is ‘returned to the people’ (see section 2.3 for a discussion on Home Zones).

**Road narrowing** – restricts access to certain vehicle widths preventing larger vehicles using sensitive areas for example in Gainsborough Road

**Priority working:** which blocks the flow of traffic and forces one lane to have priority over another e.g. Church Road.

**Speed cameras** – well displayed cameras have a proven effect of slowing traffic and are particularly effective in reducing accidents, for example at Victoria Dock Road and North Woolwich Road.

**CCTV** – Newham Council has introduced bus lane cameras and taken part in a pilot CCTV project to enforce waiting and loading restrictions. It is anticipated that this will be extended to the use of mobile cameras, so that the council can focus on specific locations and times e.g. outside schools and cycle routes.

**Road Signs** - The council ensures that signing on borough roads is designated to minimise wasted vehicle mileage as well as control sign clutter.

In addition to these measures the council is constantly looking at the programming of traffic signals to accommodate tidal traffic flows, prioritise buses, encourage

smoother driving, protect bottle necks and the reduction in severance caused by traffic. These are considered in the relevant sections.

In terms of the traffic calming measures, approximately 35% of the residential areas in Newham are currently traffic calmed, and due to various accident initiatives this is steadily increasing all the time. However, the council is constantly trying to promote and encourage modal shift to reduce car dependency, the council tries to achieve this by:

- 1) safer routes to school initiatives (see section 2.10)
- 2) schemes to promote walking
- 3) the development and improvement of cycle networks and facilities within the borough.

## **2.2 Re-routing and road hierarchy**

<b>Re-routing and road Hierarchy - Proposed Action</b>	
<b>2.2A</b>	There are no plans to reclassify roads with the borough of Newham, however, as part of traffic management proposals the council will be introducing traffic calming measures on local distributor and residential road.

### ***Air Quality Impact: LOW***

Re-routing and changing road-hierarchies could aid in overall traffic reduction by deterring traffic (or displace the problem elsewhere). Small-scale hierarchical changes could if marketed correctly illustrate the link between air quality and traffic and show the council's commitment to air quality issues.

As with most boroughs within London, Newham Council has designated the hierarchy of roads, which is supported by automatic traffic signals and the enforcement of waiting and loading restrictions in these roads.

- **Primary Distributor**, for example the A13 and A406 where traffic is fast moving, long-distance, through traffic;
- **District Distributor**, for example Barking and Romford Road where traffic is medium distance traffic to primary network, bus services, all through traffic between different parts of the area;
- **Local Distributor**; for example Green Street and Forest Lane, where vehicle movements are near the beginning or end of all journeys, access to highway via frontages, bus services;
- **Access Roads** which are all other roads not classified under the above and are predominately residential; the following are allowed: walking, access to/use of highway by frontages, vehicle access, delivery of goods and servicing premises, slow moving vehicles, bus services; and
- **Pedestrian Streets** for example partially in High Street North for walking, meeting, trading, cycle routes and cycling.

Newham's AQMA is predominately along primary and district distributor roads. At present no roads within the borough have been highlighted for reclassification and there are no plans for this to change. Plans in the past have been rejected due to public and business objection. For example in Green Street, which is classified as a Local Distributor road; local businesses objected to a reclassification as a pedestrian street due to loading access, which would be restricted.

The council will introduce traffic management schemes as outlined in section 2.1. For example, reduce the speed of traffic on local distributor and residential haven roads to between 20 and 30 mph through traffic calming. In addition, pedestrian priority and reallocation of road-space (as outlined in the relevant sections) will contribute to changes in flow.

### **2.3 Access Control & Clear Zones including Low Emission Zone**

By controlling vehicular access to areas within the borough, it is anticipated that air quality and other improvements can be achieved. As stated in 'A new deal for Transport – Better for Everyone' (DETR 1998), within Clear Zones, the impact of traffic can be reduced while maintaining accessibility, viability and vitality and reducing emissions caused by public transport and goods distribution.

Using policy and physical barriers for traffic control, Low Emission Zones, Clear Zones, and Home Zones could be created within the borough as a means to improve air quality by reducing traffic volumes and types.

#### **Low Emission Zone (LEZ)**

<b>Low Emission Zone - Proposed Actions</b>	
<b>2.3A</b>	Until the results of the feasibility study are available, Newham Council will consider a Low Emission Zone(s) an option and will await further guidance. Following the feasibility findings if required Newham Council will work with the GLA, ALG and other London Boroughs in implementing appropriate LEZ scheme(s). Proposal 10 of the MAQS requests that local authorities consider the recommendations of the LEZ feasibility study group
<b>2.3B</b>	Keep local transport operators (including passenger operators) informed of any LEZ scheme(s) within Newham. In addition, provide information regarding funding opportunities for fleet improvements.

#### ***Air Quality Impact: HIGH***

It is accepted that within London's AQMAs current policies will not achieve the NAQS objectives for 2005. Research has shown that a London-wide LEZ would result in a *significant reduction* in NO<sub>2</sub> and PM<sub>10</sub> levels to below those required for 2005 (with some exceptions). As with many of the proposals in this action plan, an LEZ could also increase the feasibility of other proposals such as cycling and walking schemes.

Air quality research has indicated that with existing policies the NAQS targets for NO<sub>2</sub> and PM<sub>10</sub> will not be met in areas of London and along major road networks. In addition, the former London Planning Advisory Council estimated the NAQS objectives for 2005 would not even be met even if there were London wide congestion charging, a workplace parking levy AND the tripling of parking fines.

Most traffic measures are aimed at the private car, however per vehicle and due to the number of miles travelled, heavier commercial vehicles are more polluting. By targeting such vehicles it is thought that a significant reduction in levels of NO<sub>2</sub> and PM<sub>10</sub> can be made.



With the above in mind it is evident that proposals within this plan could not alone achieve the 2005 objectives, but action to target the most polluting vehicles could.

A Low Emission Zone (LEZ) is an area in which the most polluting vehicles are restricted from entering. Vehicles would be allowed to enter based on their exhaust emission standard. This would be either a voluntary agreement or enforceable exclusion.

LEZs have already been successful in reducing emissions of NO<sub>2</sub> and PM<sub>10</sub> in major cities in Sweden and similar schemes have been implemented in the UK (Nottingham, Bath & Leicester). It is envisaged that LEZs would be introduced under the Road Traffic Regulation Act 1984 (RTRA).

Various reports and studies have been published regarding LEZs (e.g. Cleaner Transport Forum 1999 and LB Westminster/Transport Research Laboratory 1999). LEZs are now widely believed to be one of the few policies available that can achieve the NAQS objectives for 2005 and reduce the levels of London's transport emissions.

For this reason a feasibility study is being undertaken by the GLA, DEFRA and the ALG (in conjunction with London boroughs). It has the objectives of:

- providing information on the impacts including benefits, costs and practicalities of various LEZ scenarios;
- developing implementation and operational proposals
- preventing duplication of effort and ensuring consistency.

The Phase I of the report has already been completed and phase II is due for completion. Due to the implications for the whole of London, the London Mayor has advised that all London boroughs should await the findings of the study and not implement LEZs independently. If an LEZ for London proves viable, Newham Council will work with the GLA, ALG and other London boroughs to implement appropriate schemes. The impact of scheme on London Boroughs will of course vary depending on the type and extent of the scheme.

It is generally agreed that an LEZ would impact greatest on smaller transport operators who may typically have older vehicles that would not be able to enter the LEZ. This would be further exacerbated if they have long fleet replacement programmes (if at all). Newham Council would have to work closely with such operators to keep them informed of any schemes as well as providing assistance with available improvement funding.

If an LEZ scheme is to include Newham, this would require the council to ensure its own fleet and travel practices are sustainable. This could be achieved through a Travel Plan - as discussed in section 2.13.

## Access Control, Clear Zones and Home Zones

Access Control, Clear Zones and Home Zones - Proposed Actions	
2.3C	The council will continue to retrofit and create Home Zones. It will also continue to encourage developers to create 'Home Zones'.
2.3D	Consider the introduction of access control with future regeneration projects for example in the Regeneration of the Lower Lea Valley Spine Road and Newhams 'Arc of Opportunity'
2.3E	Explore the possibility of working with neighbouring boroughs to introduce clear zones within the borough (in line with proposal 26 of the MAQS)

### ***Air Quality Impact: Medium***

By controlling vehicle access to certain areas, in principle less vehicles means less pollution. PSVs allowed to enter would still contribute to the pollution levels; however, this mode of transport is more sustainable than individual car use. Any improvements would be localised as vehicles would find alternative routes. Ultimately, access control does restrict drivers and may encourage more sustainable modes of transport such as walking and cycling.

In addition to an LEZ there are schemes within the borough that exclude and limit access to certain vehicles, for example in High Street North in East Ham, where parts of the road are limited to buses only.

By restricting certain vehicles from accessing a given road, in principle less traffic means less pollution. However, as stated above, some commercial diesel vehicles produce more pollution per vehicle than cars and so the net reduction of NO<sub>2</sub> and PM<sub>10</sub> in such areas as High Street North may be less than expected. The council currently has plans to measure PM<sub>10</sub> and NO<sub>2</sub> levels in this restricted access street and compare the results with a similar street without such controls.

Depending on the results of the monitoring and coupled with the potential objections from local individuals regarding retrofitting restricted access, (as seen in Green Street - 'road hierarchy section'), plans to proceed with retrofitting access control for certain vehicles as a means of ensuring reduced emission will proceed with caution.

Future developments can however incorporate access controls into plans. One such plan that has incorporated access restrictions is the Lower Lea Valley Spine Road and the regeneration of the Arc of Opportunity (Newham's highest priority regeneration scheme). It runs from the A13 in Canning Town to Stratford and its primary purpose is to facilitate the regeneration of the Lower Lea Valley. At its northern end the road would provide access to Stratford Rail-Lands, which is being developed along with the new international station. Further south there is an area, which has had much potential but, to date, could not be developed through lack of access. The third section, Canning Town, is currently the focus of ambitious plans for redevelopment. The spine road is a small part of a very large project and its function is to provide access for development and not new road capacity. There will be no facility for cars to travel from one end of the road to the other.

The UK Foresight Programme promotes the Clear Zone concept, with the aim of reducing the negative impacts of traffic as a means of sustainable development.

Using a variety of measures clear zones reduce the amount of traffic, therefore resulting in less pollution. In much the same way, Home Zones can be established in a residential street where the priority is moved away from the car to the non-car user.

The target speed is 10-15 mph and the priority and status of the highway would change. It can be created in areas where there is not significant through traffic and includes a community square and some planting.

The cost implications of creating Home zones from existing streets is expensive and as such the council is working with developers and clients to introduce them from scratch. The council has subsequently developed a 'home zone' design guide that can be issued to suitable developers. Due to the environmental, community and social benefits where funding is available the council will create and retrofit Home Zones. This is currently being done in the Cranberry Area and the council now has funding for a second Zone in Rudolph Road.

## **2.4 Road User Charging**

<b>Road User Charging - Proposed Actions</b>	
<b>2.4A</b>	The council will follow the developments of the Central London Congestion Charging Scheme (CCS) and in principle are prepared to have road user charging implemented within the borough at the appropriate time.
<b>2.4B</b>	Newham Council will continue to support the CCS in Central London.
<b>2.4C</b>	Newham Council will Lobby for the wider introduction of road user charging including motorways and trunk roads.

### ***Air Quality Impact: High***

The primary purpose of congestion charging is to reduce congestion and traffic volumes, these in turn will improve air quality. Even if the whole of London was subjected to congestion charging, the AQMAs would not achieve the 2005 NO<sub>2</sub> and PM10 targets. (if congestion charging is closely related to emission criteria, then effectively the area becomes an LEZ resulting in a greater improvement in air quality - see section 2.3).

As discussed in section 2.11, Newham Council is part of the Thames Gateway London Partnership. The TGLP does not envisage the implementation of road user charging or workplace parking levies in the Thames Gateway at the current time, either independently of action by the London Mayor or prior to major improvements in regional public transport. It will, however, follow developments with the Central London scheme with interest. The council would be willing in principle, to have road user charging implemented in the borough at the appropriate time.

Individuals, who live or pass through Newham and enter Central London, need to be supported if they do not to use their vehicle to enter the Congestion Charging Zone (CCZ). As such, Newham Council has funding from TfL to implement cycle parking and CPZs outside various stations within Newham. In addition, other policies and plans provided within this Action Plan and elsewhere within the council, strive to provide a better public transport framework to support the CCZ.

The primary aim of CCZ is to reduce congestion and traffic volumes. However, by reducing congestion and traffic, there would be benefits for air quality. (Not

withstanding these benefits, congestion charging is an opportunity to promote low or zero emission vehicles, through reduced charging). In order to make a difference on congestion, and therefore air pollution, road user charging needs to be implemented on a wider basis. As areas would not align with local authority boundaries, central government or the GLA would be in a better position to deal with such schemes.

## **2.5 Parking Management & Charging**

<b>Parking Management &amp; Charging - Proposed Actions</b>	
<b>2.5A</b>	By 2004, Newham Council will complete the implementation of its 5-year parking strategy. (The fundamentals of the strategy regulate traffic volumes and may encourage a shift in the use of the private vehicle to more sustainable modes of transport, which is supported by the councils Transport Strategy).
<b>2.5B</b>	Following public consultation and taking into account travel needs and the appropriateness of parking controls, Newham Council will continue to expand and extend the number of CPZs within the borough.
<b>2.5C</b>	Newham Council will continue with parking enforcement, and dealing with moving offences in bus lanes.

### ***Air Quality Impact: Medium***

Reducing or restricting parking facilities discourages driving and parking in the borough; the number of vehicles on the road and subsequently pollution levels are therefore reduced.

In February 1999, Newham Council adopted a new 5-year parking strategy, in brief, this includes:

- Maximum parking standards for most types of non residential development
- Minimum parking standards for secure motorcycle and cycle parking at all new developments
- Limited amount of parking at new commercial developments associated with regeneration
- Absolute parking standard for residential developments and in principle, zero parking provision in town centres where there is good access to public transport.
- Introduce further CPZs
- Review and sub divide CPZs in town centres
- In order to support shopping areas, the council will maintain and provide more short-stay car parks where required.
- To reduce congestion, along with the London Bus Initiative, the council will create additional CPZs along relevant bus routes
- Council charges for resident permits
- There is free parking for motorcycles in council car parks
- At appropriate locations, private developers must provide at least 6% of parking allocated to 'blue badge holders'

Parking enables traffic levels to be regulated and can encourage individuals to shift to modes of transport which are more sustainable. By charging individuals to park when they travel, individuals may think more carefully about the necessity of using a car. This is clearly seen in some areas of London where the cost of parking and the difficulties associated with finding parking space mean that many individuals

choose public transport as a means of access; therefore reducing traffic levels, resulting in a reduction in vehicle emissions.

Newham is too close to central London to be a park and ride location. Therefore the council will continue to introduce additional CPZs around railway stations to discourage individuals who commute into Newham and park, before continuing their journey. In addition, it would discourage local residents from driving short distances before catching the train.

Whilst Newham Council charges for town centre parking as a tool for reducing car use, this needs to be part of a wider/national strategy, lead by central government, which includes charging for parking at out of town shopping or leisure facilities. Otherwise Newham Council's policies may only serve to encourage individuals to drive further for free parking. For example, the A13 eastbound is a major route to the Lakeside Shopping Centre at Thurrock.

### **Controlled Parking Zones within Newham**

The LB Newham has within its boundaries ten controlled parking zones (CPZs) referred to as

- |                  |                               |
|------------------|-------------------------------|
| • Stratford      | • Prince Regent               |
| • Upton Park     | • Canning Town                |
| • East Ham       | • Ruskin                      |
| • West Ham       | • Forest Gate                 |
| • Little Illford | • Manor Park (ready May 2003) |

Some of these CPZs have already been extended and following consultation with local residents, there are plans to continue with extensions and in addition, develop two more CPZs in Little Illford and Manor Park.

Consultation found that initially some residents did not want CPZs in proposed areas. Following exclusion, due to displaced traffic, which resulted in resident parking difficulties, the CPZs were expanded. This effect has facilitated the expansion of CPZs within the borough.

Charges for the first CPZ parking permit per household was introduced borough-wide and charges for on-street "pay & display" parking have been increased from 30p to 50p per hour. This amount is still very cheap in comparison to other areas of London. For this reason, the potential and appropriateness for increasing this charge will be investigated.

### **Parking Enforcement**

The council has a contractor to enforce vehicles parked that contravene waiting and loading restrictions. The contractors issue a Penalty Charge Notice (PCN) which is dealt with by the council (to be more efficient and streamlined). PCNs are also issued for moving offences in bus lanes. CCTV records the offence that can be viewed by the driver in a specially allocated room.

## **2.6 Urban Traffic Control Systems (UTCS)**

<b>Urban Traffic Control Systems (UTCS) - Proposed Actions</b>	
<b>2.6A</b>	Continue with the monitoring of traffic signals to ensure that the most appropriate balance is found between the motorised vehicles and other users of the road i.e. pedestrians. This should also be extended to the monitoring of temporary signals associated with road works.
<b>2.6B</b>	As part of the London Bus Initiative, investigate the potential of expanding the network of devices able to detect buses and react to traffic flows to minimise congestion (e.g. SVD and MOVA)
<b>2.6C</b>	Investigate potential areas of the borough where signage may be used in traffic management queues to indicate points where engines should be turned off while queuing eg Woolwich Ferry

### ***Air Quality Impact: Low***

The direct impact on air quality of traffic signals is minimal. They enable schemes such as walking schemes to be implemented, and can be adapted to ensure minimal disruption to bus services. Impacts on air quality are therefore indirect, but part of the larger picture of promoting modal shift.

Urban Traffic Control Systems (UTCS) are essentially traffic lights. It is essential to correctly time such traffic management systems to ensure the smooth flow of traffic and minimise congestion at peak travel times, therefore minimising the traffic's impact on air quality. There has to be, however, a balance between private vehicle use and other more sustainable users of the highway, e.g. buses, pedestrians and cyclists.

Within London, all permanent traffic signals are managed by TfL and their 'traffic technology services branch', where there is a 50-year plan. Although the traffic signals are controlled by TfL changes in the signal systems, including new signals, is borough driven. In addition, Newham Council pays per capita for maintenance and installation.

There are various categories of UTCS and various detection devices exist which enable detection of vehicle types such as buses. Selective Vehicle Detection (SVD) is a high priority objective for the London Bus Initiative (see section 2.9). With this device, UTCS recognise buses fitted with a partner device. The signal can then be held or brought forward to minimise the bus stopping time. Another system, 'MOVA', minimises delays by monitoring traffic data at junctions; within London, MOVA can now recognise buses.

Newham Council therefore investigates traffic signal timings and can request changes. On a regular basis, minor *ad hoc* changes are made to the traffic signals within Newham and on an annual basis, bids are put forward for the following:

- Scheme designs e.g. a walking scheme
- Developer driven changes e.g. a new supermarket in the borough

Various initiatives have been introduced throughout the country upon signs, requesting drivers to switch off engines at certain points within a traffic management queue e.g. at a railway crossing. Such initiatives have resulted in reduced emissions at these sites. Newham Council does not have any of these within the borough, however it will investigate potential hotspots in the borough where this may be applied, for example at the Woolwich Ferry.

## **2.7 Infrastructure Development**

<b>Infrastructure Development - Proposed Action</b>	
<b>2.7A</b>	Lobby within partnerships for sustainable transport infrastructure developments such as the rail link river crossings under TGLP. Such developments lead to regeneration of the associated areas and the infrastructure required to implement a sustainable transport system within and serving Newham, which will ultimately reduce reliance on the car and therefore reduce emissions.

### ***Air Quality Impact: Low***

Infrastructure development will support and facilitate encouragement for modal shift. A road river crossing will generate traffic, leading to increased emissions. However the presence of bus lanes means that public transport is supported and may encourage modal shift.

Infrastructure development can be seen as a means to facilitate improvements in air quality. The types of infrastructure development that could occur in the London Borough of Newham are:

- **Rail Routes and terminals** – by increasing rail routes and terminals within the borough, along with regenerating an area and increasing the ability for individuals to travel to and from the area, they reduce the reliance on cars as a means of transport and therefore emissions.
- **Highway Network** – Highway enhancement will generate more traffic with an overall negative impact on air quality.
- **Bus Depots** – increased facility to house and maintain bus fleets, therefore facilitating efficient bus fleet management (see section on Public Transport Initiatives - Bus)

### **Thames Gateway London Partnership**

Newham Council is part of the Thames Gateway London Partnership. The partnership is currently promoting major infrastructure and London wide-action. Priorities for enhancing regional public transport within the Gateway include the following:

- **Crossrail Line 1**, planned as a fully integrated heavy rail transport system supporting regeneration of the Gateway. TGLP welcomed Cross London Rail Links announcement that Crossrail will go to both Stratford and Canary Wharf and will be responding to formal stakeholder consultation on the shortlisted options over the summer. The Partnership is also keen to ensure that the Royal Docks and Barking, Dagenham and Rainham areas are fully linked into the Crossrail network, either directly or via efficient feeder connections;
- **Maximising the benefits of CTRL Phase II** with sustainable land uses and access provision to the new International Passenger Stations at Stratford and Ebbsfleet and a service pattern for the CTRL Domestic Services which serves regeneration objectives;
- The proposed North and South Extensions to the **East London Line** as Phase I of a wider Orbital network with metro-style services. This is the only heavy rail scheme which can be delivered in London by 2005 and TGLP wishes to see the full scheme proceed without further delay;
- The extensions of the **Docklands Light Railway** to London City Airport with further connections to Woolwich Arsenal, Hackney Wick and into the Barking Reach area via a Lower Roding Crossing. Further extensions to Barking and Ilford should be considered, subject to a robust business case;



- **A Thames Gateway Transit Intermediate Mode Network** on key corridors and connecting key town centres and development areas, in the form of the East London Transit, Waterfront Transit and the committed Kent Thameside Fastrack between Dartford and Gravesend. TGLP assisted TfL in public consultation on East London and Greenwich Waterfront Transit and is awaiting the Mayor's decision on whether one or both will now proceed to implementation and in what form. In the longer term, TGLP wishes to see extensions via the Thames Gateway Bridge, eastwards to Dartford and southwards for example to Blackheath and Lewisham;
- **Acceleration of the timescale for Thameslink 2000** with a particular focus on enhanced services on the North Kent Line, extending to Northfleet (for Ebbsfleet International) and with revisions to provide a metro services via Woolwich. Detailed service patterns will depend partially on decisions to be made on Crossrail Line 1;
- Enhancements to **key regional transport interchanges**, such as Stratford, Romford, Barking, Canning Town, Dartford, Greenwich, Woolwich, and Lewisham;
- **South London Metro** and other incremental improvements to rail services including direct Stratford-Stansted services via the Lea Valley Line; and Improvements to the sub-region's **bus network**, especially in terms of access to regeneration areas where public transport is currently lacking or poor.

### River Crossings

As its first priority the Partnership sees the construction of a package of four new river crossings in East London as essential if regeneration is to be maximised.

These proposals include the:

- DLR Extension to Woolwich Arsenal
- the multi-modal Thames Gateway Bridge between Galleons Reach and Thamesmead
- the Silvertown Link between North Greenwich and Silvertown
- a branch of Crossrail to connect with the North Kent Line.

TGLP is keen to engage TfL and other stakeholders as appropriate in delivering this package. To this end, the Partnership is represented on the TGSE River Crossings Working Group which is seeking to progress a wider package of six new river crossings along the whole of the Thames Gateway.

In the event of a DLR Crossing proceeding at Woolwich, TGLP wishes to see the regeneration benefits maximised south of the Thames. This outcome can be achieved through a high-quality interchange facility at Woolwich Arsenal and service enhancements on the North Kent Line between Dartford and Woolwich. The latter should be delivered ahead of the Crossrail scheme.

The Partnership continues to promote the case for the two highways elements of the package - the Thames Gateway Bridge and Silvertown Link - on the basis of their local regeneration benefits for key development areas such as Thamesmead, the Royal Docks and Barking Reach. These crossings are supported by the Thames Gateway Strategic Partnership as part of the Zones of Change agenda and TGLP is keen to ensure delivery commences as soon as practicably possible.

The construction of these crossings is consistent with the conditions laid down in the Mayor's Transport Strategy. Whilst it is accepted that the highway crossings will have a range of traffic effects, the Partnership's view is that these can be sustainably

accommodated through a programme of traffic management and environmental mitigation measures on local road networks and through the deployment of an effective tolling strategy. The latter will also provide a revenue stream to assist in funding construction costs.

### **Highway Network**

The Partnership does not, in the main, advocate the addition of substantial new highway capacity to the strategic network. However, it does support selective enhancements in a number of instances where schemes either provide environmental relief to local town centres or residential communities or serve key development sites. Its chief concern, in this context, is to ensure the completion of the full South Thames Development Route (STDR).

Elsewhere, selective traffic restraint on the local highway network and in town centres is supported where new Highway Agency/TfL schemes have provided substantial capacity for through-traffic, as in the case of the A12-M11 and A13 enhancements.

The Partnership Boroughs are reviewing their approaches to the wider issue of demand management in light of the Mayor's Transport Strategy. They are seeking to adopt a greater consistency to such areas as the re-allocation of road-space away from the private car, adoption of travel plans and the revision of parking standards for new development to maximum levels.

As previously stated, TGLP does not envisage the implementation of road user charging or workplace parking levies in the Thames Gateway at the current time, either independently of action by the London Mayor or prior to major improvements in regional public transport. It will, however, follow developments with the Central London scheme with interest.

As a sub-regional partnership, promoting the largest regeneration opportunity in London, TGLP is lobbying for a range of major infrastructure improvements as set out above. It would wish to obtain, through the BSP framework, sufficient resources to allow it to develop the key transport proposals further and work actively with Transport for London, Strategic Rail Authority and Thames Gateway Strategic Executive in bringing them to fruition.

The key elements of the five-year programme are as follows:

- **Town Centre Schemes:** integrated packages of works to support public transport, walking and cycle access and environmental enhancement in Woolwich, Barking, Ilford, Plaistow and Bethnal Green.
- **Regeneration Areas:** integrated planning and delivery for sustainable modes to access key regeneration sites in Heart of Thames Gateway (Dagenham and Rainham), Belvedere-Erith and Leamouth.
- **Interchanges:** ambitious programmes delivered in partnership with TfL for Barking, Romford, Dagenham Dock, Rainham and Beckton, a new DLR station at Langdon Park, a feasibility study for the re-opening of Lea Bridge Station, and minor works for a number of rail, LUL and bus interchanges across the Gateway.
- **Walking and Cycling:** completion of the Roding Valley Way, delivery of the Sustrans North East London route and a programme of minor works across the Gateway.

- **Bus Access and Priority:** a programme of capital works to improve bus access to town centres and key regeneration sites.
- **Sustainable Distribution:** the development of an innovative Freight Quality Partnership addressing both issues of strategic freight movement at a regional level and the development of best practice in "Delivering the Goods" in the context of a town centre demonstration project.
- **Supporting TfL Major Projects:** scheme development and implementation to support TfL delivery of Thames Gateway Transit (East London Transit and Greenwich Waterfront Transit) and Thames Gateway River Crossings; and
- **Management and Monitoring:** the development of best practice in effective, economic and timely scheme and programme planning and delivery through the Lead Borough and TGLP Strategic Unit.

The programme will be delivered by TGLP Partners working closely with TfL, the LDA, SRA, Railtrack and other stakeholders as appropriate. Each project will be funded and managed by a Lead Borough within Project Implementation Teams. Within TGLP, activities will be monitored through the Transport Task Group (led by LB Barking and Dagenham), the Integrated Transport Working Party (led by Bexley Council) and the Transport Team based within the TGLP Unit.

Further details of TGLP's regeneration, community, urban design and transport activities can be found on [www.thames-gateway.org.uk](http://www.thames-gateway.org.uk).

## **2.8 Reallocated Road-Space**

### **Reallocated Road-Space - Proposed Actions**

<b>2.8A</b>	Continue to ensure that road space is allocated to buses, coaches and cyclists or more sustainable transport modes.
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#### ***Air Quality Impact: Medium***

By reallocating road space to buses, coaches and cyclists, these modes of transport would be encouraged. When reallocating road space, less space is available for road-traffic and this may cause congestion problems. This in itself may encourage individuals to modal shift, which overall, will reduce the amount of pollution.

Because buses, motorcyclists, cyclists and pedestrians use road space more efficiently than cars, the council supports this reallocation of road space. This is in line with the revised 'Traffic Management and Parking Management Guidance for London' which states that: *"the management of traffic and road space should be based on the movement of people and goods"*.

In view of this, the council has and will continue to where possible, support the above reallocation and will transfer road space to more efficient and sustainable modes of transport. To minimise waiting and inconvenience, the council will also give priority to pedestrians at junctions and other crossing points.

By reallocating road-space to more efficient modes of transport, these lower polluting forms of transport would be encouraged. By allocating parts of the road specifically this would increase the safety of these types of transport and enable them to move more efficiently through the traffic and so encourage increased use.

With regards reallocating road-space for buses, see section 2.9 and for pedestrians and cyclists see section 2.10.

## **2.9 Public Transport Initiatives - Bus**

<b>Public Transport Initiatives (Bus) - Proposed Actions</b>	
<b>2.9A</b>	Continue working within and supporting the policies of London Bus Priority Network, London Bus Initiative and Bus Priority Partnership, which include: road-space allocation and improvements, camera enforcement, modification of traffic signals for bus priority, countdown facilities etc.
<b>2.9B</b>	To actively promote and facilitate emission-testing conducted on buses within the London Borough of Newham by the Vehicle Inspectorate and to publicise these results to members of the public.

### ***Air Quality Impact: Medium***

The measures outlined within this section are predicated to encourage modal shift, generating increased bus use and subsequently reduced car dependency and therefore emissions. Many of the schemes outlined do not require additional fleet, therefore emissions are minimised. As greater priority is given to buses, there is less capacity for other vehicles and so the number of vehicles on the road is reduced.

As well as being an efficient mode of transport and user of road-space, buses provide vital links to underground railway services as well as to local shopping centres and places of entertainment. Buses also play a vital role in taking people to work, where a fast journey time is a determining factor in its use.

Although the majority of Newham is well served by buses there are some areas, particularly around the Lea Valley, where the lack of road infrastructure prevents bus penetration and the council is keen to address this problem. With the bus network being constantly reviewed and expanded the opportunity exists to provide new links and the council takes this into consideration when considering new developments. Where possible, funding is sought from developers to enable this to happen such as at the former Beckton Gas Works site and at Twelvetrees Crescent. The council would wish to see new links to London City Airport, particularly from the East Ham and Manor Park areas.

It is important that, in promoting the bus as a sustainable transport option, consideration is given to the significant emissions of NO<sub>2</sub> and especially PM<sub>10</sub>s, arising from the older bus fleet. This has been recognised and addressed in the MAQS with an extensive programme of retrofitting particulate traps to the bus fleet.

It should be pointed out that the Vehicle Inspectorate (VI) regularly inspects the emissions from buses within Newham. In September 2002, of the 12 buses checked (selecting the oldest buses where possible) all passed with below 50% of pass limit, with the majority passing below 10% of the pass limit. This trend has also been seen in past testing exercises.

Dark diesel smoke from buses was found to be a concern of individuals questioned as part of a voluntary emissions testing survey, discussed in section 2.15. The results of random testing will be advertised to members of the public. The findings of the VI will challenge the view of some members of the public that justified the use of

their polluting car due to the diesel smoke seen from buses as they pull away from bus stops.

In line with a sustainable transport system for London, the London Bus Priority Network and the London Bus Initiative accommodate the prioritisation for bus provision.

### **London Bus Priority Network**

The London Bus Priority Network (LBPN) is an 865km network of borough roads across London that complements the Priority (Red) Routes. It was developed in 1994 by the 33 boroughs and London Transport who jointly developed in liaison with the Government Office for London (GOL) and the then Traffic Director for London, a cross boundary bus network for the whole of London.

Using a variety of traffic management measures, consistent with the Mayors Transport Strategy, UDP policies and other guidance, the LBPN seeks to improve safety and free buses from the impact of traffic congestion in order to improve reliability and reduce journey times. These include:

- Bus lanes
- Bus Gates
- Queue relocation
- Bus advanced areas (pre-signals)
- Selective Vehicle Detection
- Signal control techniques such as BUS SCOOT or SPRINT
- Signal timing changes
- Changes to parking, waiting and loading restrictions
- Enforcement through cameras and the police issue of **£80** FPNs to motorists who illegally occupy bus lanes etc

The LBPN needs to strike the appropriate balance between the needs of existing and potential bus passengers, businesses, frontages, pedestrians, pedal cyclists (including the 1000 mile strategic cycle network where appropriate) and the related environment.

### **London Bus Initiative**

Following the success of the LBPN the London Bus Initiative (LBI) was launched in April 2000 as part of a partnership approach to improving key bus services in the capital. The LBI partnership aims to bring about real change in the actual and perceived quality of London's bus services on selected routes. This can be achieved by:

- promoting a change in travel habits to encourage more people out of cars and onto London's buses;
- making buses more attractive to potential users;
- making buses the first choice mode of travel on LBI routes; and
- delivering these aims on a 'whole route' basis.

Fundamentally the LBI aims to address the whole journey rather than just the operation of the bus service including such issues as pre-journey information and planning and access to bus stops.

The London Borough of Newham has been involved in two LBI routes 86 and 115. This has involved extensive changes to the bus infrastructure along two major East/

West routes through the borough. Route 115 goes along the A124 Barking Road; and route 86 goes along the A118 Romford Road. The work was in excess of £2 million. In general terms the work involved improved access to bus stops and longer bus stop cages, installation of Countdown real time information at selected stops, extension of existing bus lanes and further bus lanes, changes to traffic signals, and the conversion of zebras to Pelicans. Additional measures on these routes and others (15 and 25) are also planned.

### **The Bus Priority Partnership**

In February 2002, a new partnership forum was created, the Bus Priority Partnership, to deliver a significant improvement to bus services in accordance with the Mayor's Transport Strategy. The new partnership, which includes Boroughs, ALG, TfL, police and bus operators, has been set up with the following objectives:

- To recommend allocation of funds to all parties for bus priority measures;
- To develop and agree longer term Action Plan programmes for bus priority works to deliver the Mayor's Transport Strategy;
- To review programmes, outputs and outcomes for ALL activities leading to improvement on bus services (LBPN; LBI & Enforcement; Sub-Regionals; London Buses (AVL; Countdown));
- To monitor progress and expenditure incurred towards overall aims and objectives;
- To link with other transport schemes and initiatives e.g. interchanges and town centre improvements; and
- To guide and support innovative measures to improve the travelling experience as perceived by the passengers.

Within Newham, studies of bus route corridors have been conducted. (e.g. Route 5 between East Ham Town Hall and the A406/LB Barking boundary and Route 101 between North Woolwich and Manor Park).

Newham views the integration of bus service provision with other public transport systems as essential. A programme of improving transport interchange facilities is underway, building on the successes of the Stratford Town centre interchange that has evolved into transport hub for the region, providing access to rail, Docklands Light Railway and bus facilities.

Other transport interchanges include Canning Town Station, which provides integrated bus and tube services including DLR, as well as shuttle bus links to London City Airport.

On an annual basis, Newham also carries out small-scale bus infrastructure improvements e.g. removal / installation of bollards to allow better operation.

## **2.10 Encouragement of Walking, Cycling and Motorcycle Use**

<b>Encouragement of Walking, Cycling and Motorcycle Use - Proposed Actions</b>	
<b>2.10A</b>	Continue to ensure with new developments that pedestrian routes are safe, accessible, convenient and pleasant.
<b>2.10B</b>	The council is committed to completing, promoting and maintaining the strategic walking routes in London
<b>2.10C</b>	The council is committed to continuing its Safer Routes to School programme.

<b>2.10D</b>	'Think Bike' in relation to highways and transport schemes and continue to retrofit and create with new developments cycle routes that are safe, accessible, convenient, pleasing and with cyclist prioritisation; for example by using toucan crossings and advance stop lines at junctions.
<b>2.10E</b>	Provide strategic and sufficient safe cycle and motorcycle parking
<b>2.10F</b>	Continue to work towards and facilitate the full implementation and maintenance of the London Cycle Network, Newham Cycle Network and National Cycle Network within the borough.
<b>2.10G</b>	Continue to provide free cycle proficiency training for children and adults
<b>2.10H</b>	Encourage staff use of bicycles by providing additional parking spaces where required, pool bikes, and attempt to extend the availability of staff changing and showering facilities.
<b>2.10I</b>	If implemented, staff will be encouraged to walk and use bicycles through the councils Travel Plan (see section 2.13) and through awareness raising events associated with 'Don't Choke Britain' (see section 2.12). This includes the periodic availability of a cycle engineer to ensure pool bikes and personal bikes are well maintained.
<b>2.10J</b>	Provision of cycle routes through parks and open spaces
<b>2.10K</b>	Continue to Liaise with local cycle groups regarding cycle networks within the borough and ensure that there is sufficient publicity and lobbying to encourage the use of cycle routes.
<b>2.10L</b>	Continue to improve cycle and walking routes in the Borough. For example: wheeling ramps for cyclists if required, CCTV cameras at strategic points on certain footpaths/cycleways and improved lighting.
<b>2.10M</b>	The council will continue with a pilot study to providing Motorcycle Advanced Stop Lines within the borough and consider its implementation on a wider scale.

***Air Quality Impact: Low***

As a low emission mode of transport, shifts from car use to walking and cycling practices would have a significant positive impact on air quality. Any improvements in the facilities that promote and encourage the shift from car to foot or bike would have a positive impact on air quality.

As the majority of trips made are less than 5km, walking and cycling offer significant potential in contributing to more sustainable journey patterns as well as providing independence and promoting better health. A major priority in encouraging individuals to walk and cycle is to ensure that they can do this in a safe manner. They need to be provided with suitably adapted routes to allow safe transit and protection from users of motorised vehicles.

## **Walking**

Walking is a low emitting, sustainable transport source that is flexible, reliable, accessible to most people, generates accessibility and is healthy way to exercise that can be easily incorporated into every day life. Due to these benefits, it follows that the council wants to promote and encourage walking. It is achieving this by:

- Ensuring new traffic management and highway schemes are pedestrian friendly and ensuring that the needs of pedestrians and those with disabilities are fully provided for when determining planning applications and securing section 106 planning agreements;



- Minimising installation of traffic signage and other 'street furniture' and ensuring that their position maximises room for pedestrians, with a minimum unobstructed width for footways;
- Minimising pavement obstructions associated with repairs and illegal trading
- Regularly inspecting footways for trips;
- Introducing CCTV and face recognition systems on footways and pedestrian subways;
- Minimising litter and dog fouling by re-organising the street cleaning programme;
- Ensuring that footways are accessible through auditing of town centres which includes the introduction of dropped crossings as well as safe and convenient facilities for crossing roads;
- Providing a high standard of street-lighting and a 5-year relighting programme;
- Pedestrian Priority at Junctions, can and has reduced the vehicle precedence on pelican crossings, and increase the 'Green Man' time; and
- When introducing road safety measures looking first of all at mechanisms to modify or calm driver behaviour rather than restricting the ease of pedestrian movement

The council supports the completion of Transport for London's Strategic Walking Routes across London; within Newham, these include the Capital Ring and the Lee Valley Walk. In addition it is committed to extending and improving pedestrian and cycle routes elsewhere in the borough, in particular the Lee Valley Path, the Roding Valley Way and the North East Thames Path. It will expand the borough's network of pedestrian only/priority routes, to and from school and around main bus routes, railway stations and centres of employment.

Measures for walking are supported by various strategies adopted by the council. The Safer Routes to School Strategy is included in the Road Safety Strategy which is part of the Transport Strategy. Walking policies are also linked to health improvement strategies.

### **Strategic Walking Routes in London**

The LB Newham is a partner in the Borough Spending Plan Bid for Strategic Walking Routes in London, which is co-ordinated by the Corporation of London.

Works carried out through this partnership bid will be complimentary and additional to the other works relating to walking proposed by the London Borough of Newham.

This project is London-wide and will complete and promote the six strategic walking routes. In doing so it will:

- Make a significant contribution to making London one of the most walk friendly cities in the world.
- Promote walking in London and encourage more people to walk.
- Improve conditions for pedestrians along the 500km of routes in the GLA area.
- Provide high quality walking experiences making London a more attractive place to live, work or visit.
- Increase the amount of walking generally but specifically, the number of walk journeys made on the six strategic routes. This would have consequent (though non-measurable) benefits for individual physical and mental health and the local economy. Where these replace journeys otherwise made by

vehicles there will also be indirect benefits including less traffic congestion, better air quality, lower noise pollution and a stronger sense of community.

- Offer attractive, cheap and reliable ways of seeing London, taking pressure off congested public transport in central London.
- Provide a strategic framework for the development of more local networks of walking improvement schemes, set exemplary standards for the design, management and promotion of quality walking environments and link the different authorities across the capital providing opportunities for people to walk north, south, east and west.

The London Borough of Newham is committed to completing and promoting the six strategic walks as appropriate and where the Borough has responsibility for maintaining these routes it will continue its maintenance duties following the completion of any works.

### **Safer Routes to School**

Newham Council aims to implement at least one 'Safer Route to School' area per year. Over the past 5-years it has developed the following havens: Plashet, Wakefield, Little Illford, Upton and Kier Hardie. Many of these schemes are part of 20mph zones and possible engineering for the havens is given in section 2.1.

The primary role of the programme is to reduce casualties, but it also encourages walking and cycling to school (including walking buses). In doing so, it tries to discourage the 'school run'. The emission impact of the 'school run' is well documented and its effects are magnified as it coincides with commuter journeys.

### **Cycling**

Like walking, cycling is a low emitting, sustainable transport source that is flexible, reliable, relatively cheap, sometimes quicker than driving, and is healthy. There are numerous reasons why individuals do not cycle, including lack of incentive; therefore cycling can be promoted by making car use less attractive. The council is committed to promoting and encouraging cycling. This is being achieved by:

- Continuing with its programme to provide secure cycle parking at all major destinations within the borough, including; main buildings, town centres, shopping areas, community centres and through new developments which comply with standards in the councils UDP;
- Providing dedicated cycle routes across the borough which would include directional signage, coloured lanes, advanced stop lines at traffic signals, toucan crossings and contra-flow stop lines;
- Effective enforcement of vehicles parked in cycle lanes;
- Piloting cycle routes through parks that forbid cycling, in the hope that this will encourage new and 'rusty' cyclists to gain confidence,
- Offering free cycle training for adults as well as continuing with its programme of cycling proficiency for children in schools; and
- 'Thinking Bike' during the design stages of highway schemes by developing an 'Audit and Review' procedure for Newham.

The council is currently developing a 'Cycle Action Plan' which will incorporate the council's own Agenda 21 plan and the National Cycling Strategy. In addition, LPAC/London Pride Partnership launched the London Cycling Strategy in 1997. This strategy aims to increase London cycle trips from 2% to 10% by 2012. This is

supported by the Government's New Deal for Transport (2000) that aims for the tripling of cycle usage by 2010.

In order to achieve these targets in London, TfL and Local Authorities have been working towards the implementation of the 3000km London Cycle Network, by 2005. Voluntary organisations including Sustrans, London Cycling Campaign and the Cyclists Tourists Club are active contributors to the development and promotion of the LCN.

### **London Cycle Network within Newham**

The council is continually improving its network. This involves devising links to networks in other boroughs (e.g. Barking Rd and A406 junction into Barking and Dagenham). Within the borough, routes will be joined up (eg Manbey Street linking Romford Rd to Stratford). Some designs are being reviewed and revaluated, leading to improvements in existing or proposed routes. In addition, the council will continue to install cycle parking where it is required i.e. outside stations, community centres and shopping parades.

Within Newham there are currently three cycle networks: the LCN+, the Newham Cycle Network and the National Cycle Network. It is planned that all three networks will be completed to create a seamless network.

Due to the evolving comprehensive cycle network in the borough, staff members will be encouraged to cycle to work and conduct visits using personal or pool bikes. Encouragement will be facilitated by the introduction of a Travel Plan (see section 2.13), which it is proposed to include:

- cycle training;
- a mileage allowance for work related visits;
- loans for staff to purchase cycles; and
- for awareness raising purposes, there will be the periodic availability of a cycle engineer to ensure pool bikes and personal bikes are well maintained.

### **Motorcycles**

Motorcycles, mopeds and scooters are flexible, generally low emitting, modes of transport. They efficiently use road-space, reducing congestion and in general journey times are quicker and more reliable. For these reasons the council wishes to promote the use of such two-wheeled vehicles. The drawback with this mode of transport is the disproportionate number of accidents associated with their use and the noise impact of certain machines. Local Authorities are challenged to reduce this number of accidents and the high theft rate from vehicles.

The council hopes to do this by working with TfL to reduce the number of accidents through promotion and engineering measures. The council also welcomes recent television publicity associated with motorcycle accidents and it also wishes to introduce:

- pilot motorcycle advance stop lines throughout the borough
- consider allowing small motorcycles, mopeds and scooters to use bus lanes
- provision of secure parking

## **2.11 Partnerships & Travel Plans (Workplace & School)**

<b>Partnerships &amp; Travel Plans (Workplace &amp; School) - Proposed Actions</b>	
<b>2.11A</b>	Using the commitment in Newhams UDP, continue to encourage developers to introduce Travel Plans (in line with proposal 76 of the MAQS). In order to lead by example, Newham Council proposes to implement a Travel Plan (section 2.13)
<b>2.11B</b>	School travel plans will continue to implemented via the 'Safer Routes Programme'
<b>2.11C</b>	Continue to work with service providers in order to encourage the transfer of passengers from one mode to another.
<b>2.11D</b>	Establish regular contact with Newhams Business Forum to discuss air quality issues. Research group member's with regards Travel Plan status; if required, provide guidance and assistance in adopting a Travel Plan.
<b>2.11E</b>	Try to encourage businesses to participate in environmental management schemes and to demonstrate continuing and meaningful improvements which could include improvements in indoor air quality of the work place and purchasing choices which minimise energy use and emissions (in line with proposals 77, 80 and 82 of the MAQS)
<b>2.11F</b>	Continue to support the vision of London's Lee Valley Transport Working Group: <i>"seek to develop an effective and sustainable integrated transport system to serve all users. It will seek to reduce the dependence on motorised traffic and its adverse effects on the environment, in order to enhance the Lee Valley as an attractive place in which to work, live and play. It has a major role to play in reducing unemployment"</i>
<b>2.11G</b>	Newham Council fully supports and will continue to be involved with the Thames Gateway London Partnership. It will work within the TGLP to implement a 'Sustainable Transport Strategy'.
<b>2.11H</b>	Seek to establish additional partnerships within the borough that will have a positive impact on air quality.

### ***Air Quality Impact: Low***

Getting other groups and partners 'onboard' means groups can work together to successfully implement policies for improving air quality, while taking onto account other issues e.g. socio-economic. Successful partnerships mean proposals can be carried out in a co-ordinated manor and on scale large enough to provide magnified air quality improvements.

### **Workplace and School Travel Plans**

There is a commitment in Newhams UDP to encourage developers to introduce Travel Plans and many new developments have such plans. However, Newham Council can pursue this with greater creditability if the council itself adopts a Travel Plan, as discussed in section 2.13.

The council is working with schools on travel planning, which includes initiating walking buses (see section 2.10)

Newham Council works with local businesses via the Newham Business Forum. Large businesses meet on a monthly basis and representatives from the council are periodically invited to speak with the members and at a very minimum, meet with members on an annual basis As there is no one council representative who liaises closely with the group, as part of this Action Plan, liaisons will be set up annually to keep the forum informed of environmental issues and particularly air quality issues.

The forum was consulted on the AQMA designation and will comment on this Action Plan. If the Action Plan is to achieve its targets, liaisons with this group is seen as key.

Initially, a questionnaire will be distributed to determine the environmental status of each company. Following the results of the questionnaire, if required, information will be provided regarding Travel Plans and environmental management schemes a liaison officer could be allocated to provide information and assistance where possible.

### **Partnerships**

As stated in section 1.2 the council's is working and involved with numerous partnerships and schemes. Reference to these partnerships and schemes are made throughout this Action Plan within the relevant sections, examples include:

#### **Partnerships**

- Thames Gateway London Partnership
- Canning Town Partnership
- London Lee Valley Transport Working Group
- Other boroughs
- Regeneration and social inclusion partnerships throughout the borough
- New Deal for Communities
- Lea Side Regeneration

#### **Schemes**

- London Bus Priority Network / Initiative
- The Bus Priority Partnership
- Strategic Walking Routes in London
- London Cycle Network

The council has worked with service providers to help passenger's transfer from one mode to another through the provision of enhanced interchange. e.g.:

- Facilitated the replacement of Stratford station, which has a passenger concourse incorporating lifts and cycle facilities as well as being adjacent to a bus station.
- Worked in partnership with Railtrack and other authorities to make the stations on the Gospel Oak - Barking line accessible by bicycle and have provided cycle parking at stations within Newham.
- To increase the number of trains stopping at Stratford, the council has been in discussion with Railtrack and first Great Eastern.
- A section-106 agreement with West Ham football club has enabled improvements at Upton Park station to take place.

As discussed in section 2.7 'Infrastructure development', Newham Council is an active member of the Thames Gateway London Partnership (TGLP) and supports its agenda. TGLP's overall vision for transport within the sub-region is as follows:

*"A sustainable transport system which provides access by a range of transport modes including public transport, walking, cycling and river transport. In particular, this will involve a reduction in use of the private car, maximum use of the river Thames and the adoption of appropriate parking, physical and pricing measures."*

Taking this vision as the starting point, five key policy objectives have been identified by the Partnership which are central to the attainment of sustainable transport in the TGLP area. Consistent with the Mayor's Transport Strategy, these are as follows:

- The promotion of regional regeneration and access;
- The improvement of environmental amenity;
- The promotion of social equality and opportunity;
- The enhancement of safety and personal security; and
- The maximisation of resource efficiency.

In addition, Newham Council supports an overall vision as part of the London Lee Valley Transport Working Group (which includes Enfield, Hackney, Haringey, Newham, Tower Hamlets and Waltham Forest and the City of London):

*"To seek to develop an effective and sustainable integrated transport system to serve all users. It will seek to reduce the dependence on motorised traffic and its adverse effects on the environment, in order to enhance the Lee Valley as an attractive place in which to work, live and play. It has a major role to play in reducing unemployment."*

The council also supports the following four objectives and work programme of the Working Group:

1. Promote new public transport links and capacity where it is most needed.
2. Secure better quality public transport facilities to improve its attractiveness to users.
3. Reduce the adverse effects of traffic on the environment and air quality and congestion, by enhancing the scope of sustainable alternative transport modes, particularly walking and cycling.
4. Facilitate business access and servicing through selective and focused road improvements, accompanied by measures to ensure that this does not generate additional commuter car traffic.

The programme includes the following:

- Developing Rail Improvements in the London Lee Valley (DRILL).
- National Cycle Network Route 1 & Linkages.
- Bus Quality Partnerships.
- Lee Valley Access Improvements.

## **2.12 Road Transport Promotion, Education & Awareness Raising**

<b>Road Transport Promotion, Education &amp; Awareness Raising - Proposed Actions</b>	
<b>2.12A</b>	Continually update the Pollution Control Unit website and produce frequent Air Quality information bulletins to members of the public to keep them informed. To ensure the target audience is met, annual reviews of the Pollution Control Units communication strategy will be conducted.
<b>2.12B</b>	Continue to monitor air quality in specified areas and extend where possible, including the addition of an automated monitoring station at London City Airport by mid 2003 and <i>ad hoc</i> monitoring, which may extend over prolonged periods
<b>2.12C</b>	Develop air quality and teaching programmes. In addition, promote air quality benefits associated with cycling during the schools cycling proficiency programme.

<b>2.12D</b>	Use examples within the borough to increase the amount of air quality research conducted by the council
<b>2.12E</b>	Develop and oversee air quality research projects for under and post graduate students starting academic year 2003/2004.
<b>2.12F</b>	Continue to take part in the national Don't Choke Britain Campaign on an annual basis and extend the councils involvement each year, including involvement with European Car Free Day.
<b>2.12G</b>	Continue to promote low emission vehicles to staff members.
<b>2.12H</b>	Place two plasma screens at prominent locations in East Ham and Stratford with regularly updated information upon air quality and its implications for health.
<b>2.12I</b>	Work with Newham PCT and community groups to expand public information screens to include dot-matrix road signs.
<b>2.12J</b>	Annually review the Pollution Control Units Communication Strategy to ensure Air Quality issues are appropriately represented.

***Air Quality Impact: Low***

As stated, awareness raising and education alone will not deter individuals from using their car. Individuals need to be made aware, but they also need to be provided with an incentive to change modes of transport, through other measures seen within this action plan. Awareness rising and education do not have a direct positive impact on air quality, but do play their part in a larger, more complex approach which is needed.

Education and awareness raising of the link between air pollution and car use is vital if the council is to improve air quality. Environmental issues, including air pollution are included within the National Curriculum; and issues such as global warming and ozone depletion are discussed in schools from an early age and are frequently on television and in newspapers.

The council needs to seize opportunities such as these to raise awareness and educate people, however, this in itself is not enough. Individuals may know that their vehicle is polluting, but to get them to change their mode of transport is more difficult. The support and incentive for them to modal shift needs to be there e.g. a reliable public transport system, safe cycle routes etc. Additionally, incentives such parking and congestion charging causes individuals to re-think their transport choice.

**Newhams Air quality Information**

Newham Council has recently launched its pollution website, which can be found at [www.newham.gov.uk/environment/pollution](http://www.newham.gov.uk/environment/pollution). On this site information pertaining to air quality within the borough is found together with other pollution information. Twice daily updates of air pollution levels as well as archived data from the boroughs two monitoring sites and diffusion tubes can also be downloaded. Newhams stage I to III review and assessment is also downloadable from the site.

Since 1998, Newham Council has been logging air quality data from two automated stations and since the late 1980's, has taken part in a number of diffusion tube monitoring regimes. Continuous diffusion tube monitoring has occurred since 1995 for Nitrogen Dioxide and 1994 for Benzene. The monitoring which is carried out in the borough is summarised in the following table.



**Table 4: Air Quality Monitoring in Newham**

Automated Monitoring Stations - (monitoring air quality 24hrs a day, taking a reading every 15 minutes)	
<b>Site A (Cam Road)</b>	Benzene, 1-3 butadiene, carbon monoxide, nitrogen oxides, ozone, particles (PM10), sulphur dioxide and toluene
<b>Site B (Tant Ave)</b>	carbon monoxide, nitrogen oxides, ozone, particles (PM10) and sulphur dioxide
<b>Site C (under development)</b>	Benzene, 1-3 butadiene, carbon monoxide, nitrogen oxides, ozone, particles (PM10), sulphur dioxide and toluene
Diffusion Tube Monitoring (passively absorbing the pollutant and sent to the laboratory to be analysed)	
<b>Sites 1-8, 10-19</b>	Nitrogen Dioxide (monthly average)
<b>Sites 18, 10-12</b>	Benzene (fortnightly average)
Ad Hoc and Project Monitoring	
<b>OSIRIS - Various Locations</b>	Portable Light Scattering Particulate Monitors (x4)
<b>DustMate - Various Locations</b>	Hand Held dust Monitor - looking for peaks in dust levels in association with construction and development sites
<b>Locations 1-7</b>	Dust slides collected fortnightly - dust levels in association with construction sites
<b>Monitoring in relation to traffic management schemes</b>	Nitrogen Dioxide tubes used prior to and following the traffic management scheme
Supervisory and Regulatory Role for Monitoring at Industrial and Construction Sites	
<b>Various sites throughout the borough</b>	Checking monitoring procedures, practice and results in accordance with standard methods for stack emissions monitoring and dust detection

This information is available to members of the public via the website. In addition, a pre-recorded message stating the air quality in the borough is available. In 2003 air quality data will be visible on two strategically placed plasma screens within the borough. It is hoped that by providing this information, individuals can make informed health decisions with respect to air quality and that the screens will serve as an awareness rising tool.

The council will continue to monitor air quality in the borough and undertake a further review and assessment in 2004.

The data from the remote sites is displayed along side the Local Air Quality Network (LAQN) data. The LAQN is managed by the South East Institute Of Public Health Environmental Research Group (SEIPH-ERG), a division of Kings College London. It forms a network of monitoring stations across Greater London that provide:

- An accurate picture of pollution levels
- Real time data for the purpose of pollution warnings
- Real time data for the purpose of pollution modelling

- A forum for discussion on air quality issues.
- Research data for health effect analysis
- Validated data used by the Government and Mayor in preparing the NAQS and the Air Quality Strategy for London

The Pollution Control Unit and the Councils Communication Team has developed a Communication Strategy for 2003, which lays out how the unit will promote and raise awareness concerning air quality issues (amongst others). The Unit will review this strategy on an annual basis.

The demand for this strategy resulted from a public survey carried out during voluntary emission testing in 2002. Approximately 62% of the individuals questioned did not know what the council was doing about air quality or felt it was not doing enough. As a result, the council will provide frequent air quality bulletins to members of the public via the website and the council's monthly publication 'The Newham Magazine', which reaches 25,000 households.

Environmental Health will liaise with the education authority to promote pollution issues at schools. Along with wider issues of environment and responsibility the subject fits well with the national curriculum. In addition, during cycling proficiency training, although the health and safety angle is a key component so too is air pollution and health issues. The council will therefore promote these further these as part of future training programmes.

### **Research**

The council will increase the amount of research associated with air quality within the borough. An example of this can be seen in the PM10 monitoring is conducted in two shopping streets, High Street North and Green Street, the former having restricted vehicular access. In addition, the council is currently investigating the impact of traffic management schemes on air quality at two locations within the borough. NO2 diffusion tube readings are being obtained in anticipation of the schemes that will go ahead during the early part of 2003.

The council will continue to provide data and assistance to students carrying out research projects. The council will then encourage students to feed their findings back into the council system. In order to increase research possibilities, the council will also develop and oversee 'research projects' which can be carried out by under or postgraduates.

The council will also continue to take part in the national 'Don't Choke Britain' Campaign on an annual basis, when valuable research data can be obtained as well as generating awareness.

### **Car Free day and Don't Choke Britain**

As part of a programme to raise awareness about the link between air pollution and the harmful effects of vehicle emissions and to promote alternative forms of transport to the car, many London Boroughs have taken part in the annual 'car free day' event. In the past Newham Council has not taken part in such an event, but it will in the future. In June 2002, Newham Council did take part in the National 'Don't choke Britain' Campaign. As part of this campaign the following were organised:

- Three weeks of voluntary vehicles emission testing and adjustment for members of the public (see section 2.16)

- On National Share a lift day and the day before Bike week (June 14<sup>th</sup>) a Green Transport Breakfast was organised for staff members of Environmental Health. Staff were encouraged to travel to work in a 'green way' and rewarded with breakfast and could trial an electric th!nk car, electric bike and folding 'Brompton' bike.
- The electric th!nk car was on trial for over a week within different departments of Environmental Management Service's.
- Two electric bikes and the folding Brompton were on trial for a month.

Following the success of the campaign, Environmental Health has purchased an electric bike and the folding Brompton to be used as 'pool bikes'. These are proving very popular and have been used by various services in the short time they have been available. In addition, with a view to purchasing, the council is currently exploring the potential of hiring an electric car, or low emission vehicle for a longer period so that the loan period to each department can be extended.

As part of Newham's 2002 'Don't Choke Newham Campaign', tips on how to reduce emissions and pollution were distributed via a monthly magazine, newspaper article and over 2000 leaflets which were handed out as part of Environmental Health's voluntary vehicle emission testing and adjustment campaign. Newham Council will continue with such awareness raising campaigns.

### **2.13 Newham Fleet Management, Travel Plan & Clean Fuels**

#### **Newham Council Fleet Operations**

<b>Fleet Management - Proposed Actions</b>	
<b>2.13A</b>	The council intends that all its fleet of 350 vehicles should meet the Euro III standard by 2003.
<b>2.13B</b>	Fleet Operations will continue to trial the use of LPG fuelled and LPG/petrol dual fuelled vehicles and investigate the potential of other low emission fuels and water-diesel emulsion, as information comes available.
<b>2.13C</b>	Ensure that council vehicles are: <ul style="list-style-type: none"> <li>• used sensibly (via staff training) and are well maintained, this includes bi-annual emission tests as a minimum;</li> <li>• used on routes and tasks which are worked out to be as efficient as possible, eg co-ordinating deliveries of goods and services; and</li> <li>• operated by appropriately trained staff (to improve fuel economy) and promote the above</li> </ul>
<b>2.13D</b>	Continue within Fleet Operations plans to ensure the retrofitting of CRT for all larger diesel vehicles.
<b>2.13E</b>	The council will establish a fleet register that includes emission information and measures to implement emissions improvements (inline with the MAQS proposal 65). This will be provided on the councils website.
<b>2.13F</b>	Promote alternative fuels and technologies through initiatives such as the use of an electric car and low emission vehicles, as well as lobbying for funding.
<b>2.13G</b>	Provide emission checks for members of the public at the councils MOT depot.

***Air Quality Impact: Low***

The Air Quality Impact would be low due to the proportionately smaller number of vehicles the council has in relation to the entire borough. The council should however lead by example and adopt a travel plan that incorporates its fleet management operations, then the measures within this action plan will be more effective and the council will have greater creditability.

Newham Council provides a wide range of services to the community that require some form of transportation. These services include:

- School Buses
- Road Maintenance
- Building Services
- Waste Collection
- Graffiti Removal
- Elderly Services
- Animal Welfare
- Pest Control
- Meal on Wheels
- Parks and Open Spaces Maintenance
- Street Lighting
- Mobile Library
- Laundry Service

The council operates around 350 vehicles comprising different types typical of a local authority fleet, including approximately 80 minibus and accessible buses for the councils Passenger Transport contract and 50 gully tankers, street sweeping machines, recycling and refuse collection vehicles. The remainder is made up of light vans, medium vans, medium tippers and a small number of cars. The bulk of the fleet are kept at Folkestone Road Depot with small quantities kept at various satellite depots around the borough. Newham Borough Services operate approximately 100 vans which are based at Bridge Road depot.

All vehicles are maintained in accordance with the conditions of our Operators Licence and service/Inspection frequencies vary from 2 per year for vans to every 8 weeks for refuse collection and other large vehicles.

In line with the MAQS, London Boroughs should lead by example and implement measures to decrease their emissions (p252). Since 1999 the council has embarked on a fleet acquisition programme via contract hire agreements and this has seen approximately 250 older, more polluting, vehicles replaced to date. The majority of new vehicles are diesel powered and the entire fleet now runs on ultra low sulphur diesel, supplied via the fuelling facility at Folkestone Road Depot. The authority also operates 10 dual fuel (Petrol / Liquid Petroleum Gas - LPG) vans that are used on the cleansing service and their performance and suitability are being monitored with a view to expanding their use. In addition, all diesel powered vehicles over 7.5 tonnes are fitted with Continuous Regenerating Trap (CRT) exhaust systems to reduce emissions of particulates and the Pest Control Service is to replace their fleet of 10 vehicles with LPG powered vans.

With regards the use of water-diesel emulsion, the council feels vehicles travelling large distances are better suited to trial its use, as opposed short haul vehicles such as those within the council. As such the council will observe the results of such trials and if feasible, trial the emulsion and would encourage its use where suitable (in line with proposal 11 of the MAQS).

Further to the above, the council intends that all its fleet should meet the Euro III standard by 2003.

Environmental Health has experimented with the use of a small electric powered vehicle and will be hiring another electric car or low emission vehicle within 2003. This will be loaned to a number of council services that use vehicles to enable them to assess the viability of alternatively fuelled vehicles. The hire of the electric car will also be used to raise the profile of air pollution issues and generate positive publicity for the council and this action plan.

To aid the council's fleet evaluations and in line with the Mayor's Air Quality Strategy, the council will establish a fleet register that includes emission information and measures to implement emissions improvements. In addition, ensuring council vehicles emit the lowest possible emissions should be considered in conjunction with ensuring vehicles are:

- used sensibly and are well maintained - this includes bi-annual emission tests as a minimum;
- used on routes and tasks which are worked out to be as efficient as possible, eg co-ordinating deliveries of goods and services; and
- operated by appropriately trained staff (to improve fuel economy)

If the council adopt an LEZ (as discussed in section 2.3), depending on the scheme adopted, then it would have implications for the council fleet as well as charity organisations and Hospital Services etc within the borough. Such groups would need to consider existing vehicle contracts they have, especially if there are cost implications.

The council sees steps it has taken with its fleet as moving towards its ultimate goal of leading by example. Further to this, one of the most effective ways that Newham Council can promote greener, cleaner travel choices, reduce reliance on the car and make this action plan successful is by introducing a Travel Plan.

## A Travel Plan for Newham

Newham Travel Plan - Proposed Actions	
<b>2.13 H</b>	Implement a Travel Plan, which may include:
<b>2.13I</b>	<p><b>Encourage Staff Cycling and use of Motorcycles:</b></p> <ul style="list-style-type: none"> <li>• provide loans for the purchase of bicycles and motorcycles</li> <li>• provide free, covered and secure cycle and motorcycle parking</li> <li>• provide lockers to store kit</li> <li>• provide changing rooms and showering facilities as funding allows</li> <li>• provide pool bikes where possible</li> <li>• pay mileage for cyclists and motor cyclists, as well as casual car user</li> </ul>

<p><b>2.13J</b></p>	<p><b>Encourage Staff use of Public Transport:</b></p> <ul style="list-style-type: none"> <li>• allow employees to use LT internet journey planning service</li> <li>• distribute information of public transport in Newham to all staff</li> </ul>
<p><b>2.13K</b></p>	<p><b>Encourage Staff to leave car at home:</b></p> <ul style="list-style-type: none"> <li>• make Council staff car parking into public car parks and introduce charges</li> <li>• introduce low emission pool cars</li> <li>• give new staff casual car user allowances instead of lump sum on essential allowances</li> <li>• set up a car sharing database</li> </ul>

***Air Quality Impact: Medium***

As the largest employer in Newham, the council cannot, with any credibility, ask others to produce a plan or change their ways with respect to using motorised vehicles, if the council are not doing the same. By leading the way, the success of other actions heightened.

The Road Traffic Reduction Act 1997 places obligations on the council to produce targets for the reduction of traffic on our roads and to implement measures to meet those targets. Newham Council gave a commitment to comply with the requirements of the Act.

It is accepted that we cannot build our way out of congestion in London but merely shift the bottlenecks around. Instead we need to manage the demand for road-space. If we do not manage demand then congestion will grow so that the morning and evening peaks will merge and the roads of London will be filled with slow moving or stationary traffic emitting pollution. The impact such a scenario would have on the prosperity and further regeneration prospects of London as a whole, and Newham in particular, would be damaging.

The means to deliver this reduction is a “travel plan”. Central Government has taken the lead by introducing travel plans in all government departments. It’s asked local authorities to also set a good example by doing the same and then encouraging other organisations in their boroughs to follow. Newham Council has already introduced the requirement into the UDP for applicants to produce travel plans as a planning condition for major developments.

In 2001, a survey by CILT revealed that 24 London boroughs either have or are currently preparing a travel plan for their staff. Together with this statement, and as the largest employer in Newham, the council cannot, with any credibility, ask others to produce a plan or change their ways with respect to using motorised vehicles, if the council are not doing the same.

A Travel Plan would address different types of travel associated with the council including:

- **Fleet operations**
- **Travel by staff for work**
- **Commuter journeys**
- **Visitor travel** e.g. meetings and courses
- **Deliveries and contractors**

Issues associated with fleet operations have already been discussed above and these would be incorporated into the travel plan. In addition, as part of a travel plan, it is proposed that that council will use its own MOT station at Folkestone road to develop a more regular emission-testing regime for council vehicle's (bi-annual). In addition, driver routes will be investigated for alterations to avoid pollution hot spots and to reduce the number and length of journeys.

In terms of commuter journeys and travel by staff, the authority has completed and analysed a staff travel survey and has formulated ideas for a draft travel plan.

As indicated above, the idea of introducing a travel plan is not new as 24 London boroughs already have one in place. However, as indicated throughout this action plan, established travel practices will be difficult to alter, this is also true within the council. The council wants to produce a plan that will be genuinely effective in reducing car dependency, but it also wants to introduce a plan that will be adopted and can then be built upon as changes in travel practice filter through the council and become common practice. The intention is to reduce car use by council employees by the same proportion as is determined to be appropriate for the borough as a whole by 2008

Following the results of the staff travel survey, it is proposed that the travel plan could include the following:

### **Encouraging Staff Cycling**

In order to encourage cycling to work and cycling to work related visits a number of successful measures have already been and will be adopted within environmental health and it is proposed that they could be adopted across the council. These include providing:

- changing area and showering facilities
- covered and secure cycle parking.
- pool bikes, including a folding bike which can be taken on public transport; and an electric bike which requires minimal effort.

Further to the above proposals, cycling could be encouraged by considering:

- free cycle training for staff (as we do for members of the public);
- as part of awareness raising exercises, periodic bike maintenance;
- loans for the purchase of bicycles in much the same way that the council provides loans for travel cards and cars and motorcycles.
- mileage payment for cycling and motorcycle use.

### **Encouraging Staff use of Public Transport**

Members of the public and council staff complain about the reliability of London's public transport system. If an individual has driven to work for a number of years, they may not be aware of improvements in the system. Although not yet ideal, by promoting improvements and distributing public transport information to staff, individuals may attempt to use it instead of drive and realise their ideas may be outdated. To assist, employees could also be encouraged to use the telephone and on-line London Transport journey planning service.

### **Encouraging Staff to leave their car at home**

By implementing the above incentives, staff may try and switch to alternative modes of transport and it is proposed that this will be encouraged by allowing all employees to choose which mode of travel to use on a journey-by-journey basis. Staff members

would not be penalised for swapping between modes of transport. ie at present staff are only able to claim either car mileage or annual bike user allowance, not both.

If people leave their cars at home, the council needs to ensure that they have suitable means of transport to carry out council's business. Public transport is not always a suitable option and neither should the council expect people to always use a pool bicycle. Following the success of an electric pool car in environmental health, it is proposed that low-emission pool cars could be introduced in line with fleet acquisition plans. In doing so, it is hoped that staff would be discouraged from driving to work in order to use their car for workplace mileage. In addition, the staff discouraged from driving to work would be supported.

Car sharing is not necessarily the most ideal form of transport due to waiting times and lack of flexibility; however, it is proposed that a car sharing database will set up for those individuals who are interested. In addition, communication between officers concerning council business will encouraged so that one car is used for a number of visits, instead of one car per officer.

Where available, council parking is freely available to those individuals who are entitled. In many other parts of London, 'free' parking is a thing of the past as companies attempt to streamline their resources and encourage 'greener' travel. As individuals pay to travel to work by public transport, it is proposed that in much the same way council staff should pay in some way to use car parks. Parking charges need to be introduced or car-parking provisions reduced, as other measures in a travel plan will not be enough to see a noticeable reduction in car commuting.

It is proposed that the hourly charge should remain in line with other Councils public car parks and the daily charge should rise in line with advice. It would therefore follow that the existing permit system would cease and places would only be reserved specified individuals, visitors or orange badge holders.

## **Alternative Fuels, Technologies and Funding**

<b>Clean Fuels - Proposed Actions</b>	
<b>2.13I</b>	Provide encouragement and guidance for individuals and groups who wish to clean up their vehicles and fuel used and take advantage of campaigns such as CleanUp and Powershift (In line with proposal 2 and 75 of the MAQS).
<b>2.13M</b>	Encourage businesses to try and achieve at least the euro II standard plus a reduced pollution certificate or Euro III by 2005 (In line with proposal 74 of the MAQS).
<b>2.13N</b>	Identifying appropriate sites for further alternative refuelling infrastructure together with TransportEnergy (in line with the MAQS, proposal 66)
<b>2.13O</b>	Support electric re-fuelling through the work of the London Clean Fuel Working Group (in line with proposal 7 of the MAQS)



**Air Quality Impact: Low**

As stated, it will take a number of years before a significant effect of cleaner vehicles and EU emission improvements is seen. In the meantime if funding and tax breaks are available to reduce emission levels, the council must encourage this. With respect to retrofitting, due to the age of vehicles that can receive funding (new, cleaner vehicles anyway), the chance of this significantly impacting on air quality before 2005 is low. Cleaner vehicles, tax breaks, funding for cleaning up engines and purchasing low emission vehicles all play their part and also contribute to awareness raising and education which will impact positively on air quality.

New vehicles will continue to be cleaner as progressive EU emission improvement requirements come into force. However, given the current life cycle of vehicles it will take several years before a significant effect is seen. Over the last few years there has been developments in the availability of alternative fuels, technologies, pricing mechanisms and funding to support air quality improvements.

Newham Council should and does aim to promote the use of such initiatives within the borough and provide help, guidance, support and direction for individuals and groups who are interested. The council can do this in a number of ways:

- internally via fleet management;
- liaising externally; for example with the Newham Chamber of commerce and promoting petrol stations that provide cleaner fuels to members of the public;
- identifying appropriate sites for further alternative refuelling infrastructure (together with TransportEnergy);
- awareness raising exercises such as the 'Don't Choke' campaign and vehicle emissions testing; and
- by adopting a travel plan.

There are a number of initiatives in place which the council will strive to promote and support, these include:

- The Cleaner Vehicle Task Force (CVTF) - aims to promote the production and use of more fuel efficient, less polluting and quieter vehicles.
- Taxation Measures:
  - a) Tax incentives mean a vehicle powered on LPG will give fuel savings in the region of 20% to 30% over petrol and 10% to 15% over diesel.
  - b) **Fuel Duty Escalator**: (currently under review) aims to discourage unnecessary trips and encourage industry to produce more fuel-efficient vehicles
  - c) Abolition of the **business mileage discount**,
  - d) **Vehicle Excise Duty** (based on size and engine efficiency) with discounts for HGVs with particulate abatement, greener fuel or upgraded engine (can be achieved using grant funding)
  - e) **Frozen tax** for gas fuels until 2004
- TransportAction Campaign (via Energy Saving Trust)
  - a) **The CleanUp Campaign**  
The CleanUp Campaign encourages the fitting of emissions reduction equipment to the most polluting vehicles to reduce levels of PM10 and NO2 in

pollution 'hotspots'. This campaign targets PSVs and HGVs and provides funding for fitting emission reduction equipment and provides help, advice and data regarding cost effectiveness and effectiveness of equipment

The types of technologies that are supported and implemented include:

- Addition of oxidation catalyst to a diesel-fuelled vehicle system
- Addition of a particulate trap to a diesel-fuelled vehicle system
- Conversion to gaseous fuel
- Re-powering vehicles with lower emission engines

#### b) **PowerShift Campaign.**

Through funding the purchase of clean-fuel-vehicles is supported.

Like the CleanUp campaign, PowerShift is aimed at a specific audience, which includes businesses, transport operators, Local Authorities and Partners and some individuals. To calculate likely cost savings and emission benefits if switching to one of the PowerShift supported fuels, fleet operators and individuals can use the web based 'calculator'.

PowerShift will fund:

- **from 40% to 75% of the cost of converting vehicles** up to one year old from petrol or diesel to a cleaner fuel
- **40% to 75% of the difference in cost** between a clean fuel vehicle and its' petrol or diesel equivalent.

Further to the above, Newham council will support the work of the London Clean Fuel Working Group, which is looking to extend the electric refuelling network within London.

### **2.14 Taxis, Mini-Cabs and Private Buses / Coaches**

<b>Taxis, Mini-Cabs and Private Buses / Coaches - Proposed Action</b>	
<b>2.14A</b>	The council will work with London City Airport to minimise the impact of taxis from the airport via the DLR extension and emission testing conducted by the Vehicle Inspectorate.
<b>2.14B</b>	Continue to control where taxis, mini-cabs, and local bus operators in Newham can park as a means of regulating their use.
<b>2.14C</b>	Newham Council supports the regulation of taxis and minicabs through the Public Carriage Office, and encourages the introduction of additional measures to ensure emission levels are minimised by 2005, such as vehicle emission checks and changes to low-emitting fuel.

#### ***Air Quality Impact: Low***

Taxis and minicabs negatively contribute to Newham's air quality and the predicted levels for PM10 and NO<sub>2</sub> in 2005. As they can be on the road for the majority of the day and are often used for an extended lifetime tighter regulation and stricter controls pertaining to their emissions is required.

### **Taxis (black cabs)**

Notwithstanding the black cabs looking for casual fares, there are two main reasons for black cabs to be in Newham. Firstly, to pass through into the centre of London via the A13 and A118 (High Street Stratford), both of which are part of the councils AQMA. Secondly, as London City Airport is located in the south of the borough, every morning over 300 taxis wait for incoming flights.

Due to the nature of diesel powered engines, particulate can build up within the engine as the vehicle travels slowly. When the vehicle increases speed up, these particles are 'cleared' via the exhaust, contributing to pollution levels. Within Newham, some taxis will have come in from the east via main trunk roads and have had the chance to 'clear' their engines. In contrast some taxis may be dropping off at the airport and come from the city where they spend the majority of the time and 'clear' their engines on the relatively fast roads which approach the airport.

Taxis should not be discouraged from the borough as along with minicabs, they play an important role in supporting other modes of transport such as trains, especially for individuals with mobility problems and luggage. They are built for a long life and consequently the majority of taxis are of a poor emission standard (Euro I). However, TfL is driving improvements in emissions and the council supports the move of taxis to alternative fuels, e.g. LPG, which Newham council supports.

### **Mini cabs**

Newham has numerous minicab firms, which utilise vehicles in a range of conditions, from private cars to vehicles especially for business use. They operate across the borough and are seen as a viable, cheaper alternative to 'black' taxis.

Minicabs are generally no different to the average private car and have no additional road priorities (unlike taxis). As the vehicles spend huge parts of the day driving around, the emission from these 'private vehicles' have a greater impact than other private cars. For this reason, Newham Council welcomes stricter controls with regards registration and emission checks.

### **Private Buses and Coaches**

There are many reasons why such modes of transport operate in Newham, including private school buses and commuter buses. In principle, due to the number of individuals they carry, they are more sustainable than individuals travelling in private vehicles, taxis or mini cabs.

## **2.15 Road Freight Measures – HGV and LGV**

<b>Road Freight Measures – HGV and LGV - Proposed Action</b>	
<b>2.15A</b>	Encourage and support initiatives the transfer road freight to rail and water.
<b>2.15B</b>	Continue with Newham's strategy for traffic management by locating freight-generating developments on or near main road systems.
<b>2.15C</b>	Set up a Freight Quality Partnership through Newham's Transport Strategy.
<b>2.15D</b>	Provide help, encouragement and awareness raising to Road Freight groups within the borough, concerning funding for cleaner vehicles.
<b>2.15E</b>	Use roadside vehicle emissions checks for HGVs and LGVs, to encourage regular servicing, maintenance and replacement of old vehicles.

<b>2.15F</b>	Minimise the misuse of roads by freight from major developments by continuing to and expand the spot-checking of roads used and whether loaded vehicles are covered.
<b>2.15G</b>	In re-writing the councils corporate procurement policy (section 4.6), include environmental considerations in all contract documentation and work with suppliers and service providers to improve environmental performance.
<b>2.15H</b>	Continue with the night-time lorry ban, and participate with the review of the ban with a view to relaxing the ban to ease day time congestion. Any relaxation (sanctioned by the London Mayor) should incorporate the use of emission abatement and cleaner fuels.
<b>2.15I</b>	In line with proposal 22 of the MAQS, Newham council will assess the scope for the use of priority lanes by freight vehicles and the implications for other road users.

***Air Quality Impact: Low***

Road freight contributes significant emissions to the atmosphere especially when the large number of miles travelled is taken into account.

The council recognises that freight transport is necessary for a prosperous economy. Further, that it is more efficient and environmentally sound for freight to bring goods to town centres, rather than facilitate individuals to drive to out of town shops. Therefore the council does not wish to hinder the movement of legitimate freight.

Freight and 'goods', the composition of which varies extensively, are transferred around the borough by vehicles that range from small LGVs to large HGVs. These are operated either privately or commercially by small, through to large-scale operators and can be part of a fleet or a single vehicle.

The road network is one of the main ways in which freight is moved around Newham. Rail and river are also used and as they result in fewer emissions of NO<sub>2</sub> and PM<sub>10</sub> they are a more sustainable mode of transport. The council can see the benefit of transferring freight from the road to rail or water and would support appropriate initiatives. For this reason, the council will promote the latter two ways whenever possible. These measures will be considered in section three.

Newham's strategy for traffic management encourages freight to use appropriate parts of the road network. By locating major freight-generating developments on or near main road systems problems such as pollution, noise and vibration associated with freight is minimised.

Through Newham's Transport Strategy, the council will set up a 'Freight Quality Partnership' with relevant organisations and particularly national trade organisations.

If the council adopt an LEZ (as discussed in section 2.3), depending on the scheme adopted, then it would have implications for LGVs and HGVs within the borough. Such groups would need to consider existing vehicle contracts they have, especially if there are cost implications that would significantly affect their operations.

Traffic management measures such as width restrictions and access control means that road freight in the Borough is generally confined to the primary and secondary roads. Ideally, other roads should only be used as the final point of delivery.

Some small-scale companies and private individuals use LGVs for local transportation. Due the extent and longevity of use by these operators, coupled with poor servicing, such vehicles contribute significantly to the pollution levels in the borough. It would be difficult to include these operators in the quality partnership and so other measures such as roadside emission testing will specifically target these vehicles.

Measures such as regular roadside emission testing can be seen as incentives to get older, more polluting lorries off of the road.

Using the planning process large-scale developments that occur within the LB Newham such as CTRL, A13 and DLR, are required to use specific routes and officers from Environmental Health and Highways ensure that these routes are used. In addition to the types of roads that can be used, the council also has a 'spot-check' system for ensuring load bearing vehicles of major developments are appropriately covered. This prevents the generation of windblown dust and grit, which can also settle and become re-suspended. Both of these approaches have been successful in minimising the number vehicles using the highways inappropriately.

The council's corporate procurement policy is currently being rewritten (see section 4.5) and the council will push for tighter controls on emissions from freight vehicles used by contractors.

Newham Council will also seek to provide assistance to companies that wish to use alternative modes of transporting their freight. For example, a schedule B process within the borough has applied for Government funding to redevelop a canal adjacent to their boundary, which is less than 100m from the River Thames. They will then use this as a means of receiving and transporting its raw materials and products. This would cut down on the number of lorry movements to and from the site as well as utilise a valuable, under used route.

The London Night Time Access Lorry Ban will continue within Newham and so too the 'Overnight Parking Ban'. The council does recognise the potential for relaxing the access ban in order to ease day-time congestion. The main purpose of the ban is to reduce nighttime noise levels, any relaxation could be tied to the use of cleaner fuels and technologies, which also result in quieter vehicles. Such relaxation would need to be sanctioned by The London Mayor and Boroughs. Due to air quality issues, there is a Local Authority consensus to review the ban.

## **2.16 Roadside Emissions Testing and Enforcement**

<b>Roadside Emissions Testing and Enforcement - Proposed Actions</b>	
<b>2.16A</b>	Newham Council has adopted the new powers laid down in The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002 and is co-ordinating the London -Wide Vehicle Emission Testing (VET) in association with the ALG. As such, in line with proposal 9 of the MAQS, Newham council will support the VET and maintenance campaign.
<b>2.16B</b>	Newham Council will initiate and support the Vehicle Inspectorate in roadside vehicle emissions testing programmes carried out in the borough

<b>2.16C</b>	In a bid to encourage motorists to get their vehicles checked more frequently, Newham Council will offer voluntary testing and adjustment on an annual basis (as part of the 'Don't Choke Britain Campaign'). In addition, action point 2.13G states the council will provide VET for members of the public at its MOT testing station.
<b>2.16D</b>	Action Point 2.13C states that council fleet will have emissions checked biannually. It is proposed that vehicle emission checks will be made available to staff, in the hope that this can be extended to be compulsory for those claiming mileage allowance.
<b>2.16E</b>	Newham Council will give the VET initiative full publicity to ensure that motorists are aware of the new powers and of the voluntary testing and adjustment.
<b>2.16F</b>	Newham Council will also work in conjunction with the Mayor for London to raise awareness of the importance of good vehicle maintenance
<b>2.16G</b>	Newham Council will seek to enforce new powers to insist that motorists switch off their engines while stationary.
<b>2.16H</b>	The council will lobby for emission limits to be reduced.

***Air Quality Impact: High***

Research has shown that approximately 20% of vehicles fail an emissions check if randomly stopped. As the main aim of emission testing is to encourage the regular servicing of vehicles, with time, the council believes that the awareness raised by regular, random emission checks will ensure a greater proportion of individuals attempt to be within the limit. It is doubtful that all 20% who fail would then pass, indeed this in itself would not ensure compliance with the NAQS objectives. Due to the age of vehicles on the road within in Newham, if a significant proportion were serviced regularly, there would be a significant positive impact on air quality.

A 1999 National Audit Office report into vehicle emissions testing (VET) concluded that a significant proportion of vehicles in Britain – between 10 and 20% - exceed legal emission limits. This is despite the fact that the failure rate for cars at annual MOT tests is around 5%. This is explained by:

- Wear and tear;
- A tendency on the part of some motorists to do no more than the minimum required to maintain their vehicle; and
- Because many vehicles are serviced prior to their MOT

Newham Council recently carried out voluntary VET and emission adjustment in conjunction with a 'Green Flag' engineer and the Vehicle Inspectorate (VI) as part of the national 'Don't Choke Britain' Campaign. 830 vehicles were tested in total. Of these, 19% failed the emissions standard and 24% of vehicles tested had improved emissions following adjustment.

Recent research carried out by the RAC suggests that motorists are generally in favour of emissions testing with 85% of those surveyed agreeing that vehicles should be checked regularly.

The Government has introduced legislation that will extend the powers for roadside VET to local authorities that have designated AQMAs. The new powers under The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002 came into force in 2002 and Newham Council has adopted these powers.

Newham Council anticipates that these new powers will make motorists more environmentally aware and take more care to ensure that their vehicles are not producing avoidable emissions. A major comment from the questionnaire during Newham Council's voluntary testing was that individuals with low polluting cars felt that their efforts were being undermined by the irresponsible minority of car users who did not maintain their vehicles. This will ensure that those individuals who have lower polluting cars will feel as if the 'real' polluters are being dealt with.

As part of the London-Wide approach taken for the VET, Newham Council will be co-ordinating the testing in association with the ALG. It is anticipated that testing will commence in May 2003.

### **Enforcement to Switch off Engine Whilst Stationary**

Under the Road Vehicles (Construction and Use) Regulation 1986 it is a requirement for drivers to switch off engines in parked vehicles. At present only the police can enforce this requirement. These powers have been extended to local authorities under The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002.

Newham Council believes that this new power will encourage all drivers to consider both their own environment and the people in the immediate area, when stationary.

A Fixed Penalty Notice (FPN) of £20 can be issued to drivers who refuse to turn off their engine when parked. This fine will rise to £40 if not paid within 28 days. The council can recover these costs through the courts if not paid within 56 days.

## **2.17 Compulsory Purchase**

Some boroughs within the UK have decided to address their air quality problem by removing the problem receptor from the chain. For example, it may be suitable to compulsory purchase a house situated in an area flanked by motorways. By removing the receptor, the main concern associated with the air pollution source is removed and the air quality issue is minimised.

Due to the densely populated nature of Newham, the council does not have any plans to compulsory purchase any properties to alleviate its air quality problem.

## Section Three

### Other Transport Measures – including airports

The Review and Assessment process has shown that the major contributing source of Air Pollution in Newham is motorised vehicles and hence other modes of transport are encouraged. These more sustainable modes of transport still have emission drawbacks, but are comparatively lower than the private vehicle. As such 'other transport measures' are discussed within this section with respect to proposed actions for adopting them and problems associated with their use.

#### **3.1 Passenger Rail and Underground Services**

<b>Passenger Rail and Underground Services - Proposed Actions</b>	
<b>3.1A</b>	Establish Quality Partnerships with the rail and tube industry to promote increased levels and quality services in the Borough. Within the partnership, agree targets for service improvement. Which includes improving frequency and reliability of services through signal improvements, reinstatement of lines and additional and increased services.
<b>3.1B</b>	Where possible encourage rail operators with trains which pass through the borough to consider transferring to low emission trains.
<b>3.1C</b>	Lobby the London Mayor to reduce air pollution on the London underground.
<b>3.1D</b>	The council will support improvements in rail / tube infrastructure.

#### ***Air Quality Impact: HIGH***

Railways and the underground form part of the lower emission transport system as well as reducing traffic volume. Actions adopted should consider ways to improve and subsequently promote this service as a low emitting alternative, to encourage individuals to model shift. In addition as trains contribute to emission levels, actions should be adopted to reduce their impact.

The borough of Newham is well served by rail and tube links with the following operating within the borough:

Underground Services: Central Line, Jubilee Line, District line, Hammersmith and City Line and Docklands Light Railway

National Rail including: -SilverLink (Stratford to North Woolwich and Westbound)  
-Liverpool and Fenchurch Street Lines out to Essex

In recent years, Newham has benefited from the extension of the Jubilee line to include Canning Town, West Ham and Stratford. Although the extension has been welcomed, if such modes of transport are to be encouraged as a viable alternative to the car, complaints such as tube overcrowding and long queuing times for tickets at Stratford need to be addressed. The council will push for resolution of such complaints.

There is still scope for improvement. In particular, the A13, which together with the dock and river Thames acts as a barrier to North South travel. The current redevelopment of the Stratford railway lands is part of a larger regeneration picture, but puts Stratford and Newham on the international map.



## **Infrastructure Developments for Rail and Underground**

There are various rail infrastructure developments which the council supports and where possible will pursue, including:

- The construction of CrossRail, which has a number of alignment proposals, including one for Stratford and another serving the Docks.
- The DLR / City Airport extension are seen as a key initiative in helping regeneration and increasing access to employment. In addition, due to decreased vehicle journeys to and from the area the project will also contribute to an improvement in air quality. In addition, there are plans to bring the Airport extension under the river to link with the mainline network at Woolwich Arsenal Station, which the council supports.
- Completion of Channel Tunnel Rail Link at Stratford
- A rail crossing of the River Thames to provide a commuter link through to the Barking – Gospel Oak Line
- Construction of the Hackney South West Line
- Construction of a New station at little Ilford
- Fully accessible tube and rail stations which have safer platforms and waiting areas with cameras, CCTV and passenger alarm facilities.
- general upgrading of the physical fabric/amenity
- car parking management
- improved links to transport networks i.e. bus routes/stops, footpaths and cycle paths.
- Additional and more secure cycle parking
- Introduce an outer London orbital Network

## **Rail and Tube Operations**

It will be difficult to encourage individuals who drive to switch to train or tube if the service provided is not comprehensive or reliable. In addition, those who already use the services may become disillusioned and switch to car use if the service is not maintained and enhanced. The council wishes to improve further frequency and reliability of rail and tube servicing and Newham and is pressing for various service improvements, including:

- Improved signalling on the Jubilee extension to increase train capacity from 24 to 26 trains per hour.
- Reinstatement of lines e.g. Lea Valley Line and Hall Farm Curve
- Additional Services to stop at stations in Newham e.g. Liverpool St to Norwich/Ipswich and Basingstoke to Colchester/Norwich.
- Increase service level at Manor Park, Forest Gate and Maryland stations.
- Liaise with local train operators with regards timetabling and reliability of services
- Fully stopping CrossRail service at all relevant stations in Newham
- Introduction of a DLR through service from Bank to Beckton

### **3.2 Freight Rail**

<b>Freight Rail - Proposed Actions</b>	
<b>3.2A</b>	Newham Council will continue to support initiatives to transfer freight from road to rail.
<b>3.2B</b>	The council will investigate the potential of establishing Quality partnerships within the freight rail industry to ensure best practicable means are adopted with regards air pollution and other environmental issues.
<b>3.2C</b>	The council will lobby for rail infrastructure improvements.

#### ***Air Quality Impact: Low***

Transferring freight that usually travels by road to rail would reduce emissions and congestion.

Transferring freight by rail is more sustainable than transferring it by road and the council will support appropriate initiatives to transfer freight from the road. However, due to emissions from diesel trains and associated noise and vibration which also occurs through the night, the council also supports initiative to minimise these impacts.

The council is currently developing a noise map for the borough that will take freight rail into account. In order to minimise the impact of freight rail, the council could discuss with freight operators best practice and the possible introduction of lower emission trains, while taking into account noise and vibration issues.

The Strategic Rail Authority proposes an upgrading of the routes serving the container port at Felixstowe. One of the routes identified is a North London Orbital Route with an upgrade of the Willesden-Gospel Oak – Barking route. This would decrease the number of freight movements on the North London Line proper, but would increase movements along the Barking route and would cause environmental dis-benefits for local residents. Newham Council would rather see a passenger line, providing a service for local residents. It could also provide an orbital rail service around London, perhaps within the M25. There could be separate tracks for passenger and freight rail and new river crossings in the east. It would however be better if the above line were to be used for passengers as well as freight.

### **3.3 Maritime, Ports and Waterways (freight and Passenger movements)**

<b>Maritime, Ports &amp; Waterways (freight &amp; Passenger movements)-Proposed Actions</b>	
<b>3.3A</b>	Where possible, the council will continue to safeguard mooring sites along the water ways in Newham which have been earmarked for river bus, taxi and freight movements.
<b>3.3B</b>	Continue to encourage and facilitate river use by river side industries and freight operators
<b>3.3C</b>	Develop sustainable water transport services within the borough in partnership with other boroughs

**Air Quality Impact: Low**

Utilising the waterways for people and freight movement would take the burden from the road, therefore reducing emissions and congestion.

The Council sees the River Thames as a significantly underused, sustainable transport resource. The council therefore supports the principle of increased use of the River Thames and River Lea for passenger and freight services.

In relation to passenger services, five sites on the river Thames with the potential as river bus mooring points have been safeguarded within the UDP. There are also ideas for a river taxi service.

In relation to freight, all wharves safeguarded by the secretary of state have been included within the UDP as well as a further four downstream of the Thames Barrier. However, as stated in the UDP, these wharves may be redeveloped to tie in with wider regeneration objectives.

The council believes that water transport services need to be developed, but this is not a single borough project and needs to be worked by TfL in partnership with relevant boroughs.

**3.4 Airport Measures**

<b>Airport Measures - Proposed Actions</b>	
<b>3.4A</b>	Under the section 106 planning agreement with Newham Council London City Airport (LCA) is committed to appointing consultants to carry out an Air Quality Study. In considering the main aims of the study, the council will ensure that the airport considers the impact on air quality of: <ul style="list-style-type: none"> <li>• Airside Vehicles</li> <li>• Aircraft take off / landing / Flight</li> <li>• Aircraft Composition</li> <li>• Aircraft on the Stand</li> <li>• Aircraft Ground Movements</li> <li>• Airport Point Source Emissions</li> <li>• Airport Traffic Generation</li> </ul>
<b>3.4B</b>	In principle, LCA is committed to implementing a Travel Plan.
<b>3.4C</b>	Newham Council will liaise with LCA for the Vehicle Inspectorate to carry out random emission checks of queuing taxis at the Airport.
<b>3.4D</b>	Newham Council and London city airport will continue to lobby for a CROSSRAIL proposal that includes access to LCA.

**Air Quality Impact: Medium**

Although the Airports activities did not cause the site to be declared an AQMA, due to the scale and nature of the business, measures to address the impact on Air Quality are required; especially with respect to the high impact of surface traffic upon Newhams AQMA, which surrounds the airport.

## **London City Airport**

Situated in the South East of the borough, London City Airport is a short take off and landing airport serving Western Europe that operates approximately 50,000 flights per year.

During stage III of the review and assessment process, emissions from LCA were considered. The assessment process concluded that emissions associated directly with aircraft and ground vehicles did not breach assessment levels. However, traffic to and from the airport, including private cars, taxis and buses significantly contribute to pollution levels along the major roads adjacent to the airport site. Along with other major roads in the borough, these roads were declared as part of the AQMA. For this reason, actions to minimise LCAs contribution will be considered.

Much of the information contained within this section of the Action Plan has been taken from the LCA website and from close liaison with management at LCA.

### **LCA Environmental Policy Statement**

London City Airport is committed to the principles of sustainable development in meeting our business objectives especially in providing the highest quality commercially sustainable services for passengers, airlines, service providers and employees.

- Reducing the impacts of the operation of the airport on our neighbours.
- Actively supporting the regeneration of the local area, its transport infrastructure, and the generation of employment for local people. Contributing to the economic and social well being of the region.
- Fostering the use of equipment and procedures that enhance environmental quality, minimise waste of resources and reduce pollution and nuisance.
- Continue to seek further improvements in environmental performance.
- Fully comply with all relevant environmental legislation, regulation and commitments.
- Develop Green Transport initiatives that compliment the local Borough Council's integrated transport plan.

### **Air Quality Study at LCA**

The section 106 planning agreement entered into by the Airport on 21st July 1998 put a new focus on the issue of air quality. The Airport is committed to appointing consultants to carry out an Air Quality Study aimed at:

- assessing and evaluating the impact of the Airport on the quality of the air enjoyed by the local community through the potential for odours ("Airport smell") and fallout (black smuts, deposits and oily films/patches on ponds).
- the measurement of ambient concentrations of fine particulates (PM10) and nitrogen dioxide (NO2).

In conjunction with the Study, LCA will be installing air quality monitoring equipment in the vicinity of the Drew Road School to measure fine particulate and nitrogen dioxide. Newham Council will liaise with LCA to extend the range of pollutants monitored.

The report of the Air Quality Study and any recommendations will be submitted to the local planning authority within twelve months of the consultant's appointment. It

will lead, within six months, to an Air Quality Management Scheme following the recommendations of the study and in response to the monitoring of air quality in vicinity of the Airport by the council. Reports on the operation of the Scheme, including recommendations for its improvement, will be submitted annually to the local planning authority and to the Airport's Consultative Committee.

### **Public Liaison**

The Airport keeps a record of complaints about air quality and a report of these, including a note of any remedial action, is to be submitted to the Airport Consultative Committee at least twice a year.

### **Noise and Air Quality**

Pending the results of LCAs 'Air Quality Study' whereby actions can be adopted to deal with the findings, actions already adopted to manage noise issues will help to minimise the air quality impact of aircraft and airport activity.

In terms of the air quality impact of Aircraft take-off/landing/flight, Aircraft Composition, Aircraft on Stand and Aircraft Ground Movements, many of the features adopted in LCAs noise strategy will help to minimise the airports pollution contribution; for example, the flight heights used to control noise will also enable pollution to be dispersed, and for noise reasons, all aircraft using the airport must be of an approved type (permitted aircraft), therefore ensuring there is a degree of emission control.

An air quality study by LCA in 1997, identified that on many occasions aircraft engines are started regardless of the time held at the stand or on the apron. Management proposed that an improvement in air quality impacts could be produced by the simple mechanism of preventing aircraft operators from starting aircraft engines before it was necessary.

### **Airside vehicles**

The 1997 report on air quality conducted by LCA indicated that airport management were anxious to minimise the occurrence of odours in the Terminal Building. With this in mind, the Airport is actively encouraging airlines to make maximum use of electrical ground power for aircraft at the stands. At present 70% of the total fleet is electric (16 out of 23 vehicles), which includes 14 electric baggage tugs and 2 electric belt loaders. By 2005 LCA aims to increase the percentage of electric vehicles to 80% of the total fleet.

The findings of the LCA air quality investigation will enable LCA and the LB Newham to decide what if anything can be done to limit the impact on air quality of airside vehicles. The Travel Plan does not at present consider the activity of airside vehicles and this may be an appropriate media through which these vehicles are considered. The LB Newham will lobby LCA to consider this potential source of pollution within its investigations

### **Point source Emissions**

There are limited point source emissions at LCA. The heating Plant and refuelling tanks can be considered as potential point sources emissions within the boundaries of the airport. Upon investigation, it was found that natural gas fires the space heating plant for the Airport Terminal building. Point source emissions will be considered within the air quality investigation.

## Surface Access

LCA has developed an Airport Surface Access Strategy (SAS). The SAS is incorporated into the London Borough of Newham's Interim Transport Plan, and in line with Government Guidance. The objectives of the strategy are to:

- Encourage the use of public transport for journeys to and from the airport (staff and passengers);
- Offer a choice of efficient public transport;
- Ensure access for the disabled;
- Ensure access for employment; and
- Contribute to regeneration.

As the airport itself has not been designated an AQMA, with regards LCA, surface access to the airport is one of the main areas that this action plan will focus on. The table below shows that nearly half of the journeys to and from the airport are by taxi, with only, 29% of journeys (including other) made by means other than taxi or private car.

Surface Access - All Passengers	
taxi	47%
private car driven away	14%
Canning Town Shuttle Bus	9%
private car - airport car park	9%
Liverpool Street Shuttle Bus	8%
other	5%
Canary Wharf Shuttle Bus	4%
rental car	2%
LT Bus	2%
charter coach	1%

Until a fixed rail link is provided, airport managers believe that most people arriving at or leaving the Airport will continue to do so by road. When the Airport opened in 1987 access by road was perceived to be poor. The opening in 1993 of the Limehouse Link and the other Docklands strategic highways transformed the position and there is now a very good route from central London to the Airport.

Passenger surveys show that the majority have an origin or destination in central London or Docklands, but there is also good access from the M11 and the North Circular Road (A406) via the new Docklands Highways (Royal Docks Road, Royal Albert Way and the Connaught Crossing). Routes to the Airport are generally well signposted.

It will be difficult to encourage individuals who use taxis, to use public transport, because of the relatively short time it takes by taxi from the City/Docklands. Measures to ensure that the taxis are emitting the lowest emissions possible will be adopted, including seeking approval from the Airport to conduct random emission checks of queuing taxis.

In the short term, initiatives include the provision of 2 electric charging points in the car park and free parking for electric cars. Further information pertaining to access routes to the airport are considered in appendix 5. These include information pertaining to the airport and:

-A13	-Public Transport Strategy	-Fixed Link DLR Extension
-Traffic Management	-Bus Services	-Crossrail
-Taxis	-Jubilee Line Extension	-Airport Transport Forum
-Private Cars	-Silver Link Metro	-LT Users Committee

### **LCA Transport Plan**

The Airport is currently developing a Transport Plan to manage the transport needs of passengers and those working at the Airport. It aims are:

- to reduce reliance on the car through the reduction in the length and number of motor journeys and in particular those undertaken in single occupancy vehicles.
- to promote the use of alternative means of travel which are more suitable and environmentally acceptable.
- to reduce emissions and encourage energy efficient vehicles within the company fleet.
- encourage work practices which reduce the need to travel

The first draft of the Plan was unveiled at the Airport Transport Forum meeting on 6<sup>th</sup> December 2000. Since then the Plan has been developed and updated. The latest version was published in July 2002.

To assist in the development of the Plan the Airport during 2001 conducted a Staff transport survey. The conclusions drawn from the survey will be fed into the plan and a new draft will be produced for discussion within the framework of the Airport Transport Forum. Meanwhile the Airport has adopted the following targets and commitments in relation to staff travel:

- To reduce staff car drivers as a percentage of the workforce.
- Publish a company travel plan by end 2002.
- Publish an employment strategy which targets areas served by public transport, by end 2002
- Work with on-site employers to encourage them to produce their own travel plans by end 2003
- Develop a Surface Access Monitoring system to provide a tool for measuring changes in car use for staff and air passengers
- Conduct a mode of travel survey for Airport staff in 2001, and then every two years. Publish these results as part of an annual update to the Surface Access Strategy.
- To produce a transport briefing for all new staff

The results of the Survey, and the findings of the CAA passenger Survey 2000, will also help in the updating of the Airport Surface Access Strategy.

## Section 4

### Non Transport Measures

During the review and assessment process, road transport was identified as the primary source of air pollution. Other sources do exist and in considering actions to improve air quality these should not be overlooked as changes in non-transport measures can still provide valuable improvements in air quality.

Actions relating to non-transport measures are detailed below. They are split into 2 sections: Environmental Enforcement (see Appendix 2 for an overview of legislation) and Planning Controls

#### **4.1 Industrial Measures**

<b>Industrial Measures - Proposed Actions</b>	
<b>4.1A</b>	In accordance with DEFRA guidance, continue to inspect local authority controlled processes to ensure compliance with authorisations, which will ensure that such process will not lead to exceedances of the National Air Quality Objectives (in line with MAQS, proposals 41 and 42).
<b>4.1B</b>	Continue to liaise with other industrial/commercial operators as well as other Local Authorities to promote good environmental practice.
<b>4.1C</b>	Continue to liaise with the environment agency to ensure part A processes comply with authorisations.
<b>4.1D</b>	Investigate industries in the Borough to ensure that all appropriate processes are authorised.
<b>4.1E</b>	Continue to investigate complaints regarding smoke from industrial and commercial premises.
<b>4.1F</b>	Produce an emission Inventory for part B processes in the borough and regularly update this on the 'Pollution Control Unit' website.

#### ***Air Quality Impact: Low***

Newham Council enforces the emissions to air of authorised processes within the borough under specific guidance. As such, efforts to reduce the impact of Industry have already been employed and additional efforts will have minimal impact on air quality.

Through the Environmental Protection Act 1990 local authorities have responsibility for regulating air pollution from small to medium scale industries (Part B). The Environmental Agency has been charged with responsibility for regulating emissions from larger industrial processes (Part A). The London Borough of Newham currently has 44 Part B processes, 23 of which are petrol stations and 4 part A processes. A list of these processes can be found on a public register, kept by the council.

The Pollution Prevention Control regulations (PPC) introduces the part A1 and A2 classification. The former being regulated by the EA and the latter along with part B process, are regulated by Local Authorities. It is anticipated that The London Borough of Newham will have two Part A2 processes.

#### **Local Abatement and Emission Reduction**

Abatement to minimise the impact of industries within the borough is varied and process specific. Abatement measures are monitored and controlled by the council in a number of ways:



- At least two routine process inspections (of the entire process) are carried out on an annual basis;
- The council responds to smoke and emission complaints (which may have arisen due to abatement or process failure);
- Annual stack emission testing is required for selected processes;
- An annual solvent inventory is required for affected industries; and
- Using best practical means, compulsory upgrading of abatement technology is required.

As a team, the Pollution Unit conduct regular consultative meetings with Newham Primary Care Trust, London City Airport and Thames Water Utilities, promoting best practise with respect to emission reduction and air quality improvements. Plans to alter and improve industrial abatement within the borough occur on an '*as required*' basis. At present an Aluminium Smelter in the borough, plans to upgrade its abatement process, which will minimise its particulate contribution.

An industrial emissions inventory is currently being compiled, which will list and detail all known and estimated emissions from Part B processes within the borough. The inventory will be updated annually and available upon the councils website. Contribution of part A process to the detriment of local air quality may be estimated from their annual emission inventories, with a total release of 92,390 tonnes of Nitrogen Dioxide per annum for the year 2001.

The Pollution Control Unit liaises with the Environment Agency to ensure that the part A processes both within Newham and those that affect Newham, meet emission constraints and are considered in the wider issue of air quality management. This has led to the rewriting of authorisations to ensure that sulphur dioxide limits will be met.

Other industrial premises are controlled by nuisance powers and the Clean Air Act 1993. Action is currently undertaken jointly between both the Pollution Unit and the Initial Response Team. The Pollution Control unit co-operates closely with the Environment Agency Waste Licensing Team taking action against waste management sites that contravene their Waste Licence who allow bonfires on their premises.

**The 1968 Clean Air Act** introduced the offence of producing dark smoke from low level burning (bonfires) on commercial premises. This legislation was amended by the **Control of Smoke Pollution Act 1989** which makes it an offence to burn any material that is **likely** to produce dark smoke. Under this Act an authority can take action after a fire has extinguished if there is evidence of material on the fire, such as plastics and rubber, which may have given rise to dark smoke. This is particularly useful where unscrupulous businesses burn waste at night, hoping to avoid detection.

### **Closure/Relocation**

Since the enactment of the Environmental Protection Act 1990, 14 Part B processes have either closed or moved out of the London Borough of Newham including, a clinical waste incinerator and 8 processes using organic solvents or releasing VOC's. In addition, two Part A category processes permits have since been revoked.

The council sees industry as an integral part of the borough, which promotes the council's aim of providing a borough in which individuals can live and work. As such

there are no plans to encourage industries to move out of the borough as a means of improving air quality.

## **4.2 Smoke Control and Nuisance Policy**

<b>Smoke Control and Nuisance Policy - Proposed Action</b>	
<b>4.2A</b>	The council will continue to enforce complaints and provide information to members of the public concerning bonfires and smoke.

### ***Air Quality Impact: Low***

Bonfires and other smoke incidents are generally acute and can be rectified in minimal time. The council is proactive and reactive when it comes to smoke control, as such additional efforts would not have a huge impact on air quality.

Under The Clean Air Act 1956 Newham is a Smoke Control Area along with the rest of Greater London and all major urban areas in the UK. The council requires complaints to actively enforce smoke problems under the clean air act 1993 and bonfires are dealt with under statutory nuisance within Environmental Health.

The council regularly provides help and advice pertaining to bonfires for members of the public, including 'out of hours'. In addition, Newhams Street Scene Enforcement Team, as well as the Newlook and Respect Teams ensure areas within the borough prone to fly tipping and abandoned vehicles are cleared. This minimises the build up of combustible material.

## **4.3 Fugitive Emissions**

<b>Fugitive Emissions - Proposed Actions</b>	
<b>4.3A</b>	Produce dust guidance for construction sites
<b>4.3B</b>	Continue and develop additional dust sampling in association with construction sites
<b>4.3C</b>	Continue with and extend random spot checks that construction site vehicles have passed through the wheel wash and are covered if carrying material that can become windblown.
<b>4.3D</b>	Continue with street cleaning to minimise the re-suspension of road dust and review the cleaning regime currently in place.
<b>4.3E</b>	Use planning conditions and section 106 agreements to minimise emissions of dust
<b>4.3F</b>	Continue to ensure that contractors working on behalf of the council demolishing council buildings or clearing council sites have a clause in their contract that ensures they minimise dust production.

### ***Air Quality Impact: Medium***

Fugitive emissions such as construction site dust can create significant localised problems.

### **Construction Site Dust Controls**

There is significant potential for particulate emissions from construction sites. Emissions can arise for example from unabated demolition, earthworks and construction activities.

Due to lack of monitoring research at construction sites, there is no National Code of Practice or advice for controlling the emission of particles. Prompted by the Committee on the Medical Effects of Air Pollution (COMEAP) and the Expert Panel on Air Quality Standards (EPAQS), the Building Research Establishment (BRE) and the Government are attempting to address this.

Newham Council are also looking at the influence of particulate emissions, from construction sites, on PM10 concentrations within the AQMA as part of its Stage 4 Review and Assessment. In addition to on site monitoring by contractors, the council is conducting independent and covert monitoring of dust associated with construction sites within the borough. It is also randomly checking that vehicles pass through the wheel wash and are covered, if carrying potentially wind blown material.

At present, contractors working on behalf of the council demolishing council buildings or clearing council sites have a clause in their contract that ensures they minimise dust production. This is achieved by wetting down, ensuring that lorries carrying waste are covered and that the name of the contractor is always visible so that complaints can be traced directly to the contractor.

Newham Council controls dust from construction sites through the planning process and approved codes of construction practice. This may involve dust monitoring before and throughout the construction project. The council agrees with the developer the sites for testing, as well as the methodology, frequency, duration, analysis method and trigger levels (where they have not been assigned). This dust level data also feeds into the councils air quality database.

The council works with developers to resolve dust problems through Best Practical Means (BPM) and such means would make up the guidance e.g.

- Dust mitigation using water
- Screening and enclosures
- Minimising drop height of materials
- Vehicle wheel and chassis washing
- Speed limits
- Haul road surfacing
- Sheeting lorry loads
- Maintenance of equipment
- Grass seeding of landscaped areas
- vegetative screening
- Chemical stabilisation of surfaces
- Site layout
- Local exhaust control & ventilation
- Site management and practices
- Use of crusting agents

By having the construction site guidance in place, there will be a reference document for enforcement through the planning process.

### **Re-suspended road dust**

Research has shown that a significant amount of respirable particulate results from the re-suspension of dirt deposited on the highway. This has been supported by research conducted by the London Borough of Bexley. The street cleaning service may have an impact in removing road dirt and with it the potential for re-suspension, however, the research conducted by Bexley indicated that increased street cleaning had little effect on preventing road dust re-suspension. The street cleaning service sweeps and cleans all borough roads on a regular basis.

#### **4.4 Domestic and Commercial Energy Measures**

<b>Domestic and Commercial Energy Measures - Proposed Actions</b>	
<b>4.4A</b>	Ensure that 'Broadway House' and subsequently acquired buildings within the borough are signed up to a 'Green Electricity Agreement'. Further to this, it is proposed that environmental audits of the council's major buildings are carried out.
<b>4.4B</b>	Continue to investigate potential locations within the borough that may benefit from CHP and more sustainable energy sources such as Solar-Voltaic cells. Where possible, such initiatives will be encouraged and promoted by the council by providing guidance and information pertaining to funding and grants. The council will assess locations for CHP using the Customs and Excise 'Good Quality CHP' index (inline with proposals 50 and 51 of MAQS)
<b>4.4C</b>	The council will ensure that old boilers are replaced and will also strive to completely withdraw from the use of solid fuels and oil-fired burners (inline with proposal 52 of MAQS).
<b>4.4D</b>	Seek to approve and integrate the following evolving policy for major developments into the councils UDP: <ul style="list-style-type: none"><li>• introducing technology on site or within the borough which generates 10% of the developments consumption, therefore reducing the boroughs contribution of CO<sub>2</sub>. If this can not be achieved:</li><li>• then 20% of their energy requirements should be imported from the 'Green Grid', contributing to a national reduction in CO<sub>2</sub> production.</li></ul>
<b>4.4E</b>	Continue to spend the council's climate change levy rebate on energy efficiency improvements.
<b>4.4F</b>	Investigate the potential of signing the Nottingham Declaration on Climate Change.
<b>4.4G</b>	Prepare the councils energy strategy in line with the Mayors Strategy to reduce energy consumption by the council, promote energy awareness in the borough, provide training for key staff and attribute responsibility and accountability for energy use.

#### ***Air Quality Impact: Low***

Improvements in energy efficiency will reduce emissions through lower fuel use, switching fuels and more efficient combustion. Improvements in PM10 will be small and NO2 limited. However the primary aim is reduction in CO2 emissions to reduce the councils 'energy footprint'.

#### **Energy Conservation, Fuel improvement/switch and Appliance Improvement**

By 2008-2012, the UK is committed under the UN Framework Convention on Climate Change and subsequent Kyoto Protocol, to reduce emissions of carbon dioxide by 12.5% from 1990 levels. There is however concern regarding the 23% contribution of transport related emissions (85% of which comes from road traffic).

The road traffic measures within this Action Plan will however assist in a reducing Carbon dioxide contribution from road traffic.

In addition, measures to increase energy efficiency and the use of renewable energy sources will result in lower overall emissions of nitrogen dioxide and PM10s from fossil fuel power plants.

The Government has introduced legislation and guidance, in relation to energy consumption, including:

- **Home Energy Conservation Act 1996** which places a duty on local authorities to improve energy in all council housing stock by 30% by 2010.
- **Government Climate Change Levy** was introduced in 2001 and is intended as a revenue neutral charge on the non-domestic use of energy of 0.15p/kWh on gas and 0.43p/kWh for electricity, offset by a reduction in the employer's National Insurance Contributions. Tax concessions have been introduced to encourage spending on energy efficient plant
- **The Government's Best Practice programme** has been rebranded as 'Action Energy'. This scheme provides Helpline and consultancy advice and a comprehensive range of publications to help industry, commerce and government in reducing energy consumption.

Newham Council owns 22,042 dwellings which it rents to tenants; in addition, it is responsible for the energy consumption within 2,106 buildings (inclusive of blocks of flats - Landlords lighting etc., which is not included in the tenants bills.). The table which follows summarises the energy consumption for the council in 2001 (figures do not include the 3 Leisure Centres, Community Centres and Sure Start Centres).

**Table 5: Energy Consumption of Newham Council 2001**

<b>Consumption</b>	<b>kWh</b>	<b>Cost</b>	<b>CO<sub>2</sub> production (tonnes)</b>
<b>Domestic</b>	438,622,450	£10,948,086.00	108,717
<b>Commercial</b>			
electricity	84,609,131	£4,744,096.00	37,228
gas	80,765,880	£932,700.00	15,345
<b>Total</b>	<b>603,997,461</b>	<b>£16,624,882</b>	<b>161,290</b>

In 2001, the council signed a competitively tendered Green Electricity Agreement to supply sustainable sourced power for most of the larger council offices, with the exception of Broadway House. It is proposed that the council will continue to negotiate for competitive green electricity prices, to bring this building in line with others within the Borough.

The East Ham and Atherton Leisure centres both have small combined heat and power units (CHP), capable of producing 50-100 kW. Other locations for CHP have been investigated with the assistance of the Community Energy Programme, for example within the Carpenters Development. The council will continue to investigate and assess potential locations for CHP. It will do this using the Customs and Excise 'Good Quality CHP' index. This will ensure that developers demonstrate opportunities for utilising heat have been fully explored.

In recent years, the council has installed large numbers of new boilers that meet modern emission standards. In addition, the council has almost completely withdrawn from the use of solid fuels and very few oil-fired boilers remain. The council will continue with such initiatives.

The council has also investigated utilising Central Government grants to cover 70% of the capital cost to ensure schools and public buildings use more sustainable energy. One such initiative currently being investigated is the use of Solar-Voltaic

panels to be used on schools within the borough. The council will continue to investigate and encourage such energy saving initiatives where possible.

Newham Council is currently investigating the potential of ensuring that major developments in the borough either generate or import renewable energy by:

- introducing technology on site or within the borough which generates 10% of the developments consumption, therefore reducing the boroughs contribution of CO<sub>2</sub>. If this can not be achieved:
- then 20% of their energy requirements should be imported from the 'Green Grid', contributing to a national reduction in CO<sub>2</sub> production.

Newham Council is one of the first councils to use its climate change levy rebate to finance a programme of energy conservation measures within the council building stock, such as insulation, low energy lighting and heating controls.

57 boroughs have already signed the 'The Nottingham Declaration on Climate Change' which includes the development of a plan *"to address the effects climate change and to secure maximum benefit for our communities"*, Newham Council will seek to sign this to illustrate its commitment to this issue. In line with this Declaration and the Mayors Energy Strategy, Newham Council will also strive to produce an Energy Strategy, which will consider the councils and residents role in energy efficiency and impact on climate change.

#### **4.5 Land Use Planning**

<b>Land Use Planning: Proposed Actions</b>	
<b>4.5.A</b>	Land-use policies based on relevant government guidance on air quality and related matters such as the promotion of sustainable transport and the location of retail and leisure development, were incorporated into Newham's adopted UDP (2001). UDP policy is a material consideration in the assessment of proposals for development.
<b>4.5.B</b>	While current UDP policies will contribute towards the minimisation of air pollution emissions in the medium to long term and support related sustainable development objectives, they need to be developed and refined as part of future UDP review in the light of recent emerging government guidance (draft PPG23) and information contained within this Air Quality Management Plan. (In line with proposals 68 and 69 of the MAQS).
<b>4.5.C</b>	The Council will produce Supplementary Planning Guidance on Sustainable Design which will address such issues as sustainable construction, the promotion of alternative energy use and energy conservation measures, all of which will impact indirectly on air quality. A guidance note will also be produced to advise developers on the land-use implications of this Air Quality Management Action Plan and other relevant air quality-related policies (In line with proposal 70 of the MAQS).
<b>4.5.D</b>	In addition, specific planning criteria will be developed to assess proposals for development in or adjoining identified air quality management areas / areas of existing / predicted exceedences.

<b>4.5.E</b>	All major development proposals (to be defined) will need to be accompanied by transport and air quality assessments. If such proposals lead to an unacceptable breach of air quality objectives, this will be a material planning consideration, which may be grounds for a refusal of the application. However, the Council will usually seek the inclusion of mitigation measures where these can feasibly address the adverse impacts of development on public amenity and human health. These measures might include, for instance: the provision of improved public transport links to the developed site, development of a green travel plan for residents and employees, provision of minimum car parking space to discourage car use to and from the site, careful design, siting and layout of development to protect sensitive uses from the adverse impacts of traffic, include environmental buffers and other forms of effective screening. This list is not exhaustive - see 'Borough wide principles', 'Local Area Responses' and 'Area-based recommendations' (as detailed). (In line with proposal 67 of the MAQS)
<b>4.5.F</b>	The council will adopt the area-based recommendations given for areas one to six (as detailed)
<b>4.5 G</b>	With regards planning applications, if the development falls within the councils AQMA, a condition will be imposed. The condition will require that prior to the occupation of the site, a report detailing steps to minimise exposure to air pollution will be submitted. In addition, air quality implications of developments outside the AQMA are taken into account and appropriate conditions and planning obligations are imposed. (In line with proposals 71 and 72 of the MAQS)

#### ***Air Quality Impact: High***

There are a number of things the land use planning system can do to help reduce the impact of air pollution. It can do this by discouraging car use, preventing pollution generating development locating in areas where pollution is high, and encouraging good building design to minimise the effect of pollution on people. If the measures outlined are adopted as well as having a positive impact on air quality and exposure, awareness will be raised concerning air quality issues i.e. potential purchasers may ask why there is limited parking space and a legitimate reason can be given.

#### **Existing Policies**

There is substantial planning guidance on air quality and planning implementation and Newham will need to take account of the following:

**DETR Guidance Note Local Air Quality Management – Air Quality and Land Use Planning (2000).** This document informs planning authorities that the planning system must contribute to the objectives set in the Air Quality Regulations 2000. The document confirms that air quality is a material consideration that must be taken into account when processing planning applications.

**PPG 23 Planning and Pollution Control (1994)** establishes the planning process has an important role to play in determining the location of development which may give rise to pollution and should control other developments proximity to potential sources of pollution. It also establishes that that air quality is a material consideration in the planning process. The new PPG23 that is currently in draft brings PPG23 up to date with the developments of the National Air Quality Strategy

**PPG 13 Transport (2001)** indicates that transport generating development should be located at transport nodes where public transport facilities are best, so as to discourage car usage. It also establishes that parking provision should be the most minimal required. S106 Agreements to be used to negotiate green travel plans to encourage increased usage of public transport.

**PPG 6 Town Centres and Retail Developments (1996)** indicates that major retail or mixed use schemes, including leisure schemes should be in town centre location where public transport provision is best.

**PPG 3 Housing (2000)** indicates that brownfield land is the preferred site for new residential development so as to discourage development on greenfield sites which would increase the amount and extent of travelling required. Also it indicates that higher density reduced parking and car free housing is appropriate in town centre locations, transport nodes and main routes with good public transport provision.

**By Design – Urban Design in the Planning System (2000)** – encourages sustainable building design which mitigates the effects of air pollution.

**Planning Circular 1/97** indicates that an agreement may be made between a developer and the planning authority to provide for community benefits when planning permission is granted – under S106 of the Town and Country Planning Act 1990 as amended. The community benefits must relate to items without which it might be reasonable to refuse the development – such as the provision of access roads to the site. Should a development generate traffic movements, it would be reasonable to get the developer to pay monies for transport improvements.

**The Draft London Plan (2002)** indicates the Mayor of London's strategy for tackling air quality. In relation to land use planning it is indicated the Mayor and boroughs should implement the Mayor's Strategy and achieve reductions in pollutant emissions by

- improving the integration of land use and transport policy and reducing the need to travel especially by car
- promote sustainable design and construction
- ensuring, at planning application stage, that air quality is taken into account along with other material considerations and that formal air quality assessments are undertaken where appropriate, particularly in designated Air Quality Management Areas.

**The London Borough of Newham Unitary Development Plan (UDP) (2001)** indicates that:

- Development proposals will be assessed in terms of how they are compatible with the aims of sustainable development (S4).
- The local planning authority will seek to secure through planning obligations community benefits in relation to transport improvements, open space etc (S2)
- The council will have regard to national air quality strategy objectives when assessing applications for development leading to the generation of traffic or atmospheric pollution. The cumulative air pollution impact of existing uses and the proposed development of land will be a material consideration in the assessment of planning applications.



Where the impact of proposed development on the use or amenity of land is likely to be significant in air quality terms, the development may be refused or measures to mitigate impact required by the imposition of conditions (EQ46).

- The council will encourage the use of vacant upper floors of commercial properties for residential accommodation (H3).
- The council will encourage the reuse of redundant office space for housing or a mix of uses including housing (H4).
- The council will encourage the conversion of other redundant commercial premises such as shops, pubs, factories and warehouses to housing (H5).
- The council will resist proposals for the development, including the extension or intensification of existing uses that would cause environmental harm or nuisance (EMP9).
- Large food stores will be permitted outside key town centres only where the site is accessible by a choice of transport modes including public transport (SH11).
- Retail Warehouses will be permitted other than in or adjacent to town centres only where the site is accessible by a choice of transport modes including public transport (SH12).
- The council is committed to minimising the environmental impact of traffic generated by new development. Accordingly, for trip-generating development applicants will be required to submit information to enable the council to assess impact and where appropriate to ensure that measures are taken to limit the environmental impact of the development. (T1).
- The council will encourage major development that generates or attracts large numbers of trips to locate near good public transport facilities (T2).
- The council supports the use of public transport, cycling and walking as preferred methods of transport to the motor car. The council's policies will normally be designed to minimise car trips and encourage the use of alternatives. Applicants will be encouraged to produce a green travel plan in order to achieve these objectives (T5).
- The council will seek opportunity for new leisure facilities in conjunction in sites served by public transport, the priority being given to town centre sites (LR2).

The council is due to produce Supplementary Planning Guidance on good design in relation to major schemes a residential development. These guides will ensure new developments are sustainable and addresses local environmental conditions.

### **Future Policies**

Bearing in mind national, regional planning guidance and the Commitments in the Newham UDP we might want to agree some specific air quality planning principles to encourage greater air quality. These principles take the form of borough wide and area specific principles and could be issued as guidance to staff and developers.

The designation of an AQMA means we need to highlight the importance of the planning principles above to the borough as a whole and to the circumstances of specific parts of the borough. The key principle is that the AQMA is a material consideration and these general and area-based recommendations are the best way the material consideration can be tackled. However, at all costs we should avoid

mechanisms which have the effect of hindering the task of regenerating the borough or tackling social exclusion via area renewal.

### **Borough wide principles**

To develop a strategy that for all major development applications (to be defined) there is a requirement that transport impact and air quality impact assessments are carried out. Should these assessments indicate the development will have a negative impact on air quality (to be defined) be it through industrial process or transport generation they may be refused or require adaptation to reduce the potential harm.

To encourage approved development applicants, where a negative air quality impact has been ascertained, to reduce the harm to air quality if possible via planning conditions or S106 Agreements, by one of the following means: -

- To ensure developments with the potential to generate substantial transport movements are located at transport nodes, where public transport is available. Green Travel Plans to be required to encourage reduced car use, including plans for car use to reduce further as time goes by. It will be expected that minimal car parking will be provided, with the amount of car parking reducing over time.
- To ensure developments with the potential to generate air pollution through industrial processes are required to invest in research to improve processes as to reduce air pollution in the future.
- To ensure all developments with the potential to generate air pollution are required to provide community benefits. These benefits should include one or more of the following as a means to improve air quality
  - funds for research into improving air quality;
  - funds for air quality monitoring;
  - funds for public transport improvement;
  - funds/works to undertake traffic calming initiatives or controlled parking schemes or;
  - funds/works to provide new green space or improved bio-mass in existing open space.

To ensure good building design that takes on board sustainable building principles and which mitigates the effect of air pollution – for example, at major transport nodes encouraging residential only on upper floors where car pollution is less.

### **Local Area Responses**

In Newham most main roads in the borough have been identified as AQMA's. Whilst recognising the link between land use planning, transportation and air quality, it is believed that a balanced approach sensitive to local circumstances is needed to avoid AQMA's being used as an unnecessary constraint to future development.

The cause of the pollution in the Newham AQMA's relates almost totally to road traffic, as such the substantial means to deal with the problem is to tackle the level of traffic travelling in and passing through the borough.

There are a number of things the land use planning system can do to help reduce the nuisance caused by pollution by means of

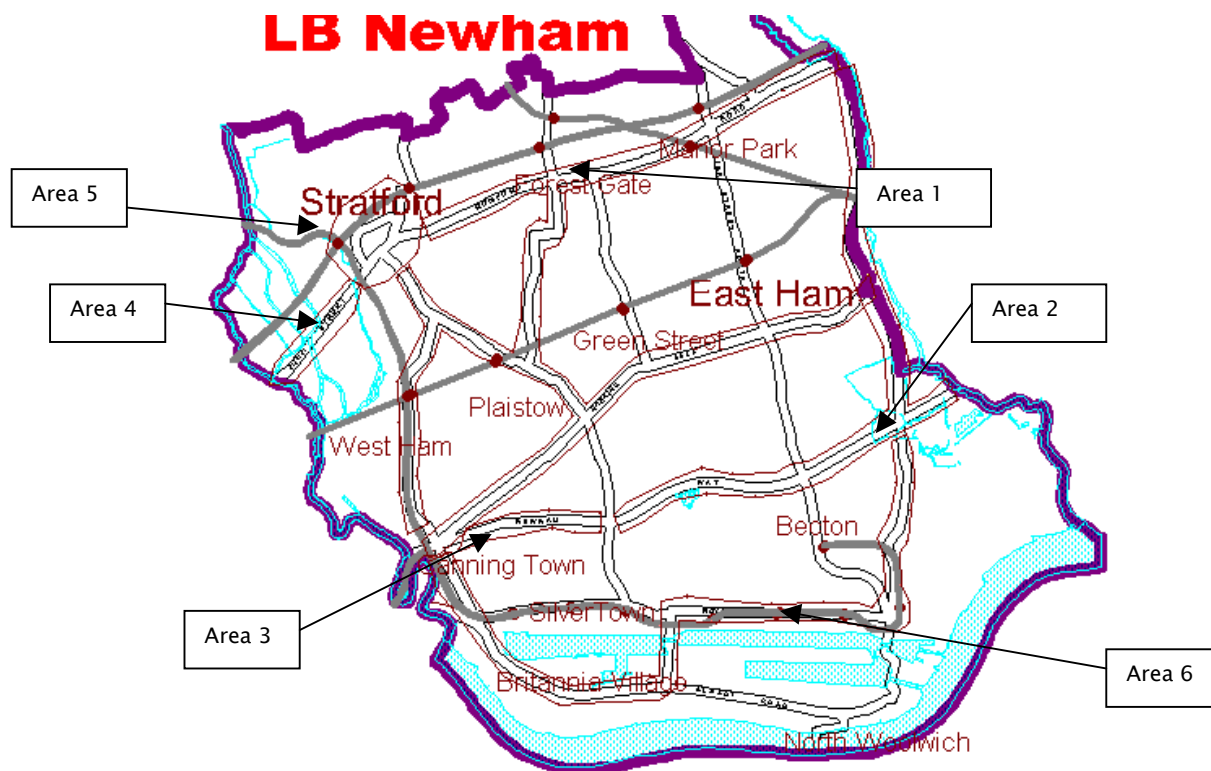
- discouraging car use,

- prevent pollution generating development locating in areas where pollution is high, and
- Encourage good building design to minimise the effect of pollution on people.

### Area Based Recommendations

The following recommendations are initial ideas which we consider to be sensitive to local factors. Areas are identified on the map below.

**Figure 4: Areas identified for Area based recommendations.**



**Area 1: Romford Road, Barking Road, West Ham Lane, New Plaistow Road, High Street Plaistow, Broadway, Greengate Street, Manor Road, Woodgrange Road, Upton Lane, Stanford Road (part), Pelly Road (part) and Clegg Street.**

In the area adjacent to these roads there is near constant development with few development opportunities. Where new development is planned we will:

- Insist on uses which do not contribute to pollution by generating high traffic flows by road.
- Where appropriate consider reduced car parking or car free developments so as to encourage reduced dependency on the car. All these roads have good transport provision either in terms of bus provision or proximity to rail or tube stations.
- Encourage traffic generating developments to locate at transport hubs such as Stratford, Forest Gate, Manor Park, Plaistow, East Ham or Canning Town – so as to encourage journeys to them by means other than by car.

- d) Encourage good building design that reduces the receipt of pollution by those living, working or visiting the site. Good building design in this context could mean residential on upper floors of buildings, double glazing and air conditioning, careful positioning of windows and building so as to effect wind flows - and extension landscaping such as green buffers.

**Area 2: A106, A13 Newham Way (eastern end from Prince Regents Lane junction).**

In the area adjacent to these roads there is substantial green space and a number of potential development sites. As such we might want to consider a possible safeguarded zone in these areas. Where new development is planned we will

- a) Ensure new residential development is not built adjacent to the roads but is set back a certain distance unless measures are included to mitigate the pollution that would be received by those living there.
- b) Encourage good building design for all developments that reduces the receipt of pollution by those living, working or visiting the site. Good building design in this context could mean residential on upper floors of buildings, double glazing and air conditioning, careful positioning of windows and building so as to effect wind flows - and extension landscaping such as green buffers.

**Area 3: A13 Newham Way (western end to Prince Regents Lane junction).**

In the area adjacent to this stretch of road there is substantial residential development, particularly at the western end where the road goes through Canning Town centre. In the Canning Town area a major residential redevelopment is taking place and many of the sites being redeveloped are adjacent to the A13. Where new development is planned we will

- a) Insist on uses which do not contribute to pollution.
- b) Encourage traffic generating developments to locate at transport hubs such as Canning Town – so as to encourage journeys to them by means other than by car.
- c) Encourage good building design for all developments that reduces the receipt of pollution by those living, working or visiting the site. Good building design in this context could mean residential on upper floors of buildings, double glazing and air conditioning, careful positioning of windows and building so as to effect wind flows - and extension landscaping such as green buffers.

**Area 4: High Street Stratford**

In the area adjacent to this stretch of road there is mainly industrial development, much of the area is identified as a major opportunity zone to promote its regeneration. There is a draft Planning Framework for the Lower Lea Valley which recommend that this stretch of road is 'Boulavarded' – widened with trees planted along its length. Where new development is planned we will

- a) Encourage good building design that reduces the receipt of pollution by those living, working or visiting the site. Good building design in this context could

mean residential on upper floors of buildings, double glazing and air conditioning, careful positioning of windows and building so as to effect wind flows - and landscaping such as green buffers.

#### **Area 5: Stratford Town Centre**

This area is the key centre for the borough and a major regeneration zone, as a transport hub mixed use and higher density residential development/ reduced parking is to be encouraged. Where new development is planned we will:

- a) Approve reduced car parking or car free developments so as to encourage reduced dependency on the car. This area has good transport provision both in terms of bus provision or proximity to rail or tube stations.
- b) Encourage traffic generating developments to locate at here so as to encourage journeys to them by means other than by car.
- c) Encourage good building design that reduces the receipt of pollution by those living, working or visiting the site. Good building design in this context could mean residential on upper floors of buildings, double glazing and air conditioning, careful positioning of windows and building so as to effect wind flows - and landscaping such as green buffers.

#### **Area 6: Silvertown Way, North Woolwich Road, Connaught Bridge, Royal Albert Way and Royal Docks Road.**

In the area adjacent to this stretch of roads there is mostly industrial and commercial development and previously developed land. The area consists of a series of major opportunity zones where regeneration is being encouraged – including new residential developments. Some of the traffic on these roads will reduce when the A13 improvements are complete. Where new development is planned we will

- a) Review local pollution levels and see if action is required to mitigate them.
- b) Encourage good building design for all developments that reduces the receipt of pollution by those living, working or visiting the site. Good building design in this context could mean residential on upper floors of buildings, double glazing and air conditioning, careful positioning of windows and building so as to effect wind flows - and extension landscaping such as green buffers.

## **4.6 Other Measures**

### **Corporate Procurement**

<b>Corporate Procurement: Proposed Actions</b>	
<b>4.6A</b>	The council will consider sustainability and environmental issues as important criteria in any procurement providing that the cost or availability does not prejudice service delivery
<b>4.6B</b>	<p>The councils key environmental procurement objectives are to reflect the Council's commitment to sustainable development through the goods and services it procures and will seek to:-</p> <ul style="list-style-type: none"><li>• minimise the consumption of non-renewable resources;</li><li>• procure goods and services which are least harmful to the environment;</li><li>• achieve and promote best practice with regard to purchasing and sustainable development.</li></ul> <p>In order to achieve this the Council will:-</p> <ul style="list-style-type: none"><li>• consider value for money in terms of durability, economy of operation and disposal costs and not just initial purchase price;</li><li>• specify products: which are made from recycled materials, can themselves be recycled or re-used, which operate in an energy efficient manner and cause minimal damage to the environment in their production, distribution, use and disposal provided that quality and value for money are not compromised;</li><li>• ban the use, by both the Council and it's contractors, of certain specified environmentally damaging products where an alternative product or method is available. These products are:-</li><li>• ozone depleting chemicals, timber which is not independently certified as originating in responsibly managed forests, pesticides on the UK "Red List" and EC "Black List" and peat and peat based products.</li><li>• establish and maintain policies and guidelines for products with a significant environmental impact.</li><li>• include environmental considerations in all contract documentation and work with suppliers, service providers and contractors to improve environmental performance</li><li>• share experiences with others and promote good environmental procurement practice.</li></ul>

#### **Air Quality Impact: Low**

The Council acknowledges the goods and services it procures will have an impact on the environment both locally and globally and recognises that by integrating environmental issues into procurement processes LBN can help to generate environmental gains both locally and nationally.

Newhams Corporate Procurement Code of Practice is currently under review and proposes to include the above actions as outlined. These are general rather than specific actions, which the council can adhere to as a whole. The council recognises its influence purchasing power can have in terms of reducing transport related emissions. This can be achieved by considering the type of goods and services procured by the council, how goods and services are delivered to the council and how they are distributed in the council organisation.

## Section Five

### Implications, Cost Effectiveness and Monitoring Outputs

#### Implications and Cost Effectiveness of Actions within the Plan

This action plan has attempted to broadly consider each action and the impact that the actions will have on air quality. At times the action plan may have mentioned the impact of proposals on the following:

- economic implications
- social/community impact
- other environmental impacts e.g. noise
- transport impact
- practicability and integration

The aim of this action plan is to improve air quality. All of the actions listed will have additional implications (as above) and these will occur in varying degrees. For example, the introduction of road humps will deter traffic but will improve the environment for the community due to reduced traffic flow, but potentially increase exposure to noise, as traffic travel over the humps.

The council is required to ensure that the Action Plan is cost effective. The responsibility for delivering actions within this plan, including allocation of funding, lies with the relevant departmental services within the council. Depending on the nature and scope of the action, direct funding may or may not be required. It is proposed that a full cost benefit analysis will only be considered if the cost are high and the proposed action will be adopted specifically for air quality. Next to each proposal in appendix 6, a cost is assigned as outlined below:

**Table 6: Cost Classifications for Proposed Actions**

Cost	Explanation of Cost
<b>Low (3)</b>	<ul style="list-style-type: none"> <li>• Internal cost that is accounted for by officer time e.g. Partnership meetings and lobbying</li> <li>• External cost which is taken outside the council e.g. polluter pays</li> <li>• Proposed action will go ahead anyway and does not directly relate to air quality</li> <li>• Air Quality funding required which can be easily incorporated into the departmental budget (&lt;2K)</li> </ul>
<b>Medium (2)</b>	<ul style="list-style-type: none"> <li>• Air Quality funding required which can be incorporated into departmental budgets, but requires numerous tenders to comply with council financial regulations (&gt;2K)</li> <li>• Supplementary Credit Approval Funding (SCA)</li> </ul>
<b>High (1)</b>	<ul style="list-style-type: none"> <li>• Air Quality funding required which cannot be incorporated into council budget and additional funding must be sought e.g. LEZ.</li> </ul>

Base on the 'cost' and the 'Air Quality Impact' (as defined throughout the Action Plan), the effectiveness of the proposed actions can summarised.

Using the above 'cost' table and the 'Air Quality Impact' classification, a simple number matrix can be formed (as shown overleaf). Each group of proposals can then be allocated a number that, **very** generally, relates to the cost effectiveness of

the proposal group. This is achieved by assigning values to the low, medium and high categories and multiplying cost \* impact.

**Table 7: Effectiveness of Proposed Actions**

<b>Effectiveness</b>	<b>Action Impact on Air Quality</b>		
<b>Cost of proposed Action</b>	<b>Low (1)</b>	<b>Medium (2)</b>	<b>High (3)</b>
<b>Low (3)</b>	3	6	9
<b>Medium (2)</b>	2	4	6
<b>High (1)</b>	1	2	3

The number provided gives the council a simple indicator of increasing effectiveness, from 1 to 9 (with 9 being the most effective). This number is of course based on a subjective assessment of the cost and action impact and the numbers merely provide the council with a way of considering the cost implications. The findings of this exercise are also shown in Appendix 6 along with a list of the proposed actions.

In developing this matrix, it should be realised that a Low cost, Low impact proposal is still considered viable as many low cost, low impact proposals combined will overall cumulating positive impact on air quality. Also high cost, high impact schemes are worthwhile and may be essential if the council is to meet its air quality commitments.

### **Monitoring the outputs of the Action Plan**

In Appendix 6, a list of the proposed actions is seen. An interim review document will be produced as a means of assessing the action plan. At the simplest level, the list can be periodically reviewed to ensure that the actions have been attempted, carried out or being worked on, in relation to the timeframe set (as given in appendix 6). In reviewing document, it is anticipated that the following questions will be asked of the action plan:

- Q: Is the action point:
- 1) Started / In progress?
    - if so at what stage,
    - if not, why not,
    - are changes required?
  - 2) Finished? if so how can it evolve
- Q: Any Changes in air pollution levels? (unlikely over the short-term)
- Q: Public Transport and Use of Road Space?
- Public attitudes?
  - Change in use?

### **Summary**

The review and assessment process has shown that the London Borough of Newham will not meet the NAQS objectives for two of the eight pollutants listed, these are the PM10 24hr rolling mean and the Nitrogen Dioxide Annual Average. This Action Plan has therefore attempted to illustrate Newham Council's approach to meeting the Air Quality Objectives stipulated in the National Air Quality Strategy. These actions are summarised in appendix 6. The main source of these pollutants is from road vehicles and the stage IV review and assessment has provided the technical justification for this finding and Action Plan.



## Abbreviations

ALG	Association of London Government
AQAP	Air Quality Action Plan
AQMA	Air quality management area
BAT	Best Available Techniques
BPM	Best Practical Means
BPP	Bus Priority Partnership
CHP	Combined heat and power
CNG	Compressed natural gas
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CoCP	Code of Construction Practice
COMAH	Control of Major Accident Hazard
COMEAP	Committee on the Medical Effects of Air Pollutants
COSSH	Control of Substances Hazardous to Health
CTF	Cleaner Transport Forum
DEFRA	Department for Environment, Food & Rural Affairs
DETR	(former) Department for the Environment, Transport and the Regions, replaced by DTLR and DEFRA
DfT	Department for Transport
DLR	Docklands Light Railway
DTLR	(former) Department for Transport, Local Government and the Regions
EC	European Commission
EIA	Environmental impact assessment
EMS	Environmental Management System
EPAQS	Expert Panel on Air Quality Standards
EST	Energy Saving Trust
EU	European Union
FPN	Fixed Penalty Notice
FQP	Freight Quality Partnerships
GLA	Greater London Authority
GOL	Government Office for London
HGV	Heavy goods vehicle
IC	Internal combustion
IPC	Integrated Pollution Control
IPPC	Integrated Pollution Prevention and Control
LAPC	Local (Authority) Air Pollution Control
LAQM	Local Air Quality Management
LAQN	Local Air Quality Network
LBI	London Bus Initiative
LBPN	London Bus Priority Network
LCA	London City Airport
LCN	London Cycle Network
LEZ	Low emission zone
LGV	Light Good Vehicle
LIP	Local Implementation Plans
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
LTO	Landing and take-off
MAQS	Mayors Air Quality Strategy
mg/ m <sup>3</sup>	Milligrammes per cubic metre of air
µg/m <sup>3</sup>	Microgrammes per cubic centimetre of air

µm	Micrometre, also referred to as a micron
mph	Miles per hour
MtC	Million tonnes carbon equivalent
NAQS	The 'National' Air Quality Strategy or proper title of The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, January 2000.
NCN	Newham Cycle Network
NH <sub>3</sub>	Ammonia
NO	Nitrogen monoxide, also termed nitric oxide
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Oxides of nitrogen
NSCA	National Society for Clean Air and Environmental Protection
O <sub>2</sub>	Oxygen
O <sub>3</sub>	Ozone
PAH	Polycyclic aromatic hydrocarbons
PM <sub>10</sub>	Particulate matter with an (equivalent aerodynamic) diameter of ten microns (10 µm) or less
PM <sub>2.5</sub>	Particulate matter with an (equivalent aerodynamic) diameter of 2.5 microns (2.5 µm) or less
POP	Persistent organic pollutant
PPB	Parts per billion
PPC	Pollution Prevention and Control, see IPPC
PPG	Planning Policy Guidance (and also Pollution Prevention Guidelines)
PPM	Parts per million
SO <sub>2</sub>	Sulphur dioxide
SVD	Selective Vehicle Detection
TEOM	Tapered element oscillating microbalance
TfL	Transport for London
TGLP	Thames Gateway London Partnership
TLRN	Transport for London Road Network
TSP	Total suspended particulates
UDP	Unitary development plan
ULSD	Ultra-low sulphur diesel
UTCS	Urban Traffic Control Systems
VOC	Volatile organic compound

## Appendix 1

### Air Quality Objectives.

Substance	Objective Levels	Objective Dates
Benzene	16.25 micrograms per cubic metre or less (running annual mean)	31 <sup>st</sup> December 2003
1,3-Butadiene	2.25 micrograms per cubic metre or less (running annual mean)	31 <sup>st</sup> December 2003
Carbon monoxide	10.0 milligrams per cubic metre or less (maximum daily running 8 hour mean)	31 <sup>st</sup> December 2003
Lead	0.5 micrograms per cubic metre or less (annual mean)	31 <sup>st</sup> December 2004
	0.25 micrograms per cubic metre or less (annual mean)	31 <sup>st</sup> December 2008
Nitrogen dioxide	200 micrograms per cubic metre or less (hourly mean), not to be exceeded more than 18 times a year	31 <sup>st</sup> December 2005
	40 micrograms per cubic metre or less (annual mean)	31 <sup>st</sup> December 2005
PM10	50 micrograms per cubic metre or less (24 hour mean), not to be exceeded more than 35 times a year	31 <sup>st</sup> December 2004
	40 micrograms per cubic metre or less (annual mean)	31 <sup>st</sup> December 2004
Sulphur dioxide	125 micrograms per cubic metre or less (24 hour mean), not to be exceeded more than 3 times a year	31 <sup>st</sup> December 2004
	350 micrograms per cubic metre or less (hourly mean), not to be exceeded more than 24 times a year	31 <sup>st</sup> December 2004
	266 micrograms per cubic metre or less (15 minute mean), not to be exceeded more than 35 times a year	31 <sup>st</sup> December 2005

## Appendix 2

### Air Quality Roles, Legislation and Guidance for Local Authorities

<b>Air Quality Roles, Legislation and Guidance for Local Authorities</b>
<b>Local Air Quality Management Enforcement and Guidance Under</b>
<p><b>Clean Air Act 1993</b> (consolidates 1956/1968 Clean Air Acts and Control of Smoke Pollution Act 1989)</p> <p><b>Environmental Protection Act 1990:</b> Part I: Industrial Regulation <b>Pollution Prevention &amp; Control (England and Wales) Regulations 2000</b> (formally Pollution Control Regulations) Part III: Statutory Nuisance</p> <p><b>Environment Act 1995 Part IV:</b> <b>The Air Quality (England) Regulations 2000</b> - (Air Quality Objectives) Section 80: SoS to produce National Air Quality Strategy 2000 Section 82: LA must do Review and Assessment <i>LA Output:</i> Air Quality Monitoring within the borough <i>LA Output:</i> Air Quality Management Areas (AQMA's) <i>LA Output:</i> Air Quality Action Plans</p> <p><b>Greater London Authority Act 1999</b> (GLA Introduced) London's Air Quality Strategy 2002 (one of eight strategies which the GLA must produce, including one for transport)</p> <p><b>Road Vehicles (Construction and Use) Regulation 1986</b> (drivers to switch off engines in parked vehicles - police enforced). <b>The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002.</b> <i>LA Output:</i> Roadside Vehicle Emission Testing by local authorities in AQMA's. <i>LA Output:</i> Drivers to switch off engines in parked vehicles - local authority enforced</p>

## Action Plan Guidance

- The National Society for Clean Air and Environment (NSCA) in association with the government produced guidance on the Development of Air Quality Action Plans and Local Air Quality Strategies.

**Part 1:** 'Air Quality Action Plan: Interim Guidance for Local Authorities' (pub' Nov 2000).

**Part 2:** 'Air Quality: Planning for Action' (pub' June 2001).

- This updates the general guidance – **Developing Local Air Quality Action Plans and Strategies- The Principal Consideration – LAQM.G2 (00)** produced by the government.

Also in this series are: **LAQM.G3(00) – Air Quality and Transport,**  
**LAQM.G4(00) – Air Quality and Land Use Planning.**

- Casella-Stanger's Checklist for Action Plans (produced on behalf of DEFRA)

## Air Quality Roles of Local Authority

Air Quality Monitoring

Air Quality Research

Provide Air Quality Information

Air Quality Education programmes

Advice and assessments of air quality in relation to planning applications

Planning enquiries, where air quality is a material consideration

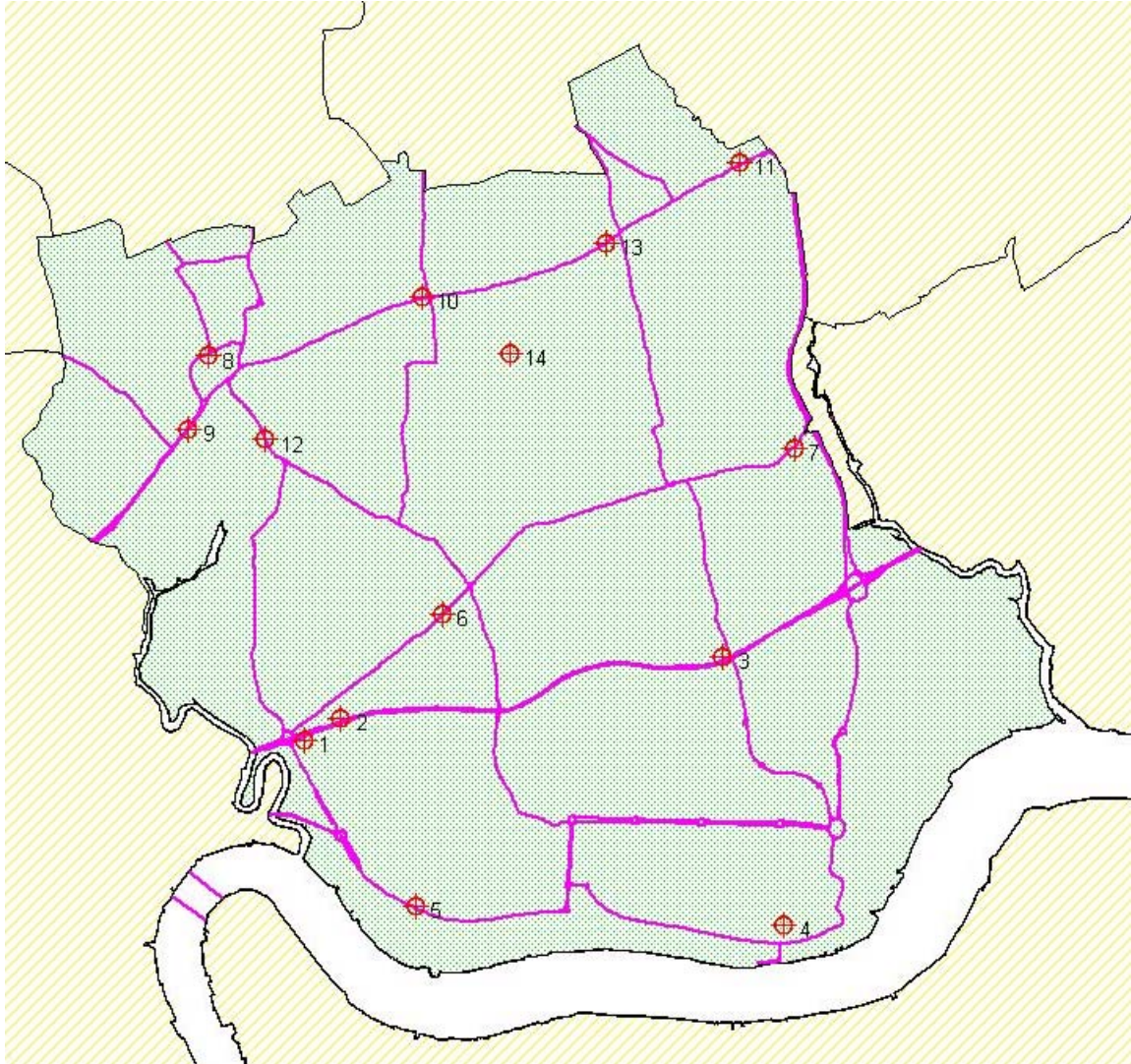
Construction Site Dust Control

Vehicle Emissions Testing

## Appendix 3

### Detailed Results of Source Apportionment

(The following information is contained within the stage IV report. To prevent confusion, the table and figure numbers remain the same)



**Figure 3:** The location of facades identified across the London Borough of Newham's area

Note – the numbered points refer to the locations given in Table 2.

**Table 2** Location of sites used for source apportionment

Locations	Road Name	Easting	Northing
1	1 Hughes Terrace E16	539568	181517
2	19 Aviary Close E16	539864	181690
3	2 Roman Road E6	542891	182176
4	65 Claremont Close E16	543377	180066
5	8 Kennacraig Close E16	540460	180210
6	486 Barking Road E13	540669	182510
7	53 Dukes Court E6	543461	183824
8	Gerry Raffles Square E15	538815	184551
9	High Street Stratford E15	538656	183973
10	325 Romford Road E7	540502	185015
11	1019 Romford Road E12	543020	186079
12	81 West Ham Lane E15	539267	183891
13	Salisbury School, Romford Road E	541965	185438
14	49 South Esk Road (background site) E7	541206	184567

**Table 3** Predicted NO<sub>2</sub> concentration (µg/m<sup>3</sup>) at identified locations within the AQMA

Location	Concentration
1	51.0
2	57.0
3	48.2
4	32.4
5	47.4
6	45.0
7	47.0
8	46.7
9	53.3
10	44.0
11	44.3
12	50.1
13	45.0
14	32.0

The predicted results for the 2005 base year (from Table above) show that for those locations exceeding the objective, the amount is between 4 and 17 µg/m<sup>3</sup>.

**Table 4** Predicted NO<sub>x</sub> concentration (µg/m<sup>3</sup>) for the different sources

Location	Base case	Buses	Cars	HGVs	Background
1	182.4	5.0	40.1	69.8	67.5
2	287.6	3.8	78.1	141.6	64.1
3	183.5	5.5	53.7	66.3	58.0
4	70.5	1.0	2.7	6.5	60.3
5	146.3	6.3	33.1	43.5	63.4
6	129.3	17.9	25.7	28.0	57.6
7	160.9	16.7	44.7	38.9	60.6
8	144.2	9.4	33.1	41.1	60.6
9	234.0	22.5	62.3	87.6	61.5
10	125.6	9.5	30.0	27.5	58.5
11	138.9	9.3	36.7	24.0	69.0
12	192.2	37.4	36.1	59.2	59.5
13	146.7	11.2	37.4	38.3	59.7
14	69.0	2.0	4.2	5.3	57.5

**Table 5** Predicted NO<sub>x</sub> concentration (µg/m<sup>3</sup>) for the different background sources

Location	Background roads	Domestic	Industrial Gas	Industrial Oil	Other Transport	Part Bs	Other Background
1	41.66	2.81	2.23	1.02	0.56	0.26	19.0
2	38.18	2.81	2.23	1.02	0.56	0.26	19.0
3	29.65	2.98	5.45	0.26	0.53	0.14	19.0
4	28.60	3.26	6.85	0.55	1.78	0.22	19.0
5	36.43	2.82	2.27	0.62	1.27	0.96	19.0
6	31.25	4.08	2.21	0.58	0.38	0.14	19.0
7	35.54	3.41	1.94	0.24	0.37	0.09	19.0
8	33.10	3.83	2.44	1.41	0.62	0.22	19.0
9	34.18	3.74	2.72	1.11	0.46	0.33	19.0
10	31.08	4.90	2.56	0.48	0.39	0.12	19.0
11	43.59	3.90	1.63	0.23	0.61	0.07	19.0
12	32.14	3.74	2.72	1.11	0.46	0.33	19.0
13	32.22	5.01	2.41	0.40	0.59	0.10	19.0
14	30.03	4.76	2.59	0.48	0.58	0.10	19.0



**Table 6** Predicted NO<sub>x</sub> contributions (%) for the different background sources

Location	% Non-road related	% Road related
1	38.3	61.7
2	40.4	59.6
3	48.9	51.1
4	52.5	47.5
5	42.5	57.5
6	45.8	54.2
7	41.3	58.7
8	45.4	54.6
9	44.5	55.5
10	46.9	53.1
11	36.8	63.2
12	46.0	54.0
13	46.0	54.0
14	47.8	52.2

**Table 7** Predicted annual mean PM10 concentration (µg/m<sup>3</sup>) for different sources

Location	Base case	Buses	Cars	HGVs	Background
1	30.4	0.3	1.4	4.1	24.6
2	34.8	0.2	2.6	7.6	24.5
3	30.4	0.3	1.7	4.2	24.3
4	24.7	0.0	0.1	0.3	24.2
5	29.1	0.3	1.2	3.0	24.5
6	28.8	1.0	1.4	2.2	24.2
7	30.1	0.9	1.9	2.9	24.3
8	29.4	0.5	1.5	3.0	24.4
9	36.1	1.2	3.5	6.8	24.5
10	28.3	0.5	1.5	2.1	24.3
11	29.5	0.6	2.0	2.3	24.6
12	33.4	2.3	2.2	4.6	24.3
13	30.4	0.7	2.2	3.3	24.3
14	24.7	0.1	0.1	0.3	24.2

**Table 8** Proportions of source contributions (%)

Location	All road transport	Background
1	18.9	81.1
2	29.7	70.3
3	20.2	79.8
4	1.8	98.2
5	15.7	84.3
6	15.8	84.2
7	19.1	80.9
8	16.8	83.2
9	32.0	68.0
10	14.4	85.6
11	16.6	83.4
12	27.2	72.8
13	20.0	80.0
14	2.0	98.0

**Table 9** Proportion (%) of vehicle category contributions to predicted PM10 concentrations

Location	Buses	Cars	HGVs
1	4.4	25.1	70.5
2	1.8	24.7	73.5
3	4.4	27.9	67.7
4	9.9	18.3	71.9
5	6.8	26.5	66.7
6	21.9	29.8	48.3
7	16.2	33.3	50.5
8	9.7	29.9	60.4
9	10.7	30.0	59.3
10	12.4	35.7	51.9
11	11.8	41.3	46.9
12	24.8	24.3	50.9
13	10.7	35.8	53.5
14	16.5	28.7	54.7

**Table 10** Predicted PM10 concentration ( $\mu\text{g}/\text{m}^3$ ) at the identified locations for the different background sources

Location	Background roads	Industrial Oil	Other Transport	Part Bs	Rural Background primary	Secondary/ coarse
1	1.93	0.26	0.02	0.29	1.17	20.93
2	1.83	0.26	0.02	0.29	1.17	20.93
3	1.82	0.05	0.02	0.32	1.17	20.93
4	1.62	0.09	0.05	0.35	1.17	20.93
5	1.77	0.14	0.03	0.46	1.17	20.93
6	1.78	0.12	0.02	0.17	1.17	20.93
7	2.02	0.04	0.02	0.12	1.17	20.93
8	1.62	0.11	0.03	0.54	1.17	20.93
9	1.73	0.10	0.02	0.55	1.17	20.93
10	1.89	0.09	0.03	0.19	1.17	20.93
11	2.23	0.04	0.03	0.20	1.17	20.93
12	1.53	0.10	0.02	0.55	1.17	20.93
13	1.87	0.08	0.03	0.23	1.17	20.93
14	1.79	0.09	0.03	0.19	1.17	20.93

**Table 11** Proportion (%) of source category contributions

Location	Background roads	Other transport/ commercial	Rural Background primary	Secondary/ coarse
1	7.9	2.3	4.76	85.1
2	7.5	2.3	4.78	85.4
3	7.5	1.6	4.81	86.1
4	6.7	2.0	4.83	86.5
5	7.2	2.6	4.78	85.4
6	7.4	1.3	4.83	86.5
7	8.3	0.7	4.81	86.1
8	6.6	2.8	4.80	85.8
9	7.1	2.7	4.78	85.4
10	7.8	1.3	4.81	86.1
11	9.1	1.1	4.76	85.1
12	6.3	2.8	4.81	86.1
13	7.7	0.0	4.81	86.1
14	7.4	0.0	4.83	86.5

**Table 12** Predicted 2005 concentrations ( $\mu\text{g}/\text{m}^3$ ) of  $\text{NO}_2$  at the identified locations

Location	Base case emissions	Lower emissions	Improvement ( $\mu\text{g}/\text{m}^3$ )	Improvement (%)
1	51.0	45.1	5.9	11.5
2	57.0	54.2	2.8	5.0
3	48.2	43.2	5.0	10.3
4	32.4	29.0	3.3	10.3
5	47.4	42.0	5.4	11.4
6	45.0	39.6	5.4	12.0
7	47.0	41.2	5.9	12.4
8	46.7	41.5	5.2	11.0
9	53.3	51.5	1.8	3.4
10	44.0	39.0	5.0	11.4
11	44.3	38.4	5.9	13.3
12	50.1	47.7	2.4	4.8
13	45.0	40.3	4.7	10.4
14	32.0	28.4	3.6	11.3

**Table 13** Predicted 2005 concentrations ( $\mu\text{g}/\text{m}^3$ ) of  $\text{NO}_x$  at the identified locations

Location	Base case emissions	Lower emissions	Improvement ( $\mu\text{g}/\text{m}^3$ )	Improvement (%)
1	122.4	95.8	26.6	21.7
2	189.7	145.5	44.2	23.3
3	120.7	92.9	27.8	23.0
4	49.5	41.9	7.6	15.3
5	98.8	78.2	20.7	20.9
6	89.1	72.0	17.1	19.1
7	107.8	84.5	23.2	21.6
8	99.2	78.6	20.5	20.7
9	161.8	126.7	35.1	21.7
10	86.3	68.6	17.7	20.5
11	92.4	72.1	20.3	22.0
12	135.5	109.4	26.1	19.3
13	99.7	78.6	21.0	21.1
14	47.9	40.1	7.8	16.3

**Table 14** Predicted (2004) number of days exceeding the AQS daily PM10 mean of  $50\mu\text{g}/\text{m}^3$  at the identified locations

Lower				
Location	Base case	emissions	Improvement (days)	Improvement (%)
1	7	5	2	23.4
2	14	9	4	32.2
3	7	5	2	24.6
4	4	4	0	2.4
5	6	5	1	19.7
6	5	4	1	18.1
7	6	5	1	23.8
8	6	5	1	21.0
9	13	8	5	36.3
10	5	4	1	17.3
11	6	5	1	22.6
12	8	6	3	31.6
13	6	5	2	24.8
14	4	4	0	2.3

**Table 15** Predicted 2005 concentrations ( $\mu\text{g}/\text{m}^3$ ) of  $\text{NO}_2$  at the identified locations

Location	Base case	10% reduction	15% reduction	20% reduction
1	50.9	49.4	49.0	48.6
2	56.0	53.8	53.1	52.3
3	47.4	45.9	45.4	44.9
4	32.4	31.7	31.6	31.4
5	47.4	46.1	45.6	45.1
6	45.0	43.8	43.4	43.1
7	46.9	45.5	45.1	44.7
8	46.4	45.2	44.8	44.5
9	53.3	51.5	50.9	50.3
10	44.0	42.9	42.6	42.4
11	47.9	46.5	46.1	45.7
12	50.1	48.6	48.2	47.8
13	45.0	43.8	43.5	43.1
14	32.0	31.4	31.2	31.1

**Table 16** Predicted NO<sub>2</sub> improvement from base case at the identified locations (%)

Location	10% reduction	15% reduction	20% reduction
1	2.9	3.8	4.7
2	3.9	5.2	6.6
3	3.2	4.3	5.3
4	2.1	2.5	3.0
5	2.7	3.6	4.7
6	2.7	3.5	4.3
7	2.9	3.8	4.6
8	2.6	3.3	4.0
9	3.4	4.5	5.6
10	2.5	3.1	3.7
11	2.9	3.8	4.6
12	2.9	3.7	4.6
13	2.7	3.5	4.3
14	2.1	2.6	3.0

**Table 17** Predicted 2005 concentrations (µg/m<sup>3</sup>) of NO<sub>x</sub> at the identified locations

Location	Base case	10% reduction	15% reduction	20% reduction
1	122.0	113.6	110.1	106.7
2	179.2	164.2	157.8	151.4
3	112.4	104.5	101.2	97.9
4	49.5	48.3	48.0	47.7
5	98.8	92.8	90.5	88.1
6	89.1	84.6	82.9	81.2
7	106.1	99.8	97.3	94.8
8	96.2	90.6	88.3	86.0
9	161.8	150.1	145.2	140.3
10	86.3	81.6	79.7	77.9
11	128.4	120.3	117.0	113.7
12	135.5	127.5	124.4	121.17
13	99.7	93.7	91.4	88.97
14	47.9	46.7	46.4	46.12

**Table 18** Predicted NO<sub>x</sub> improvement from base case at the identified locations (%)

Location	10% reduction	15% reduction	20% reduction
1	6.9	9.7	12.6
2	8.4	11.9	15.5
3	7.0	10.0	12.9
4	2.5	3.1	3.7
5	6.0	8.5	10.9
6	5.0	6.9	8.8
7	5.9	8.3	10.7
8	5.9	8.3	10.6
9	7.3	10.3	13.3
10	5.5	7.6	9.8
11	6.3	8.9	11.5
12	5.9	8.3	10.61
13	6.0	8.4	10.74
14	2.5	3.1	3.77

**Table 19** Predicted number of days exceeding the AQS daily PM<sub>10</sub> mean of 50µg/m<sup>3</sup> at the identified locations

Location	Base case	10% reduction	15% reduction	20% reduction
1	7	6.4	6.1	5.9
2	12	11.0	10.3	9.7
3	6	5.9	5.7	5.5
4	4	3.6	3.6	3.6
5	6	5.5	5.4	5.2
6	5	4.9	4.8	4.7
7	6	5.7	5.5	5.4
8	6	5.4	5.2	5.1
9	13	11.6	11.0	10.3
10	5	4.8	4.7	4.6
11	10	8.8	8.3	7.9
12	8	7.6	7.3	7.05
13	6	5.9	5.8	5.58
14	4	3.6	3.6	3.59

**Table 20** Predicted PM10 improvement from base case at the identified locations (%)

Location	Improvement (%)	Improvement (%)	Improvement (%)
1	6.9	10.2	13.4
2	11.3	16.6	21.7
3	6.6	9.7	12.7
4	0.2	0.3	0.4
5	5.5	8.1	10.6
6	4.0	5.9	7.8
7	6.1	8.9	11.7
8	5.1	7.5	9.9
9	10.6	15.7	20.5
10	4.2	6.1	8.0
11	9.5	14.0	18.3
12	7.6	11.3	14.78
13	6.3	9.2	12.05
14	0.2	0.3	0.35



## Appendix 4

### Sources and Health Effects of Pollutants including NO<sub>2</sub> and PM<sub>10</sub>.

#### Sources and description

**Nitrogen Dioxide** is a colourless and odourless gas produced mainly as a bi-product of combustion. Emissions arise in the form of NO<sub>x</sub>, a mixture of Nitric Oxide (NO) and Nitrogen Dioxide (NO<sub>2</sub>). It is thought that as a rough guide, emissions from vehicles comprise 50% NO<sub>2</sub>. NO<sub>2</sub> is also formed in the atmosphere as a result of chemical reactions, influenced by sunlight. NO<sub>2</sub>, along with VOCs (volatile organic compounds), also influence the increase in ozone formation at ground level. NO<sub>2</sub> is also emitted from domestic gas boilers and cookers.

**PM<sub>10</sub>s** are particulates less than 10 microns in size (a micron is one 1000<sup>th</sup> millimetre). They originate naturally eg. volcanic ash, fine sand and soil, or result from human activity eg. emissions from transport, power stations and burning. PM<sub>10</sub>s can form in the atmosphere due to chemical reactions eg sulphates. There is still considerable debate as to whether it is the number of particles or mass that is significant to health, however, it is known that these particles are ingested deep into the lungs, where, over time, they will reduce lung capacity and function. Other chemicals, such as carcinogens, may attach to PM<sub>10</sub>s allowing them to be ingested as well.

Health Effect Of Pollutants		
Pollutant	Main Source	Health Effect
Lead	Vehicle emissions Industrial	Toxic effect on human organs. Impairs the normal intellectual development and learning ability of children
Carbon Monoxide	Vehicle emissions Industrial	Reduces the amount of oxygen in the blood, low doses can impair concentration, increases the likelihood of exercise related heart pain, may present a risk to the foetus
Nitrogen Dioxide	Vehicle emissions Industrial Aircraft	<b>Affects respiratory and cardiovascular systems, asthma and mortality</b>
PM <sub>10</sub>	Vehicle emissions Industrial Natural	<b>Affects respiratory and cardiovascular systems, asthma and mortality</b>
Sulphur Dioxide	Power stations Vehicle emissions	Irritation to the respiratory system, may provoke wheezing, exacerbate asthma and is associated with chronic bronchitis
Benzene	Vehicle emissions	Can cause cancer
1,3-Butadiene	Vehicle emissions	Can cause cancer

## Appendix 5

### London City Airport Surface Access Issues

#### A13

The docklands Highways were built principally to serve new developments south of the A13. However, plans to improve the A13 to cope better with through traffic, especially in the peak hours, did not keep pace and many drivers find it more convenient to use the Docklands Highways even though the journey may be longer. This gives rise to congestion which affects journey times to/from the Airport at peak times. The A13 improvements are now proceeding as a Design Build Finance Operate (DBFO) scheme using private finance. The £200 million contract for this was awarded to RMS (A13) plc on 12th April 2000. The 30 year contract provides for the operation and maintenance of 13 miles of of the A13 stretching from the City to Wennington and includes £146 million to be spent on improvements as follows:

- the **A13 Ironbridge to Canning Town Improvement** - widening and an additional flyover and completing the East India Dock Link Tunnel
- the **A13/A112 Prince Regent Lane Improvement** - an underpass, slip roads and new junction.
- the **A13/A117 Woolwich Manor Way Improvement** - replacing the existing flyover with a dual three-lane road flyover;
- the **A13 Movers Lane Improvement** - a new dual three-lane underpass
- replacing the **Roding Bridge** (south)

Work on the improvements has started with expected completion in 2004. Congestion on the Docklands Highways during the construction period is likely to worsen.

There is a separate scheme to build a flyover to link the A406 (North Circular Road) to Royal Docks Road over the present (already grade separated) junction of these roads with the A13 but the resources for the project have still to be identified. The Airport has undertaken to make a contribution towards the cost of this flyover if it is built.

#### Traffic Management

The heavy flows of through traffic using the Docklands Highways until the A13 improvements are completed, and new developments, have served as a spur for minor improvements to manage the traffic using North Woolwich Road and Silvertown Way and improvements to the junction of Hartman Road with the Connaught Crossing may well be required before long. It is likely in any event that when the number of passengers using the Airport exceeds 2.5 mppa the Hartman Road/Connaught Crossing will require further improvement including possibly, traffic signals. The Airport has undertaken to help with the cost of such improvements.

#### Taxis

About half the Airport's passengers use taxis to get to and from the Airport. The Airport's Byelaws allow only taxis licensed under Section 6 of the Metropolitan Public Carriage Act 1969. Over 300 taxis come to the Airport each morning for arriving passengers. There is a taxi desk in the Terminal for bookings, accounts and credit facilities.

### Private Cars

About a quarter of passengers and slightly more than half the staff travel to the Airport by car. The Airport provides 900 car parking spaces. The car parks were resurfaced in August 1998 and the lighting was upgraded. A covered walkway along the dock edge was completed in September 1999

### Public Transport Strategy

At present only about a quarter of Airport passengers - and a similar percentage of staff - use the bus and rail services and the Airport generates upwards of 2 million car/taxi journeys per year. With the number of Airport passengers set to double over the next six years this number will go on rising and the Airport is, therefore, working with other agencies to secure better public transport facilities for passengers and staff and so reduce dependence on the private car. The focus for this work is the Airport Transport Forum and the Airport Surface Access Strategy.

The Airport's current targets and commitments are as follows:

- To increase the percentage of air passengers using public transport.
- To reduce staff car drivers as a percentage of the workforce.
- Publish a company travel plan by end 2002.
- Publish an employment strategy which targets areas served by public transport, by end 2002
- Work with on-site employers to encourage them to produce their own travel plans by end 2003
- Develop a Surface Access Monitoring system to provide a tool for measuring changes in car use for staff and air passengers
- Work with CAA to publish annual results on the mode of travel used by air passengers.
- Conduct a mode of travel survey for Airport staff in 2001, and then every two years. Publish these results as part of an annual update to the Surface Access Strategy.
- To produce a transport briefing for all new staff
- Introduce flight information at Liverpool Street, Canary Wharf, Canning Town and Westminster.

### Bus Services

THE Airport's Shuttle Bus services are used by 21% of passengers. These run every 5 minutes to the new Jubilee line/DLR/Silverlink Metro interchange at Canning Town and every 10 minutes to Canary Wharf (linking to the DLR) and Liverpool Street station linking to the London Underground and main railway services.

The ordinary LT bus services include the 473 bus which provides connections every ten minutes to the Silverlink Metro station at Silvertown and the free ferry at North Woolwich and to the DLR at its Prince Regent station and the London Underground at Plaistow or Stratford. The 69 bus, which terminates at the Airport, provides a service to the interchange at Canning Town and to Plaistow LT and Stratford DLR/LT stations. Also linking to the Canning Town interchange is the 474 bus which stops in Connaught Road beside the entrance to the Airport. It also provides a link to the Woolwich Free Ferry and to the shopping centre at East Becton. These services are less frequently used by passengers but more so by staff.

The N69 Night Bus, which terminates at the Airport, provides a night-time link to Canning Town, Plaistow and Stratford. It operates at times when the Airport is closed to air traffic but it does provide a service for local residents.

### Jubilee Line Extension

Transport links to the Airport have been greatly enhanced by the opening of the Jubilee Line Extension. The extended Jubilee Line offers improved transport options for Airport passengers, providing a quick and convenient route to the Airport via the new Canning Town Station. To coincide with the opening of the new underground service, Airport opened its own high frequency shuttle bus service between the Airport and the Canning Town Interchange only 5 minutes away. It is now possible to travel between Westminster or Waterloo and the Airport in only 25 minutes, Green Park in 30 minutes and to Bond Street in less than 40 minutes - far quicker than to any other airport.

Canning Town is now an important transport hub for the Airport, serving not only the Jubilee Line, but also the *Docklands Light Railway (DLR)* to Bank and *Silverlink Metro* to Richmond via Stratford, Highbury & Islington, Camden Road, West Hampstead and Willesden Junction. It also incorporates a major bus interchange.

### Silverlink Metro

This rail service - operating on the North London Line - provides a link to Richmond in west London via Stratford, Highbury & Islington, Camden Road, Hampstead and Willesden Junction. Silvertown Station is about 6 minutes walk from the Airport but Silverlink services also call also at the Canning Town Interchange where passengers can pick up the Airport's shuttle bus. The service is not much used by Airport passengers or staff and there is concern among local people about the frequency/reliability of the service.

### Fixed Link - DLR Extension

The Airport is very keen to see a fixed rail link direct to the Airport. It has thus been very strong in its support for the proposed extension of the Docklands Light Railway (DLR) from Canning Town to the Airport and on to North Woolwich.

On 19th March 2002 the Government announced its decision to approve an Order under the Transport and Works Act authorising the scheme. The DLR is now considering whether to promote a further order to carry the new Airport Extension under the River to Woolwich Arsenal.

East London Transit STAFF surveys show that slightly more than half of those employed at the Airport come to work by car and that a large percentage live to the east of the Airport from where public transport links to the Airport are generally poor. For this reason the Airport support the proposed *East London Transit* project about which there was consultation in the summer of 2001.

Using state of the art buses or trolley buses with their own road space, or with priority over other traffic, this project would link the main town centres in Barking, Ilford and Romford and also connect National Rail, Underground and DLR stations. There is the prospect the new system might include a link between Barking and the DLR at Galleons Reach and the plans show a possible onward link to the Airport.

Following its January 2002 meeting the Consultative Committee and told the Mayor they strongly support the project which should include the suggested link to Gallions Reach and onwards via North Woolwich to the Airport. For more information about the scheme visit *Document Downloads* at [www.thames-gateway.org.uk](http://www.thames-gateway.org.uk)

### Crossrail

Also of importance to the Airport is the Crossrail project. In December 2001 the Airport Transport Forum was briefed on the project by representatives of *Cross London Rail Links Limited*, a joint venture company of Transport for London and the Strategic Rail Authority tasked with promoting and developing two new routes through London: Crossrail 1 (East-West) and Crossrail 2 (NorthEast-SouthWest).

An agreed shortlist of Options for Crossrail 1 was unveiled on 7th March 2002. This is based on the core route for Crossrail line 1 running from Heathrow to Paddington, then to Liverpool Street with branches to Stratford and to the Isle of Dogs. West of London, the shortlist includes lines to Reading, Aylesbury and Watford Junction. To the east, the shortlist includes lines from Stratford to Shenfield and from the Isle of Dogs to Ebbsfleet via Woolwich Arsenal, Abbey Wood and Dartford.

There are two options for the Ebbsfleet route between the Isle of Dogs and Woolwich Arsenal - one via the Greenwich Peninsula and Charlton and the other via the Royal Docks.

Among local organisations there is keen support for the option serving the Royal Docks. The Airport believes that the proposed new **DLR extension** from Canning Town to the Airport and North Woolwich will be insufficient to deal with the population explosion projected for the Royal Docks by 2012. It believes the DLR link and Crossrail will complement each other to sustain the redevelopment of the area. *"Crossrail will be a way of knitting together the Royal Docks which is currently made up of scattered communities"* says the Airport's MD Richard Gooding *"And having two transport options gives credibility to the regeneration of the area. Just as Canary Wharf needs more than one route, so will the Royal Docks in the future."*

Both the Airport and the London Borough of Newham have been campaigning for a Crossrail link and Station for the Royal Docks. With the support of local business interests the Council commissioned consultant studies to identify the feasibility and costs of the route through the Royal Docks compared with the alternative via Charlton.

There is more information about the Crossrail project (and maps) on the company's website including the consultation document for key stakeholders and local authorities issued on 5th June 2002. Following this period of consultation, which ends on 26 July 2002, a preferred scheme will be announced in Autumn 2002 and the public will be invited to comment on this proposal before the end of the year. A final scheme will be selected for Crossrail line 1 at the end of 2002.

### Airport Transport Forum

In line with Government policy the Airport has established an Air Transport Forum (ATF). This includes representatives of the Airport, the local authorities, regional planning bodies, transport operators, infrastructure providers, businesses and other interested bodies.

### London Transport Users Committee

The Consultative Committee is represented on the *London Airports Access Forum* (LAAF) of the *London Transport Users Committee* (LTUC) which is the statutory watchdog protecting, promoting and speaking for the interests of the non-freight users of transport provided, procured or licensed by *Transport for London* and, as

the Rail Passengers Committee for London, the users of rail services in and around London.

In February 2002 LTUC published its report "*Reaching the Skies*". This represents LTUC's manifesto for surface access to airports. It covers general principles and aspirations that apply to all airports – in a way, a good practice guide but coming from the user perspective – as well as their specific aspirations for each airport, including London City.

On 18th June 2002 the LAAF held its meeting at London City Airport. Members travelled to the Airport by a variety of routes and part of the meeting was taken up with reports of their experiences. These were shared with the Airport who will consider how to respond to the problems mentioned. A report of this part of the meeting, by Peter Mendham who represents the London City Airport Consultative Committee on the LAAF, is available.

## Appendix 6

### Tables of Action Plan Proposals

	<b>Key</b>
<b>A</b>	Action Already Agreed
<b>P</b>	Proposed Action
<b>TP</b>	Transport
<b>TO</b>	Traffic Operations
<b>FM</b>	Fleet Management
<b>PU</b>	Pollution Unit
<b>IRT</b>	Initial Response Team
<b>E</b>	Energy
<b>ALL</b>	Across the council

	<b>Air Quality Impact</b>
<b>Low (1)</b>	The impact of the proposal(s) on improving air quality is not considered significant, but together with the other proposals within the action plan, the proposal(s) would provide a net benefit.
<b>Medium (2)</b>	The impact of the proposal(s) on improving air quality is considered important, and benefits from the proposal(s) would be clearly seen.
<b>High (3)</b>	The impact of the proposal(s) on improving air quality is considered significant and the proposal(s) are seen as the core elements of this action plan.

<b>Cost</b>	<b>Explanation of Cost</b>
<b>Low (3)</b>	<ul style="list-style-type: none"> <li>Internal cost that is accounted for by officer time e.g. Partnership meetings and lobbying</li> <li>External cost which is taken outside the council e.g. polluter pays</li> <li>Proposed action will go ahead anyway and does not directly relate to air quality</li> <li>Air Quality funding required which can be easily incorporated into the departmental budget (&lt;2K)</li> </ul>
<b>Medium (2)</b>	<ul style="list-style-type: none"> <li>Air Quality funding required which can be incorporated into departmental budgets, but requires numerous tenders to comply with council financial regulations (&gt;2K)</li> <li>Supplementary Credit Approval Funding (SCA)</li> </ul>
<b>High (1)</b>	<ul style="list-style-type: none"> <li>Air Quality funding required which cannot be incorporated into council budget and additional funding must be sought e.g. LEZ</li> </ul>

<b>Effectiveness</b>	<b>Action Impact on Air Quality</b>		
<b>Cost of Proposed Action</b>	<b>Low (1)</b>	<b>Medium (2)</b>	<b>High (3)</b>
<b>Low (3)</b>	3	6	9
<b>Medium (2)</b>	2	4	6
<b>High (1)</b>	1	2	3



Action Ref.	Action
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<b>2.1</b>	<b>Physical Traffic Management: speed &amp; flow - Proposed Actions</b>
<b>2.1A</b>	Continue with, and expand, road hump schemes within the borough and ensure that all humps in the borough are the optimum height and distance apart to minimise the level of pollution produced from braking vehicles.
<b>2.1B</b>	Increase the number of traffic speed cameras, and CCTVs associated with bus lanes and lobby for the decriminalisation of traffic offences so that CCTV use can be extended beyond the pilot scheme currently in place.
<b>2.1C</b>	As a means to extend the councils air quality monitoring network and ensure that the air quality associated with traffic management schemes is monitored, NO2 and PM10 levels will be monitored prior to, during and after some schemes are implemented.

<b>2.2</b>	<b>Re-routing and road Hierarchy - Proposed Action</b>
<b>2.2A</b>	There are no plans to reclassify roads with the borough of Newham, however, as part of traffic management proposals the council will be introducing traffic calming measures on local distributor and residential roads.

<b>2.3</b>	<b>Access Control &amp; Clear Zones including Low Emission Zone</b>
<b>Low Emission Zone - Proposed Actions</b>	
<b>2.3A</b>	Until the results of the feasibility study are available, Newham Council will consider a Low Emission Zone(s) an option and will await further guidance. Following the feasibility findings if required Newham Council will work with the GLA, ALG and other London Boroughs in implementing appropriate LEZ scheme(s). Proposal 10 of the MAQS requests that local authorities consider the recommendations of the LEZ feasibility study group
<b>2.3B</b>	Keep local transport operators (including passenger operators) informed of any LEZ scheme(s) within Newham. In addition, provide information regarding funding opportunities for fleet improvements.
<b>Access Control, Clear Zones and Home Zones - Proposed Actions</b>	
<b>2.3C</b>	The council will continue to retrofit and create Home Zones. It will also continue to encourage developers to create 'Home Zones'.
<b>2.3D</b>	Consider the introduction of access control with future regeneration projects for example in the Regeneration of the Lower Lea Valley Spine Road and Newhams 'Arc of Opportunity'
<b>2.3E</b>	Explore the possibility of working with neighbouring boroughs to introduce clear zones within the borough (in line with proposal 26 of the MAQS)

<b>2.4</b>	<b>Road User Charging - Proposed Actions</b>
<b>2.4A</b>	The council will follow the developments of the Central London Congestion Charging Scheme (CCS) and in principle are prepared to have road user charging implemented within the borough at the appropriate time.
<b>2.4B</b>	Newham Council will continue to support CCS in Central London.
<b>2.4C</b>	Newham Council will Lobby for the wider introduction of road user charging including motorways and trunk roads.

Action Ref.	Action
<b>2.5</b>	<b>Parking Management &amp; Charging - Proposed Actions</b>
<b>2.5A</b>	By 2004, Newham Council will complete the implementation of its 5-year parking strategy. (The fundamentals of the strategy regulate traffic volumes and may encourage a shift in the use of the private vehicle to more sustainable modes of transport, which is supported by the councils Transport Strategy).
<b>2.5B</b>	Following public consultation and taking into account travel needs and the appropriateness of parking controls, Newham Council will continue to expand and extend the number of CPZs within the borough.
<b>2.5C</b>	Newham Council will continue with parking enforcement, and dealing with moving offences in bus lanes.

<b>2.6</b>	<b>Urban Traffic Control Systems (UTCS) - Proposed Actions</b>
<b>2.6A</b>	Continue with the monitoring of traffic signals to ensure that the most appropriate balance is found between the motorised vehicles and other users of the road i.e. pedestrians. This should also be extended to the monitoring of temporary signals associated with road works.
<b>2.6B</b>	As part of the London Bus Initiative, investigate the potential of expanding the network of devices able to detect buses and react to traffic flows to minimise congestion (e.g. SVD and MOVA)
<b>2.6C</b>	Investigate potential areas of the borough where signage may be used in traffic management queues to indicate points where engines should be turned off while queuing eg Woolwich Ferry

<b>2.7</b>	<b>Infrastructure Development - Proposed Action</b>
<b>2.7A</b>	Lobby within partnerships for sustainable transport infrastructure developments such as the rail link river crossings under TGLP. Such developments lead to regeneration of the associated areas and the infrastructure required to implement a sustainable transport system within and serving Newham, which will ultimately reduce reliance on the car and therefore reduce emissions.

<b>2.8</b>	<b>Reallocated Road-Space - Proposed Actions</b>
<b>2.8A</b>	Continue to ensure that road space is allocated to buses, coaches and cyclists or more sustainable transport modes.

<b>2.9</b>	<b>Public Transport Initiatives (Bus) - Proposed Actions</b>
<b>2.9A</b>	Continue working within and supporting the policies of London Bus Priority Network, London Bus Initiative and Bus Priority Partnership, which include: road-space allocation and improvements, camera enforcement, modification of traffic signals for bus priority, countdown facilities etc.
<b>2.9B</b>	To actively promote and facilitate emission-testing conducted on buses within the London Borough of Newham by the Vehicle Inspectorate and to publicise these results to members of the public.

<b>2.10</b>	<b>Encouragement of Walking, Cycling and Motorcycle Use - Proposed Actions</b>
<b>2.10A</b>	Continue to ensure with new developments that pedestrian routes are safe, accessible, convenient and pleasant.

Action Ref.	Action
<b>2.10B</b>	The council is committed to completing, promoting and maintaining the strategic walking routes in London
<b>2.10C</b>	The council is committed to continuing its Safer Routes to School programme.
<b>2.10D</b>	'Think Bike' in relation to highways and transport schemes and continue to retrofit and create with new developments cycle routes that are safe, accessible, convenient, pleasing and with cyclist prioritisation; for example by using toucan crossings and advance stop lines at junctions.
<b>2.10E</b>	Provide strategic and sufficient safe cycle and motorcycle parking
<b>2.10F</b>	Continue to work towards and facilitate the full implementation and maintenance of the London Cycle Network, Newham Cycle Network and National Cycle Network within the borough.
<b>2.10G</b>	Continue to provide free cycle proficiency training for children and adults
<b>2.10H</b>	Encourage staff use of bicycles by providing additional parking spaces where required, pool bikes, and attempt to extend the availability of staff changing and showering facilities.
<b>2.10I</b>	If implemented, staff will be encouraged to walk and use bicycles through the councils Travel Plan (see section 2.13) and through awareness raising events associated with 'Don't Choke Britain' (see section 2.12). This includes the periodic availability of a cycle engineer to ensure pool bikes and personal bikes are well maintained.
<b>2.10J</b>	Provision of cycle routes through parks and open spaces
<b>2.10K</b>	Continue to Liaise with local cycle groups regarding cycle networks within the borough and ensure that there is sufficient publicity and lobbying to encourage the use of cycle routes.
<b>2.10L</b>	Continue to improve cycle and walking routes in the Borough. For example: wheeling ramps for cyclists if required, CCTV cameras at strategic points on certain footpaths/cycleways and improved lighting.
<b>2.10M</b>	The council will continue with a pilot study to providing Motorcycle Advanced Stop Lines within the borough and consider its implementation on a wider scale.

<b>2.11</b>	<b>Partnerships &amp; Travel Plans (Workplace &amp; School) - Proposed Actions</b>
<b>2.11A</b>	Using the commitment in Newhams UDP, continue to encourage developers to introduce Travel Plans (in line with proposal 76 of the MAQS). In order to lead by example, Newham Council proposes to implement a Travel Plan (section 2.13)
<b>2.11B</b>	School travel plans will continue to implemented via the 'Safer Routes Programme'
<b>2.11C</b>	Continue to work with service providers in order to encourage the transfer of passengers from one mode to another.
<b>2.11D</b>	Establish regular contact with Newhams Business Forum to discuss air quality issues. Research group member's with regards Travel Plan status; if required, provide guidance and assistance in adopting a Travel Plan.
<b>2.11E</b>	Try to encourage businesses to participate in environmental management schemes and to demonstrate continuing and meaningful improvements which could include improvements in indoor air quality of the work place and purchasing choices which minimise energy use and emissions (in line with proposals 77, 80 and 82 of the MAQS)
<b>2.11F</b>	Continue to support the vision of London's Lee Valley Transport Working Group: <i>"seek to develop an effective and sustainable integrated transport system to serve all users. It will seek to reduce the dependence on motorised traffic and its adverse effects on the environment, in order to enhance the Lee Valley as an attractive place in which to work, live and play. It has a major role to play in reducing unemployment"</i>
<b>2.11G</b>	Newham Council fully supports and will continue to be involved with the Thames Gateway London Partnership. It will work within the TGLP to implement a 'Sustainable Transport Strategy'.
<b>2.11H</b>	Seek to establish additional partnerships within the borough that will have a positive impact on air quality.

Action Ref.	Action
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<b>2.12</b>	<b>Road Transport Promotion, Education &amp; Awareness Raising - Proposed Actions</b>
<b>2.12A</b>	Continually update the Pollution Control Unit website and produce frequent Air Quality information bulletins to members of the public to keep them informed. To ensure the target audience is met, annual reviews of the Pollution Control Units communication strategy will be conducted.
<b>2.12B</b>	Continue to monitor air quality in specified areas and extend where possible, including the addition of an automated monitoring station at London City Airport by mid 2003 and ad hoc monitoring, which may extend over prolonged periods
<b>2.12C</b>	Develop air quality and teaching programmes. In addition, promote air quality benefits associated with cycling during the schools cycling proficiency programme.
<b>2.12D</b>	Use examples within the borough to increase the amount of air quality research conducted by the council
<b>2.12E</b>	Develop and oversee air quality research projects for under and post graduate students starting academic year 2003/2004.
<b>2.12F</b>	Continue to take part in the national Don't Choke Britain Campaign on an annual basis and extend the councils involvement each year, including involvement with European Car Free Day.
<b>2.12G</b>	Continue to promote low emission vehicles to staff members
<b>2.12H</b>	Place two plasma screens at prominent locations in East Ham and Stratford with regularly updated information upon air quality and its implications for health.
<b>2.12I</b>	Work with Newham PCT and community groups to expand public information screens to include dot-matrix road signs.
<b>2.12J</b>	Annually review the Pollution Control Units Communication Strategy to ensure Air Quality issues are appropriately represented.

<b>2.13</b>	<b>Fleet Management &amp; Clean Fuels - Proposed Actions</b>
<b><i>Fleet Management - Proposed Actions</i></b>	
<b>2.13A</b>	The council intends that all its fleet of 350 vehicles should meet the Euro III standard by 2003.
<b>2.13B</b>	Fleet Operations will continue to trial the use of LPG fuelled and LPG/petrol dual fuelled vehicles and investigate the potential of other low emission fuels and water-diesel emulsion, as information comes available.
<b>2.13C</b>	Ensure that council vehicles are: - used sensibly (via staff training) and are well maintained, this includes bi-annual emission tests as a minimum; - used on routes and tasks which are worked out to be as efficient as possible, eg co-ordinating deliveries of goods and services; and - operated by appropriately trained staff (to improve fuel economy) and promote the above
<b>2.13D</b>	Continue within Fleet Operations plans to ensure the retrofitting of CRT for all larger diesel vehicles.
<b>2.13E</b>	The council will establish a fleet register that includes emission information and measures to implement emissions improvements (inline with the MAQS proposal 65). This will be provided on the councils website.
<b>2.13F</b>	Promote alternative fuels and technologies through initiatives such as the use of an electric car and low emission vehicles, as well as lobbying for funding.
<b>2.13G</b>	Provide emission checks for members of the public at the councils MOT depot.
<b><i>Newham Travel Plan - Proposed Actions</i></b>	
<b>2.13 H</b>	Implement a Travel Plan, which may include:

Action Ref.	Action
2.13I	<b>Encourage Staff Cycling:</b> provide loans for the purchase of bicycles provide free, covered and secure cycle and motorcycle parking provide lockers to store kit provide changing rooms and showering facilities as funding allows provide pool bikes where possible free cycle training periodic bike maintenance for publicity purposes
2.13J	<b>Encourage Staff use of Public Transport:</b> allow employees to use LT internet journey planning service distribute information of public transport in Newham to all staff

2.13K	<b>Encourage Staff to leave car at home:</b> make Council staff car parking into public car parks and introduce charges introduce low emission pool cars give new staff casual car user allowances instead of lump sum on essential allowances set up a car sharing database
<b>Clean Fuels - Proposed Actions</b>	
2.13L	Provide encouragement and guidance for individuals and groups who wish to clean up their vehicles and fuel used and take advantage of campaigns such as CleanUp and Powershift (In line with proposal 2 and 75 of the MAQS).
2.13M	Encourage businesses to try and achieve at least the euro II standard plus a reduced pollution certificate or Euro III by 2005 (In line with proposal 74 of the MAQS).
2.13N	Identifying appropriate sites for further alternative refuelling infrastructure together with TransportEnergy (in line with the MAQS, proposal 66)
2.13O	Support electric re-fuelling through the work of the London Clean Fuel Working Group (in line with proposal 7 of the MAQS)

<b>2.14</b>	<b>Taxis, Mini-Cabs and Private Buses / Coaches - Proposed Action</b>
2.14A	The council will work with London City Airport to minimise the impact of taxis from the airport via the DLR extension and emission testing conducted by the Vehicle Inspectorate.
2.14B	Continue to control where taxis, mini-cabs, and local bus operators in Newham can park as a means of regulating their use.
2.14C	Newham Council supports the regulation of taxis and minicabs through the Public Carriage Office, and encourages the introduction of additional measures to ensure emission levels are minimised by 2005, such as vehicle emission checks and changes to low-emitting fuel.

<b>2.15</b>	<b>Road Freight Measures – HGV and LGV - Proposed Action</b>
2.15A	Encourage and support initiatives the transfer road freight to rail and water.
2.15B	Continue with Newham's strategy for traffic management by locating freight-generating developments on or near main road systems.
2.15C	Set up a Freight Quality Partnership through Newham's Transport Strategy.
2.15D	Provide help, encouragement and awareness raising to Road Freight groups within the borough, concerning funding for cleaner vehicles.
2.15E	Use roadside vehicle emissions checks for HGVs and LGVs, to encourage regular servicing, maintenance and replacement of old vehicles.
2.15F	Minimise the misuse of roads by freight from major developments by continuing to and expand the spot-checking of roads used and whether loaded vehicles are covered.

Action Ref.	Action
<b>2.15G</b>	In re-writing the councils corporate procurement policy (see section 4.6), include environmental considerations in all contract documentation and work with suppliers and service providers to improve environmental performance.
<b>2.15H</b>	Continue with the night-time lorry ban, and participate with the review of the ban with a view to relaxing the ban to ease day time congestion. Any relaxation (sanctioned by the London Mayor) should incorporate the use of emission abatement and cleaner fuels.
<b>2.15I</b>	In line with proposal 22 of the MAQS, Newham council will assess the scope for the use of priority lanes by freight vehicles and the implications for other road users.

<b>2.16</b>	<b>Roadside Emissions Testing and Enforcement - Proposed Actions</b>
<b>2.16A</b>	Newham Council has adopted the new powers laid down in The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002 and is co-ordinating the London-Wide Vehicle Emission Testing (VET) in association with the ALG. As such, in line with proposal 9 of the MAQS, Newham council will support the VET and maintenance campaign.
<b>2.16B</b>	Newham Council will initiate and support the Vehicle Inspectorate in roadside vehicle emissions testing programmes carried out in the borough
<b>2.16C</b>	In a bid to encourage motorists to get their vehicles checked more frequently, Newham Council will offer voluntary testing and adjustment on an annual basis (as part of the 'Don't Choke Britain Campaign'). In addition, action point 2.13G states the council will provide VET for members of the public at its MOT testing station.
<b>2.16D</b>	Action Point 2.13C states that council fleet will have emissions checked biannually. It is proposed that vehicle emission checks will be made available to staff, in the hope that this can be extended to be compulsory for those claiming mileage allowance.
<b>2.16E</b>	Newham Council will give the VET initiative full publicity to ensure that motorists are aware of the new powers and of the voluntary testing and adjustment.
<b>2.16F</b>	Newham Council will also work in conjunction with the Mayor for London to raise awareness of the importance of good vehicle maintenance
<b>2.16G</b>	Newham Council will seek to enforce new powers to insist that motorists switch off their engines while stationary.
<b>2.16H</b>	The council will lobby for emission limits to be reduced.

<b>3.1</b>	<b>Passenger Rail and Underground Services - Proposed Actions</b>
<b>3.1A</b>	Establish Quality Partnerships with the rail and tube industry to promote increased levels and quality services in the Borough. Within the partnership, agree targets for service improvement. Which includes improving frequency and reliability of services through signal improvements, reinstatement of lines and additional and increased services.
<b>3.1B</b>	Where possible encourage rail operators with trains which pass through the borough to consider transferring to low emission trains.
<b>3.1C</b>	Lobby the London Mayor to reduce air pollution on the London underground.
<b>3.1D</b>	The council will support improvements in rail / tube infrastructure.

<b>3.2</b>	<b>Freight Rail - Proposed Actions</b>
<b>3.2A</b>	Newham Council will continue to support initiatives to transfer freight from road to rail.
<b>3.2B</b>	The council will investigate the potential of establishing Quality partnerships within the freight rail industry to ensure best practicable means are adopted with regards air pollution and other environmental issues.
<b>3.2C</b>	The council will lobby for rail infrastructure improvements.

Action Ref.	Action
<b>3.3</b>	<b>Maritime, Ports &amp; Waterways (freight &amp; Passenger movements)-Proposed Actions</b>
<b>3.3A</b>	Where possible, the council will continue to safeguard mooring sites along the water ways in Newham which have been earmarked for river bus, taxi and freight movements.
<b>3.3B</b>	Continue to encourage and facilitate river use by river side industries and freight operators
<b>3.3C</b>	Develop sustainable water transport services within the borough in partnership with other boroughs

<b>3.4</b>	<b>Airport Measures - Proposed Actions</b>
<b>3.4A</b>	Under the section 106 planning agreement with Newham Council London City Airport (LCA) is committed to appointing consultants to carry out an Air Quality Study. In considering the main aims of the study, the council will ensure that the airport considers the impact on air quality of: - Airside Vehicles - Aircraft take off / landing / Flight - Aircraft Composition - Aircraft on the Stand - Aircraft Ground Movements - Airport Point Source Emissions - Airport Traffic Generation
<b>3.4B</b>	In principle, LCA is committed to implementing a Travel Plan.
<b>3.4C</b>	Newham Council will liaise with LCA for the Vehicle Inspectorate to carry out random emission checks of queuing taxis at the Airport.
<b>3.4D</b>	Newham Council and London city airport will continue to lobby for a CROSSRAIL proposal that includes access to LCA.

<b>4.1</b>	<b>Industrial Measures - Proposed Actions</b>
<b>4.1A</b>	In accordance with DEFRA guidance, continue to inspect local authority controlled processes to ensure compliance with authorisations, which will ensure that such process will not lead to exceedances of the National Air Quality Objectives (in line with MAQS, proposals 41 and 42).
<b>4.1B</b>	Continue to liaise with other industrial/commercial operators as well as other Local Authorities to promote good environmental practice.
<b>4.1C</b>	Continue to liaise with the environment agency to ensure part A processes comply with authorisations.
<b>4.1D</b>	Investigate industries in the Borough to ensure that all appropriate processes are authorised.
<b>4.1E</b>	Continue to investigate complaints regarding smoke from industrial and commercial premises.
<b>4.1F</b>	Produce an emission Inventory for part B processes in the borough and regularly update this on the 'Pollution Control Unit' website.

<b>4.2</b>	<b>Smoke Control and Nuisance Policy - Proposed Action</b>
<b>4.2A</b>	The council will continue to enforce complaints and provide information to members of the public concerning bonfires and smoke.

Action Ref.	Action
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<b>4.3</b>	<b>Fugitive Emissions - Proposed Actions</b>
<b>4.3A</b>	Produce dust guidance for construction sites
<b>4.3B</b>	Continue and develop additional dust sampling in association with construction sites
<b>4.3C</b>	Continue with and extend random spot checks that construction site vehicles have passed through the wheel wash and are covered if carrying material that can become windblown.
<b>4.3D</b>	Continue with street cleaning to minimise the re-suspension of road dust and review the cleaning regime currently in place.
<b>4.3E</b>	Use planning conditions and section 106 agreements to minimise emissions of dust
<b>4.3F</b>	Continue to ensure that contractors working on behalf of the council demolishing council buildings or clearing council sites have a clause in their contract that ensures they minimise dust production.

<b>4.4</b>	<b>Domestic and Commercial Energy Measures - Proposed Actions</b>
<b>4.4A</b>	Ensure that 'Broadway House' and subsequently acquired buildings within the borough are signed up to a 'Green Electricity Agreement'. Further to this, it is proposed that environmental audits of the council's major buildings are carried out.
<b>4.4B</b>	Continue to investigate potential locations within the borough that may benefit from CHP and more sustainable energy sources such as Solar-Voltaic cells. Where possible, such initiatives will be encouraged and promoted by the council by providing guidance and information pertaining to funding and grants. The council will assess locations for CHP using the Customs and Excise 'Good Quality CHP' index (inline with proposals 50 and 51 of MAQS)
<b>4.4C</b>	The council will ensure that old boilers are replaced and will also strive to completely withdraw from the use of solid fuels and oil-fired burners (inline with proposal 52 of MAQS).
<b>4.4D</b>	Seek to approve and integrate the following evolving policy for major developments into the councils UDP: - introducing technology on site or within the borough which generates 10% of the developments consumption, therefore reducing the boroughs contribution of CO2. If this can not be achieved: - then 20% of their energy requirements should be imported from the 'Green Grid', contributing to a national reduction in CO2 production.
<b>4.4E</b>	Continue to spend the council's climate change levy rebate on energy efficiency improvements.
<b>4.4F</b>	Investigate the potential of signing the Nottingham Declaration on Climate Change.
<b>4.4G</b>	Prepare the councils energy strategy in line with the Mayors Strategy to reduce energy consumption by the council, promote energy awareness in the borough, provide training for key staff and attribute responsibility and accountability for energy use.

<b>4.5</b>	<b>Land Use Planning: Proposed Actions</b>
<b>4.5A</b>	Land-use policies based on relevant government guidance on air quality and related matters such as the promotion of sustainable transport and the location of retail and leisure development, were incorporated into Newham's adopted UDP (2001). UDP policy is a material consideration in the assessment of proposals for development.



Action Ref.	Action
<b>4.5B</b>	While current UDP policies will contribute towards the minimisation of air pollution emissions in the medium to long term and support related sustainable development objectives, they need to be developed and refined as part of future UDP review in the light of recent emerging government guidance (draft PPG23) and information contained within this Air Quality Management Plan. (In line with proposals 68 and 69 of the MAQS).
<b>4.5C</b>	The Council will produce Supplementary Planning Guidance on Sustainable Design which will address such issues as sustainable construction, the promotion of alternative energy use and energy conservation measures, all of which will impact indirectly on air quality. A guidance note will also be produced to advise developers on the land-use implications of this Air Quality Management Action Plan and other relevant air quality-related policies (In line with proposal 70 of the MAQS).
<b>4.5D</b>	Specific planning criteria will be developed to assess proposals for development in or adjoining identified air quality management areas / areas of existing / predicted exceedences.
<b>4.5E</b>	All major development proposals (to be defined) will need to be accompanied by transport and air quality assessments. If such proposals lead to an unacceptable breach of air quality objectives, this will be a material planning consideration, which may be grounds for a refusal of the application. However, the Council will usually seek the inclusion of mitigation measures where these can feasibly address the adverse impacts of development on public amenity and human health. These measures might include, for instance: the provision of improved public transport links to the developed site, development of a green travel plan for residents and employees, provision of minimum car parking space to discourage car use to and from the site, careful design, siting and layout of development to protect sensitive uses from the adverse impacts of traffic, include environmental buffers and other forms of effective screening. This list is not exhaustive - see 'Borough wide principles', 'Local Area Responses' and 'Area-based recommendations' (as detailed). (In line with proposal 67 of the MAQS)
<b>4.5F</b>	The council will adopt the area-based recommendations given for areas one to six (as detailed)
<b>4.5G</b>	With regards planning applications, if the development falls within the councils AQMA, a condition will be imposed. The condition will require that prior to the occupation of the site, a report detailing steps to minimise exposure to air pollution will be submitted. In addition, air quality implications of developments outside the AQMA are taken into account and appropriate conditions and planning obligations are imposed. (In line with proposals 71 and 72 of the MAQS)

<b>4.6</b>	<b>Corporate Procurement: Proposed Actions</b>
<b>4.6A</b>	The council will consider sustainability and environmental issues as important criteria in any procurement providing that the cost or availability does not prejudice service delivery
<b>4.6B</b>	<p>The councils key environmental procurement objectives are to reflect the Council's commitment to sustainable development through the goods and services it procures and will seek to:-</p> <ul style="list-style-type: none"> <li>• minimise the consumption of non-renewable resources;</li> <li>• procure goods and services which are least harmful to the environment;</li> <li>• achieve and promote best practice with regard to purchasing and sustainable development.</li> </ul> <p>In order to achieve this the Council will:-</p> <p style="text-align: right;">continued overleaf</p> <ul style="list-style-type: none"> <li>▪ consider value for money in terms of durability, economy of operation and disposal costs and not just initial purchase price;</li> </ul>

Action Ref.	Action
4.6B cont.	<ul style="list-style-type: none"> <li>▪ specify products: which are made from recycled materials, can themselves be recycled or re-used, which operate in an energy efficient manner and cause minimal damage to the environment in their production, distribution, use and disposal provided that quality and value for money are not compromised;</li> <li>▪ ban the use, by both the Council and it's contractors, of certain specified environmentally damaging products where an alternative product or method is available. These products are:-               <ul style="list-style-type: none"> <li>ozone depleting chemicals, timber which is not independently certified as originating in responsibly managed forests, pesticides on the UK "Red List" and EC "Black List" and peat and peat based products.</li> </ul> </li> <li>▪ establish and maintain policies and guidelines for products with a significant environmental impact.</li> <li>▪ include environmental considerations in all contract documentation and work with suppliers, service providers and contractors to improve environmental performance</li> <li>▪ share experiences with others and promote good environmental procurement practice.</li> </ul>