



Gravesham Borough Council
Local Air Quality Management –
Air Quality Strategy

June 2006

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Executive Summary

This Air Quality Strategy has been drawn up under the Local Air Quality Management regime by Gravesham Borough Council (GBC) in fulfilment of Government recommendations for local authorities. In compiling the Air Quality Strategy, Government guidance LAQM.PG (03) and guidance from the National Society for Clean Air has been referred to. The process of Local Air Quality Management (LAQM) review and assessment has been set down in Part IV of the Environment Act 1995, which forms part of the Government's response to European Directives on Air Quality to which the UK Air Quality Strategy responds.

The aims of the Air Quality Strategy are to address the wider air pollution issues in the Borough and prevent air quality deteriorating by taking action to improve air quality. The Air Quality Strategy will provide a framework for future air quality issues and encourage partnership working within the Council and with the County Council, neighbouring local authorities, health authorities, transport operators, local businesses, community groups and members of the public to deliver air quality improvements. The Strategy draws upon existing strategies and policies which are expected to have an impact on air quality and proposes a number of strategy policies which demonstrate Gravesham Borough Council's commitment to delivering cleaner air by leading by example and working jointly with others. The Strategy will be regularly reviewed by the Council to ensure that it is kept up-to-date with relevant policy changes and progress with policies shall be monitored through LAQM annual progress reports.

The strategy policies in this Air Quality Strategy are:

Policy 1: The Council will continue to fulfil its statutory duties under the Environmental Act 1995 Part IV Local Air Quality Management and meet the target deadlines for reporting as set by Defra.

Policy 2: The Council will implement the Council's Sustainable Travel Plan measures and encourage uptake of sustainable modes of transport. The Council will periodically review the Travel Plan and assess progress with achieving the targets set.

Policy 3: The Council will ensure that the recommendations to further improve emissions from the Council fleet will be fully considered and developments reported within air quality strategy progress updates.

Policy 4: The Council will continue to address its own energy usage within Council buildings through adoption of efficient energy practices and use of the best available technology to deliver energy savings.

Policy 5: The Council, in partnership with the other Kent local authorities, will continue to fulfil its statutory duties with respect to waste management and build upon its current achievements to meet the recycling and composting targets. The Council will ensure that air quality is integrated into the waste management option appraisal process.

Policy 6: The Council will monitor its procurement to ensure that the Council's Procurement Strategy aims are implemented and subsequent Procurement Plans

include appropriate consideration to environmental impacts and sustainability appraisal.

Policy 7: The Council will continue to work together with Kent County Council on sustainable transport issues within the Borough to secure necessary air quality improvements and encourage more sustainable transport modes to the car to prevent further deterioration in air quality.

Policy 8: The Council will ensure that the aims of the Air Quality Strategy are integrated into all relevant Council's policies and strategies, (including the Local Development Framework, Community Strategy and Corporate Plan) and that air quality policies are adopted which ensure that future air quality is protected and enhanced through sustainable development.

Policy 9: The Council will regularly review its Code of Construction Practice to ensure that changes in guidance are taken into account and the recommendations represent best practice.

Policy 10: The Council will continue to work closely with businesses and industries within the Borough to secure necessary air quality improvements and encourage more sustainable practices through uptake of Travel Plans and awareness raising initiatives through the Local Business Partnership.

Policy 11: The Council will continue to work together with Kent County Council on work with schools within the Borough to secure air quality improvements through the development of school Travel Plans and encouragement of sustainable practices.

Policy 12: The Council will continue to work together with the Kent Energy Centre to promote and implement energy efficiency measures in Gravesham. Gravesham Borough Council will work in partnership with Kent County Council to implement the Kent Strategy sustainable energy policies.

Policy 13: The Council will continue to work together with the Primary Care Trusts to promote and implement health initiatives in Gravesham and help deliver environmental improvements to secure public health benefits. Subsequent reviews of the Public Health Strategy will emphasise the link between air quality and health to raise awareness of the impacts of poor air quality.

Policy 14: The Council will make details of the Air Quality Strategy policies and review and assessment reports available on the Website to ensure broad access to the consultation and implementation process.

Policy 15: The Council will continue to work together with the Kent and Medway Air Quality Partnership on promotional activities to raise the profile of air quality in Gravesham.

1 Introduction and Aims of the Air Quality Strategy

1.1 Project Background

Gravesham Borough Council has drawn up, with the assistance of Bureau Veritas, a Local Air Quality Strategy for the Borough of Gravesham. The Government strongly recommend that all authorities consider drawing up a Local Air Quality Strategy as part of the local authority's responsibilities under the Local Air Quality Management regime.

Bureau Veritas has undertaken previous review and assessment reports for Gravesham Borough Council, which includes the Detailed Assessments and Air Quality Action Plans for the five Air Quality Management Areas in the Borough.

1.2 Legislative Background

Part IV of the Environment Act, 1995, places a statutory duty on local authorities to periodically review and assess the air quality within their area. This involves consideration of present and likely future air quality against air quality standards and objectives. Guidelines for the 'Review and Assessment' of local air quality were published in the 1997 National Air Quality Strategy (NAQS)¹ and associated guidance and technical guidance. In 2000, Government reviewed the NAQS and set down a revised Air Quality Strategy for England, Scotland, Wales and Northern Ireland² (AQS). This set down a revised framework for air quality standards and objectives for seven pollutants, which were subsequently set in Regulations in 2000 through the Air Quality Regulations 2000³. These were subsequently amended in 2002⁴.

Where it appears that the air quality objectives will not be met by the designated target dates local authorities must declare an Air Quality Management Area (AQMA) and develop Air Quality Action Plans to improve air quality and work towards achieving the air quality objectives.

Policy Guidance LAQM.PG (03) was published by the Government in 2003, which included guidance on the development of air quality strategies. The NSCA have published guidance 'Air Quality: Planning for Action (2001)' which include additional guidance on production of air quality strategies. These guidance documents have been taken into account in development of this Air Quality Strategy for GBC.

1.3 Aims of the Air Quality Strategy

The purpose of the Air Quality Strategy is:

- To address air pollution issues on a wider scale for all pollutants of concern to health, in addition to greenhouse gases
- To prevent air quality deteriorating within the Borough and take action to improve air quality
- To provide a framework for future air quality issues and review of new/revised Air Quality Objectives and EU Limits

¹ DoE (1997) The United Kingdom National Air Quality Strategy The Stationery Office

² DETR (2000) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland – Working together for Clean Air, The Stationery Office

³ DETR (2000) The Air Quality Regulations 2000, The Stationery Office

⁴ Defra (2002) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland: Addendum, The Stationery Office

- To encourage partnership working within the Council and with neighbouring local authorities
- To raise the profile of air quality in the local community and emphasise the role of the local authority in delivering cleaner air by leading by example
- To link together other local initiatives and strategies to achieve local emissions reductions.

1.4 Reporting of the Air Quality Strategy

The Air Quality Strategy reflects both the Council's responsibilities with respect to local air quality impacts within the Borough and joint responsibilities through partnership working with the County Council, neighbouring local authorities, health authorities, transport operators, local businesses, community groups and members of the public. Proposed air quality strategy policies are reported as a series of commitments by the Council to lead by example and work in partnership with the community to improve local air quality.

2 Impact of Air Pollution on Health and the Environment

The Committee on the Medical Effects of Air Pollutants (COMEAP) advise Government on the extent of health effects of air pollutants. COMEAP have estimated that in the UK the deaths of between 12,000 and 24,000 vulnerable people may be brought forward and between 14,000 and 24,000 hospital admissions and readmissions may be associated with short-term exposure to air pollution.

Table 1 sets out the potential adverse impacts on health of individual pollutants included within the scope of Local Air Quality Management (LAQM). With respect to LAQM in Gravesham, the main pollutants of concern to health have been identified as nitrogen dioxide and fine particulates due to road traffic emissions and, in Northfleet Industrial Area, fugitive dust emissions from industrial processes.

Table 1 Summary of Air Pollution Health Effects

Pollutant	Health effects
Nitrogen dioxide	Causes respiratory illnesses and possibly increases the risk of lung infections. Young children and people with asthma are the most sensitive to this pollutant.
Sulphur dioxide	Sulphur dioxide is an irritant and can cause a feeling of chest tightness and a narrowing of the airways. Those who suffer from asthma are more sensitive than other people. It can aggravate existing bronchitis.
Fine particles (PM ₁₀)	Fine particles have been linked with a number of respiratory illnesses, including asthma. Of more concern is that long-term exposure to fine particles has recently been found to cause premature death from heart disease and lung disease. Fine particles may also cause lung cancer, since cancer-causing compounds found in exhaust fumes attach themselves to the surface of the particles, which may then be breathed into the lungs.
Ozone	Ozone is a toxic gas which can cause damage and irritation to the lungs and air ways. Damage is increased when taking exercise, but the effects are not permanent. Asthmatics are not thought to be more sensitive to ozone, although it is possible that ozone may make people more sensitive to pollens and allergens.
Carbon monoxide	This pollutant can deprive the blood of oxygen and can cause headaches, dizziness, nausea and at very high levels, death. Elderly people, pregnant women, young children and people with heart disease and lung disease are more sensitive to carbon monoxide.
Volatile organic compounds	Includes some compounds which are either known or thought to cause cancer. Two compounds which are known to cause cancer are benzene and 1,3-butadiene.
Lead	Children are the most sensitive to lead poisoning. Exposure to lead is thought to cause behavioural problems, lower learning ability and lack of concentration.

With respect to adverse impacts of pollution on vegetation and ecosystems, the main pollutants have been identified as sulphur dioxide, nitrogen oxides and ozone. EU Directive Limit values have been set for sulphur dioxide and nitrogen oxides with respect to vegetation and these are UK national objectives i.e. outside the Local Air Quality Management considerations. Nitrogen oxides can cause adverse effects at elevated levels including leaf or needle damage and reduced growth. Sulphur dioxide can cause degradation of chlorophyll, reduced photosynthesis, raised respiration rates and changes in protein metabolism.

With respect to the wider environment and potential climate change impacts, the release of greenhouse gases, particularly carbon dioxide, into the atmosphere from industrial activities, energy generation and traffic emissions is of particular concern. Climate change is expected to lead to more extreme weather conditions, wetter winters with subsequent flooding issues, hotter and drier summers leading to water resource issues, and rises in sea levels with potential flooding and increased coastal erosion.

3 Overview of Air Quality in Gravesham

The main source of air pollution in the Borough is road traffic emissions from major roads, notably the A2 Trunk Road and a number of strategic urban roads through Gravesend town centre. In addition, 'fugitive' dust emissions from industrial processes in the Northfleet Industrial Area have been shown to be a problem in a localised area. Other pollution sources, including commercial and domestic sources, also make a contribution to background pollution concentrations.

The Local Air Quality Management (LAQM) review and assessment process to date within the Borough is summarised below.

3.1 The First Round of Review and Assessment of Air Quality

Gravesham Borough Council undertook the first round of review and assessment (the 'First Round') between 1998 and 2001. The First Round was a three-stage process, which assessed the sources of seven air pollutants of concern to health: Benzene, 1,3 butadiene, carbon monoxide, lead, nitrogen dioxide (NO₂), fine particulates (PM₁₀) and sulphur dioxide. The conclusions of the First Round were that it was expected that all Air Quality Objectives were expected to be met with the exception of NO₂ and PM₁₀. The first round results showed exceedences of the 2005 nitrogen dioxide Objectives and the 2004 PM₁₀ Objectives. These were predicted at relevant receptors bordering the A2 corridor through the Borough and exceedences of the 2004 PM₁₀ objective were predicted within the Northfleet Industrial Area. This resulted in the declaration of two Air Quality Management Areas (AQMAs):

- The 'A2 Trunk Road AQMA' for nitrogen dioxide and PM₁₀ largely due to road traffic emissions from the A2.
- The 'Northfleet Industrial Area AQMA' for PM₁₀ largely due to 'fugitive' (uncontrolled) emissions from industrial processes in and surrounding the area.

An Air Quality Action Plan was drawn up in 2003 to improve air quality in the AQMA areas. Measures were proposed that would directly impact on the AQMAs, in addition to general Borough wide measures to encourage modal shift to walking, cycling and public transport. The PM₁₀ and NO₂ objectives (2004/2005) were assessed as unlikely to be met without immediate intervention by the Highways Agency through direct measures for the A2 Trunk Road AQMA and the major industrial operators for the Northfleet Industrial Area AQMA. While Gravesham Borough Council can implement a number of measures in the short term which will lead to air quality improvements, the current proposals by the Highways Agency, for realignment of the A2 Trunk Road, and industrial process operators (notably Lafarge Cement UK) for the Northfleet Industrial AQMA are longer-term goals (~2008) and will not achieve the Objectives by their target dates. As such, without additional measures, the achievement of the Objectives is a long-term goal of the Council for which annual updates are provided through air quality progress reports.

3.2 The Second Round of Review and Assessment of Air Quality

The Updating and Screening Assessment (2003) was the first phase of the second round review and assessment. Similar to Stage One of the previous round, there was consideration of the seven pollutants of concern to health and an assessment was made as to whether Air Quality Objectives for these pollutants would be met. Gravesham Borough Council completed this in July 2003, with the conclusion that a Detailed Assessment was required for NO₂ due to emissions from road traffic on the Gravesend Town Centre one-way system, four heavily trafficked junctions ((1) Wrotham Road/Old Road West (2) Parrock Road/Old Road East (3) Old Road West/Pelham Road (4) Perry Street/Vale Road) and the A226 through Northfleet. All other Air Quality Objectives are expected to be met.

The Detailed Assessment (2004) and subsequent Addendum Report considered the nitrogen dioxide (NO₂) annual mean objective at the six locations identified in the Updating and Screening Assessment, through dispersion modelling using ADMS-Roads and additional monitoring undertaken at relevant receptor locations.

The results showed that there were predicted exceedences of the NO₂ annual mean Objective identified at the nearest receptors within three of the areas that underwent Detailed Assessment: A226 One-way system Gravesend, B262/B261 Pelham Arms Junction, and A227/B261 Wrotham Road/Old Road West Junction.

The Detailed Assessment concluded that Gravesham Borough Council should consider declaring Air Quality Management Areas (AQMAs) on the basis of the potential exceedences in the assessment areas as highlighted in the Detailed Assessment Report where exposure criteria are fulfilled. Gravesham Borough Council declared the three further areas as AQMAs on 1st April 2005 and are currently drawing up action plans to improve air quality within these areas.

4 The Council's Contribution to Improving Air Quality

The Government is keen that local authorities demonstrate their commitment to delivering cleaner air through their local air quality strategies by leading by example and acting as a catalyst for encouraging others to consider their impact on the environment and help bring about improvements in local air quality.

4.1 Local Air Quality Management

4.1.1 Review and Assessment

Gravesham Borough Council has undertaken the first and second rounds of review and assessment between 1998 and 2005. The first round concluded with the declaration of two Air Quality Management Areas: the A2 Trunk Road AQMA and the Northfleet Industrial AQMA and an Action Plan is in place to improve air quality in these areas. The results of the second round of review and assessment showed further exceedences of the Air Quality Objectives and three additional AQMA areas were declared due to road traffic emissions: A226 One-way system Gravesend, B262/B261 Pelham Arms Junction, and A227/B261 Wrotham Road/Old Road West Junction. The Action Plan and Further Assessment for these AQMA areas are currently being finalised.

The third round of review and assessment has already begun, with the first phase, the Updating and Screening Assessment, to be completed by April 2006. The Council will continue its commitment to Local Air Quality Management through the subsequent review and assessment phases.

4.1.2 Monitoring Network

Gravesham Borough Council has two air quality monitoring stations within the Borough: one at a roadside site along the A2 at Painters Ash School (grid reference x=562613, y=172075) and the other at an industrial background site at Lawn County Primary School in Northfleet (grid reference x=562143, y=174387). These were installed in January 1999 to more accurately assess levels of NO₂, PM₁₀ and sulphur dioxide. There are triplicate NO₂ diffusion tubes co-located at the sites, which provide data for the bias adjustment of the passive diffusion tube monitoring network.

In addition to the continuous monitoring, Gravesham Borough Council currently operates 53 NO₂ diffusion tubes sites within the Borough at relevant locations including the AQMA areas and background sites.

These sites provide valuable information in support of the air quality review and assessment process and enables progress with the implementation of action plans and strategies to improve air quality. The Council will continue its commitment to the monitoring of air quality at relevant sites as part of its responsibilities under Local Air Quality Management.

Policy 1: The Council will continue to fulfil its statutory duties under the Environmental Act 1995 Part IV Local Air Quality Management and meet the target deadlines for reporting as set by Defra.

4.2 Local Agenda 21 Strategy

LA21 originated from the Earth Summit in Rio de Janeiro in 1992. It incorporates the concept of sustainable development – meeting current needs without compromising the needs of future generations. The LA21 process enables communities to take an active role in conserving their local environment and improving their quality of life. GBC finalised its LA21 Strategy in May 2001 and this set out objectives and actions which can be tied in directly with the Air Quality Action Plan aim to improve local air quality.

These objectives include actions to:

- promote sustainable development of land within the Borough;
- ensure that energy efficiency of all housing within the Borough is improved;
- minimise the impact of all human activities undertaken within Gravesham on the environment;
- work towards a more efficient and integrated transport system;
- reduce traffic and congestion through its land use policies; and
- promote the movement of people by public transport, walking and cycling thereby improving air quality and health.

The LA21 Strategy objectives have now largely been incorporated into the Kent Thameside Community Strategy and GBC Corporate Plan discussed in later sections.

4.3 Gravesham Borough Council's Sustainable Travel Plan

A Travel Plan is a general term for a package of measures tailored to the needs of an organisation to introduce greener, cleaner and sustainable travel choices and reduce the reliance on the car. It involves the development of a set of mechanisms, initiatives and targets that together can enable an organisation to reduce the impact of travel and transport on the environment. This will include the consideration of alternative fuels.

Gravesham Borough Council is a major employer in the Borough and accepts responsibility for the impact of Council generated traffic on the environment and on local travel conditions. The Council approved the development and implementation of a sustainable Travel Plan to help manage and reduce that impact and to improve travel choices for staff.

A staff survey was undertaken in 2001, which was used to assess the modes of business travel and commuting and gauge support for potential travel plan options. The Travel Plan is being reviewed in 2006 by Planning and Regeneration Services and new targets will be set at this time. Options provided within the travel plan include:

- **Car Sharing**
This has been implemented as an informal scheme within the Council, but will be extended through the KCC Kent Car Share Scheme, which GBC has signed up to.
- **Interest Free Season Ticket Loans**
As an incentive to encourage staff to use public transport, season ticket loans are available.
- **Pool Bikes**
For those staff requiring transport for business use, a number of pool bikes are available.

- Home working
A home working policy has been developed by the Council to enable improved scope for home working for staff.

Policy 2: The Council will implement the Council's Sustainable Travel Plan measures and encourage uptake of sustainable modes of transport. The Council will periodically review the Travel Plan and assess progress will achieving the targets set.

4.4 Greening the Council's Fleet

In considering the Council's own contribution to improving air quality, and to lead by example, it is recommended that consideration be given to the Council's own fleet emissions and those of their contractors. Many local authorities already run their own vehicles and those of their contractors on alternative fuels and have a programme of fleet renewal to ensure that emissions improve with time.

Gravesham Borough Council currently has a small number of electric vehicles within their fleet and use ultra-low sulphur diesel (ULSD), in addition to ensuring vehicles are appropriately maintained and that emissions meet the legal standards.

To help monitor and ensure continued progress with improving emissions within the Council fleet, the following recommendations will be considered:

- A fleet register will be maintained with information held on all the vehicles in the fleet, including the type of vehicle, age, fuel type/use, maintenance/service history;
- A rolling programme of vehicle renewals will be undertaken to consolidate technological advances within the fleet;
- Specifications of continuous regenerating traps (CRTs) and a minimum of Euro 3 compliant engines on new heavy commercial vehicles;
- Minimum specifications will be introduced into service contracts with outside contractors;
- Consideration will be made to the availability of grants (EST) for retrofitting CRTs to existing vehicles.

Policy 3: The Council will ensure that the recommendations to further improve emissions from the Council fleet will be fully considered and developments reported within air quality strategy progress updates

4.5 Energy Management

Gravesham Borough Council has a Green Housekeeping Policy, which includes measures to reduce energy consumption in all its buildings. A number of measures to increase energy efficiency in Council buildings have been undertaken, including an ongoing programme to replace light fittings with more energy efficient fittings and the purchase of 'green electricity' renewable energy. Future initiatives include fitting computer-controlled lighting whereby sensors will allow lighting to be switched off automatically if no movement is detected for long periods. In the meantime, staff are encouraged to adopt energy efficient practices at work by ensuring lighting and appliances are not left on unnecessarily.

Policy 4: The Council will continue to address its own energy usage within Council buildings through adoption of efficient energy practices and use of the best available technology to deliver energy savings.

4.6 Waste Strategy

The Government's Waste Strategy (2000) and subsequent Guidance on Municipal Waste Management Strategies (2001) sets out the framework for municipal waste management and sets challenging statutory recycling targets for local authorities with the aim of meeting the national recycling target of 25% by 2005. A statutory local recycling target of 33% for 2005/6 has been set for Gravesham Borough Council and is one of the Council's Best Value Performance Indicators.

In response to requirements of the National Waste Strategy, the Kent Waste Forum, a partnership of all collection and disposal authorities in Kent, has produced a Kent-wide Waste Strategy. This Strategy sets out the recycling targets for local authorities and actions to be taken to achieve these to reduce waste and reduce the reliance on landfill disposal. By 2006/7 Kent authorities aim to be recycling and composting approximately 40% of waste with the rest being split equally between thermal treatment and landfill disposal.

Since the recycling targets were set, Gravesham Borough Council has considered the options for achieving the targets and set policies accordingly. The Council has established a clear bag recycling scheme Borough wide which has had an excellent uptake by Gravesham residents. The Council also continues its policy of environmental education encouraging Gravesham residents to carry out waste minimisation, recycling and home composting wherever possible. Joint initiatives are held with Kent County Council's War on Waste and a Waste/Community Action Forum has been established in Gravesham to enable members of the public to directly contribute towards the overall direction, policy and management of wastes.

A waste facility which will remove recyclables from the waste stream prior to turning residual waste into energy has been developed at Allington. This is due to be operational in early 2006 and will deal with household waste from a number of Kent local authorities including Gravesham.

Policy 5: The Council, in partnership with the other Kent local authorities, will continue to fulfil its statutory duties with respect to waste management and build upon its current achievements to meet the recycling and composting targets. The Council will ensure that air quality is integrated into the waste management option appraisal process.

4.7 Procurement Strategy

The most recent Gravesham Borough Council Procurement Strategy was completed in February 2005. This Strategy was an update on the previous Strategy undertaken in 2001 and takes into account more recent changes in procurement practice originating from the Egan, "Rethinking Construction" agenda (1998), the Byatt Report,

“Delivering Better Services for Citizens” (2001) and the National Procurement Strategy (2003).

The Procurement Strategy has been linked closely with the aims of the Gravesham Corporate Plan, including consideration to sustainability issues and environmental impact:

- ensure procurement processes balance cost with quality and deliver services that are sustainable, innovative and structured to seek continuous improvement;
- ensure that the procurement process promotes and supports key Council policies which include diversity and equality, health and safety, employment, customer services and the environment;
- ensure that the procurement process incorporates the inclusion of sustainable design and environmental issues into technical specifications as appropriate.

The Strategy includes the development and publication of annual Procurement Plans and the development of processes through the tendering mechanism to allow bidders to be informed about how they will support the objectives of the Corporate Plan, including those referred to above.

The Council's effective management of its supplier and contractor database is considered central to it having the capacity to select quality service providers. The Council will continue to use the existing or a similar supplier accreditation process to ensure the quality and capacity of its supplier base.

The Strategy will be reviewed by the Procurement Manager at least once a year on a formal basis to ensure that it is consistent and relevant to the National Procurement Strategy, best practice procurement and the Council's Corporate Policy objectives.

Policy 6: The Council will monitor its procurement to ensure that the Council's Procurement Strategy aims are implemented and subsequent Procurement Plans include appropriate consideration to environmental impacts and sustainability appraisal.

5 Sustainable Transport

5.1 Kent Local Transport Plan

The White Paper 'A New Deal for Transport' set out new policy initiatives to create a better, more integrated sustainable transport system. This included greater emphasis on public transport, and cyclist and pedestrian accessibility, with initiatives such as Safer Routes to School, Green Transport Plans and Quality Partnerships between the local authority and transport operators. This was to be achieved through Local Transport Plans (LTP) with a five-year strategy for the implementation of local and regional transport measures. LTPs are required to be consistent with County Structure Plans, to ensure consistency and sustainability in transport proposals. KCC in partnership with the District authorities has developed the LTP for Kent. LTP strategies and initiatives are likely to have a significant impact on local air quality and therefore need to be closely co-ordinated with Air Quality Action Plans.

Kent County Council has submitted its Provisional 2nd LTP to DfT. This document publicises the main proposals for the 2nd LTP (2006/07 – 2010/11), which includes air quality as one of four shared priorities (which is closely linked to 'congestion', also a shared priority). The Provisional 2nd LTP was completed in July 2005, and the final LTP is due to be completed by the end March 2006. The final Plan will include a full sustainability appraisal of all measures, including air quality impacts.

Relevant proposed schemes likely to have both a direct and indirect impact on local air quality within the Borough, including the AQMA areas are incorporated within the 2nd LTP and form the foundation for the recent Air Quality Action Plan relating to the local road network in Gravesend. These include measures expected to have a direct impact on air quality in the AQMA areas (as listed below), in addition to Borough wide 'smarter' measures, such as improvements to walking and cycling facilities and promotion of uptake of Travel Plans for schools and businesses to encourage modal shift.

- Traffic rerouting using VMS
- HGV rerouting
- New road infrastructure (Rathmore Link Road)
- Traffic Management (UTMC and junction improvements)
- Pedestrianisation of King Street
- Improve emissions standards for Public Service Vehicles
- Road prioritisation (Bus priority)
- Public transport improvements (Including Fastrack* and Gravesham station improvements)
- Development of a car parking strategy

**Fastrack* is the working name for a new bus-based public transport network for Kent Thameside. It is planned to have core express routes, feeder routes and rural links connecting most of the major existing and new developments in the Dartford and Gravesham areas. It aims to provide fast, reliable, frequent and accessible public transport. Completion of the first phase is due in 2006 which will run from Home Gardens to Greenhithe Railway Station via Darent Road, Leigh City Technology College, Darent Valley Hospital and Bluewater shopping centre. Fastrack development will help encourage future sustainable developments and therefore control future congestion on the existing road network in Kent Thameside.

Policy 7: The Council will continue to work together with Kent County Council on sustainable transport issues within the Borough to secure necessary air quality improvements and encourage more sustainable transport modes to the car to prevent further deterioration in air quality

6 Land Use Planning

There are a number of related land use policies and strategies at the local and regional level that can be tied in directly with the aims of the Air Quality Strategy, and will help contribute to overall improvements in air quality across the Borough.

6.1 Local Plan / Local Development Framework

The Planning and Compulsory Purchase Act 2004 has introduced a new national planning system which has seen Local Plans replaced by Local Development Frameworks (LDFs) which will comprise of a series of inter-related Local Development Documents (LDDs). The aim is for all local planning authorities to have Local Development Frameworks in place by 2007. The new proposals are intended to speed the plan-making process up by producing more focused, flexible, and slimmer plans. A Strategic Environmental Assessment/ Sustainability Appraisal needs to be undertaken alongside plan preparation and also a Statement of Community Involvement. This Statement will identify how the Council intends to consult on the plan, in particular engaging those groups that are traditionally hard to reach.

The new Act makes transitional arrangements for local planning authorities to transfer from local plans to LDFs. Current adopted local plan policies can be “saved”, which means that they can still be used as the statutory basis for determining planning applications.

The Gravesham Local Plan First Review (November 1994) is the current adopted Local Plan but it does not include any policies on air quality. However, the Gravesham Local Plan Second Review (Deposit Version) includes the following policy, although it has limited weight because the Review was not completed in view of the introduction of the LDF system.

Air Quality

‘Policy NE16 Development likely to result in emissions to air, by reason of its operational characteristics or the traffic generated by it, will require the submission of details to enable a full assessment of the impacts on air quality to be carried out. Such development will only be allowed if it does not have an unacceptable effect on health, amenity or the natural environment, taking into account the cumulative effects of other existing and proposed sources of air pollution in the vicinity. In making such an assessment, consideration will be given to whether or not the development would cause current national air quality standards to be exceeded.’

The above air quality policy has been adopted for development control purposes and will be a material consideration in the determination of planning applications. No objections were received at the first deposit stage of the Local Plan Review, only a request for clarification. However, four provisional policies have been drawn up to ensure air quality is appropriately considered in the evolving development planning process. These policies will be taken forward as part of the new Gravesham Local Development Framework. (GLDF)

Air Quality: Minimisation of Pollutants Development proposals will only be permitted where they are sited and designed to minimise the emission of air pollutants and the impact of air pollutants on the local environment.

Air Impact Assessments Development proposals that give rise to a potentially polluting activity, including the emission of dust, will only be permitted where they are accompanied by an assessment of the potential impact of the proposal on local air quality arising either from the operational characteristics of the development or the traffic generated by it.

Development in Air Quality Management Areas Development within an Air Quality Management Area will only be permitted if it can be demonstrated that the resulting long-term air quality situation will be satisfactory, and that short and medium term impacts can be minimised to an acceptable level.

Development sensitive to Air Pollution Development which would be sensitive to adverse levels of air pollution will not be supported where such conditions exist, or are in prospect, and where mitigation measures would not afford satisfactory protection.

The following policies are also included in the Gravesham Local Plan Second Review (Deposit Version) and their status is as explained above. They will also be taken forward as part of the new GLDF.

Energy Efficiency

Policy NE24 New build development will only be allowed where it will give optimal energy efficiency through site layout, orientation, form and design.'

Location of Development

Policy T1 In considering development proposals, the Local Planning and Highways Authorities will consider the impact of the generated travel demand on the transport system as a whole and on the environment. Contributions towards the improvement of public transport provision and highways will be required, depending on the scale, location and local circumstances of the proposal. Major development will be required to provide Travel Assessments, including a Parking Strategy and Green Travel Plan.

Policies T2 – T6 relate to the safeguarding of land for and encouragement of public transport improvements, including the Fastrack rapid transit network and the Gravesend Station Public Transport Interchange, and the Channel Tunnel Rail Link and Ebbsfleet International and Domestic Stations. With major development proposed in the Kent Thameside area, the improvement of public transport facilities and encouragement of uptake will be essential to minimise the impact on air quality.

Cycling

Policy T7 The Borough Council will encourage the use of cycles as a means of travel for short and medium distance trips and for recreation and, to this end, will seek to implement a network of cycle routes throughout the Borough. It will work with all relevant agencies and funding sources to achieve this, as part of the Green Grid. In particular, it will encourage the completion of National Cycle Route 1 and protect this route from any development which would prejudice it.'

Walking

'Policy T8 The Borough Council will encourage walking as a means of travel for short distance trips and recreation. It will encourage the maintenance and enhancement of the network particularly in the context of the development of the Green Grid.'

Freight

'Policy T14 The Borough Council will seek to encourage commercial traffic to use the most appropriate routes to reach the trunk road network. Any major new development which generates a significant volume of commercial traffic will require the production of a traffic assessment on how it can be acceptably handled, given the other policies and proposals of this Local Plan Review. Transportation by rail and water will be encouraged.'

Construction Traffic

'Policy T15 Developers of sites which will generate large volumes of construction traffic will be expected to produce Traffic Management Plans and to co-ordinate these with the relevant agencies and other developers who may be having an impact on the transport routes concerned. Use of rail and water transport will be encouraged where compatible with other policies.'

6.2 Gravesham Local Development Framework

Gravesham Borough Council is currently drawing up its Local Development Framework (LDF) in response to new planning laws. The LDF will replace the Gravesham Local Plan (Second Review), but the comments received through the Local Plan consultation process have been taken into account when preparing the new Local development Framework. Because the new system is based on the development of sustainable communities, it is broader in outlook than the Local Plan and provides an ideal framework for putting into action the aims and vision of the Kent Thameside Community Strategy and Gravesham Borough Council Corporate Strategy. The first documents to be prepared are the Core Strategy and the Site Specific Development Allocations. There will also be an annual public report to monitor progress on the Local Development Framework.

A consultation leaflet was produced early in 2005 outlining the key issues to be addressed through the Local Development Framework and seeking the views of the community. Gravesham as part of Kent Thameside has been identified by the Government as a priority location for long-term sustainable economic, social and environmental regeneration. The main focus of the Local Development Framework is to enable the provision of high quality development and sustainable economic growth in the area, whilst meeting the aims of the Community Strategy and Corporate Strategy.

The Gravesham Local Plan Second Review incorporated relevant policies of the Kent Structure Plan and addressed air quality issues through specific policies as referred to above. The Council will similarly incorporate air quality policies within the Local Development Framework to ensure that future air quality is protected and enhanced through sustainable development.

6.3 Kent Thameside Community Strategy (2003)

The Community Strategy (2003) has been drawn up for Kent Thameside, which includes the Boroughs of Gravesham and Dartford, by the Kent Thameside Local Strategic Partnership. The Strategic Partnership includes representatives from the Borough Councils, as well as a wide range of community organisations. The

Environment is listed as a key issue within the Strategy and the Strategy promotes sustainable development and transport in the area. The key points of action and strategic targets proposed for the environment are outlined below.

Kent Thameside Community Strategy - Key Points for Action

Energy Conservation, Emissions and Cost

We will promote action to improve energy conservation and reduce harmful emissions in housing, buildings, transport and all forms of machinery and appliances through a range of measures, including education, regulation and where appropriate, direct support. Through private sector renewal policies and the achievement of Decent Homes, those on low incomes will be assisted in combating fuel poverty and, at the same time, minimising energy use.

Waste Minimisation & Re-cycling

Kent Thameside has a strong commitment to increasing the proportion of household waste that is recycled through household collection schemes and other measures. In addition, the new developments will create opportunities for innovation in reducing and recycling waste (e.g. rainwater recycling), and this will be strongly encouraged in discussions with developers and the utility companies.

Air Quality

We will act to address local air quality issues where necessary and traffic pollution in particular. This will include promotion of clean fuel technology, Green Travel Plans and influencing the pattern of developments to help reduce the numbers of dwellings impacted by poor air quality. In addition, we will continue to work with firms to monitor and control industrial emissions.

Strategic Targets

Regeneration and Transport

1. Between 2002 and 2010, to facilitate the creation of a net 20,000 new jobs and 10,000 new homes - typified by high standards of design and landscaping on Kent Thameside's major regeneration sites, with Fastrack and Green Grid components forming integral elements;
2. By 2010 to secure substantial improvements to Kent Thameside's public transport, including the introduction of CTRL international and domestic services; new cross-London rail services; a major upgrading of the North Kent Line; completion of at least 25 kilometres of the *Fastrack* network; and substantial further improvements to the bus network and services;
3. By 2005 to have developed and commenced the implementation of Action Plans for the continuing renaissance of Dartford and Gravesend Town Centres alongside the newer centres at Bluewater and Ebbsfleet; and by 2010 to demonstrate further significant improvements in a range of indicators, including retail turnover, commercial floorspace, visitor numbers and crime levels.

The Environment

1. Co-operate with government and national agencies to work towards achieving the National Air Quality Strategy Objectives;
2. To increase the percentage of household waste recycled or composted to 20% by 2006 (17% by 2004);
3. To complete and make available an increase in planned open space and links between them as part of Green Grid (detailed target to be developed within 12 months).

6.4 Gravesham Borough Council Corporate Plan (2003 – 2007)

The Corporate Plan outlines a four-year programme which includes challenging targets aimed at improving the quality of life in Gravesham. The Corporate Plan sets out how Gravesham Borough Council will take forward the actions proposed in the Community Strategy for the local area. With regard to air quality, the Plan includes targets to ensure sustainable development of proposed major development sites, such as Ebbsfleet Valley, North East Gravesend and Lord Street/Parrock Road/Eden Place area, in addition to securing a dramatic improvement in public transport, notably through the Fastrack rapid transit network which will link the new developments to urban centres and transport interchanges.

Policy 8: The Council will ensure that the aims of the Air Quality Strategy are integrated into all relevant Council's policies and strategies, (including the Local Development Framework, Community Strategy and Corporate Plan) and that air quality policies are incorporated which ensure that future air quality is protected and enhanced through sustainable development.

6.5 Draft Kent and Medway Structure Plan

The Deposit Draft Kent and Medway Structure Plan was published in September 2003 and is due to be adopted in May 2006, following consultation. The adopted Plan will take on board consultation comments, the Examination in Public and the Inspector's Report. The Structure Plan policies will provide the foundation for the Gravesham Local Development Framework, together with the emerging South East Plan. This will replace the Structure Plan when adopted.

There are three policies relating to air quality in the Deposit Draft Structure Plan.

Policy NR4: Pollution Impacts

The quality of Kent's environment will be conserved and enhanced. This will include the visual, ecological, geological, historic and water environments, air quality, noise and levels of tranquility and light intrusion. Development should be planned and designed to avoid, or adequately mitigate, pollution impacts. Proposals likely to have adverse implications for pollution should be the subject of a pollution impact assessment. In assessing proposals local authorities will take into account:

- a) Impact on prevailing background pollution levels; and
- b) The cumulative impacts of proposals on pollution levels; and
- c) The ability to mitigate adverse pollution impacts; and
- d) The extent and potential extremes of any impacts on air quality, water resources, biodiversity and human health.

Development which would result in, or significantly contribute to, unacceptable levels of pollution, will not be permitted.

Policy NR5: Development Sensitive to Pollution

Development which would be sensitive to adverse levels of noise, air, light and other pollution, will not be supported where such conditions exist, or are in prospect, and where mitigation measures would not afford satisfactory protection.

Policy NR6: Air Quality Management Areas

The local authorities are required to:

- a) review and assess air quality and, where necessary declare Air Quality Management Areas.
- b) work towards improving air quality in Air Quality Management Areas through preparation of an Air Quality Action Plan.

The scale and character of development in, or adjoining such areas, should be controlled so as not to adversely affect this improvement.

7 Working With Businesses and Industries to Improve Air Quality

7.1 Local Businesses

7.1.1 Company Travel Plans

Kent County Council has set up a dedicated travel planning team. The focus to date has largely been on school travel plans, and targets have been met. The remit of the team also includes the Kent County Council Travel Plan and Company Travel Plans, and the team is currently drawing up a Travel Plan for the new Kent Highways Service's office. Once this has been agreed, the Travel Plan will be used to promote good practice with businesses.

The priorities for Company Travel Plans for 2005/6 are Canterbury, Maidstone and Tunbridge Wells, as there are existing interested organisations in these places and these are considered to be the worst traffic and congestion problems areas. However, initiatives will be expanded into other areas over time, including Gravesham, as resources allow.

In addition to the County Council's ongoing work, Gravesham Borough Council secures agreements with developers to implement sustainable Travel Plans for major new developments in the area through local planning policies.

7.1.2 Gravesham Local Business Partnership

The Gravesham Local Business Partnership has been created to provide a business-friendly approach to regulations enforcement and to assist businesses with achieving compliance. To ensure that business have the necessary help, advice and guidance to be self compliant by provision of guidance notes, seminars and training sessions. Gravesham Local Business Partnership provides a forum for discussion on service standards, complaints, appeals and guidance on regulations and enforcement policy. The partners include: Gravesham Borough Council, Kent County Council, Kent Fire & Rescue Service, Kent Police, Enterprise Agency of North Kent, Town Centric, Groundwork, HM Revenue and Customs, North West Kent College, Port of London, and Gravesham Chambers of Commerce. A Local Business Partnership newsletter is produced called "Cutting the tape".

Gravesham Council works through the Local Business Partnership to offer advice and information to businesses in respect of all its services. The Council have signed up to the Government's Enforcement Concordat which includes the Principles of Good Enforcement: Standards, Openness, Helpfulness, Complaints Procedure, Proportionality and Consistency.

The Gravesham Local Business Partnership provides a potential forum to encourage improvements in air quality in the commercial sector through uptake of travel plans, promotion of alternative fuels and greening commercial transport fleets, advice on available grants (e.g. through the Energy Savings Trust) and encouraging sustainable practices, such as through improved energy efficiency and procurement or implementing environmental management systems.

7.1.3 Code of Construction Practice

Gravesham Borough Council have developed a code of construction practice for all building sites, which is provided to developers to prevent unnecessary nuisance including fugitive dust emissions which can lead to elevated fine particulate levels. The code of practice outlines in brief the expected dust suppression requirements and daily log book requirements.

Since the development of the code of construction, there has been additional guidance from the Buildings Research Establishment, 'Control of Dust from Construction and Demolition Activities' (2003) and 'Controlling particles, vapour and noise pollution from construction sites' (2004) which sets out good practice with respect to building sites. The London working group on Air Pollution Planning and the Environment (APPLE) have also produced a comprehensive Code of Practice in 2005, which provides additional information on good practice.

Gravesham Borough Council Code of Construction Practice should be reviewed and updated to ensure that the code of practice takes into account new guidance and best practice with respect to dust management at building sites. This will make clear the requirements of best practice to developers and help ensure that dust and fine particulate levels are kept to a minimum.

Policy 9: The Council will regularly review its Code of Construction Practice to ensure that changes in guidance are taken into account and the recommendations represent best practice.

7.2 Industrial Processes

Prescribed Industrial Processes are regulated by Gravesham Borough Council and the Environment Agency under the Environmental Protection Act 1990 Part I A and B and subsequent Pollution and Prevention Control Regulations 2000. There are 28 prescribed Part B Processes in Gravesham regulated by Gravesham Borough Council and three A1 Processes (Lafarge Cement UK (formerly Blue Circle Industries), Kimberley Clark and Britannia Refined Metals Ltd) regulated by the Environment Agency.

Fugitive dust emissions from industrial processes in the Northfleet Industrial Area have been shown to be a problem in localised area which has been declared an Air Quality Management Area due to predicted exceedences of the 2004 PM₁₀ Objectives. An Air Quality Action Plan has been adopted for this AQMA which includes direct measures to improve air quality in the area. These measures involve partnership working with industrial processes in the area, notably with Lafarge Cement UK, to address fugitive dust emissions.

With regard to nuisance emissions from unregulated processes, Statutory Nuisance is enforced by Environmental and Public Health Services under the Environmental Protection Act 1990 Part III and this controls smoke, dust, fumes or gas emissions from commercial and domestic premises which are causing a nuisance or are prejudicial to health. Bonfire leaflets have been produced and these are distributed when nuisance smoke problems arise.

Policy 10: The Council will continue to work closely with businesses and industries within the Borough to secure necessary air quality improvements and encourage more sustainable practices.

8 Working With Schools to Improve Air Quality

8.1 Eco Schools

Eco Schools is an international programme which provides schools with a framework enabling them to assess their environmental impact and work to improve the environmental performance of the school e.g. through waste minimisation initiatives. Eco Schools promotes environmental awareness in a way that is linked to many curriculum subjects and involves the whole school and the wider community in environmental activities.

The process of becoming an Eco-school involves carrying out an environmental review to identify problem areas within the School, then developing action plans with environmental targets which the School will working towards achieving. The action plan targets are then monitored and evaluated, and awards can be gained for recognition of the work achieved.

There are 4 Eco Schools in Gravesham as listed below:

- Riverview Infant School
Cimba Wood
Gravesend DA12 4SD
- Shorne CEP School
Cob Drive
Shorne
Gravesend DA12 3DU
- Northfleet School For Girls
Hall Road
Northfleet
Gravesend DA11 8AQ
- Istead Rise Primary School
Downs Road
Istead Rise
Northfleet
Gravesend DA13 9HG

8.2 School Travel Plans

The 2nd LTP Objective is for all schools to have a school travel plan and increase the number of children walking and cycling to school by 2010. Annual funding allocations are made to support the 'Safer routes to school' schemes and support school Travel Plans. Kent County Council has appointed a School Travel Plan Advisor for West Kent to support schools with implementation of their Travel Plans. To date there are 10 school Travel Plans in the Gravesham area. These plans will be monitored annually by a hands up survey to see if there has been any modal shift. The 10 schools are listed below:

- Cobham Primary
- Istead Rise Primary

- St Johns Primary
- Northfleet School for Girls
- Singlewell Primary
- Culverstone Primary
- Whitehill Infants
- Whitehill Juniors
- Riverview Juniors
- St George's School

Over the next year, the following schools will be approached to start work on their school Travel Plans:

- Ifield Special School
- Riverview Infants
- Holy Trinity Primary
- St John's Secondary
- Raynehurst Infants
- Raynehurst Juniors
- Rosherville Primary
- Northfleet College of Technology
- Wrotham Road
- Vigo Village

Policy 11: The Council will continue to work together with Kent County Council on work with schools within the Borough to secure air quality improvements through the development of school Travel Plans and encouragement of sustainable practices.

9 Energy Management and Climate Change Initiatives

Defra has responsibility for tackling the causes of climate change, through reduction of the UK emissions of greenhouse gases, and managing our natural resources in a productive way. To meet these responsibilities Defra is leading on international climate change negotiations, promoting energy efficiency, reducing emissions from industry and business, developing alternatives to fossil fuels, and encouraging the protection and enhancement of carbon sinks such as forests. Defra has developed a Sustainable Development Strategy which sets out the actions to achieve this and sets a number of indicators to monitor progress e.g. energy use per household. Local authorities contribute to this through the promotion of energy efficiency in the domestic and commercial sectors and through design requirements for new developments e.g. through Kent Design best practice requirements and BREEAM/ECOHOMES standards.

Under the Home Energy Conservation Act (HECA) 1995, local authorities are required to submit to Defra annual progress reports on the local authorities HECA strategies which include energy efficiency measures to reduce household energy use and greenhouse gas (carbon dioxide) emissions. The measures proposed within the HECA strategy for Gravesham have to date achieved a 30% overall energy efficiency improvement since 1996 and led to a reduction of carbon dioxide emissions of 77646 tonnes per annum.

In 2005/6 Gravesham Borough Council, in partnership with the Kent Energy Centre, will build upon current initiatives with the following planned activities:

- Promotion of Energy Efficiency Renovation grants;
- Gravesham Borough Council Voluntary Accreditation Scheme will incorporate standards for heating and insulation;
- Incorporating ECOHOMES standard in local planning conditions for new residential build to ensure energy efficient design;
- Development of local renewables project;
- Promotion of 'Warmfront' scheme through Primary Care Trust promotion;
- Housing benefit mail out promoting Warmfront and Coldbusters grants;
- Energy efficiency promotional stands at parish events;
- Promotion of energy efficiency and fuel poverty themes in Primary Care Trust newsletters and magazines.

The Deposit Draft Kent Structure Plan (Chapter 9) considers the whole of Kent's contribution to climate change and energy use and sets policies to reduce emissions of greenhouse gases and improve energy efficiency and generation. Gravesham Borough Council will work in partnership with the County Council to implement these policies.

“Policy NR1: Development and the Prudent Use of Resources

Proposals for development should incorporate sustainable construction techniques and demonstrate that their design and layout contributes to:

- (a) the conservation and prudent use of energy, water and other natural resources; including provision for recycling facilities, water conservation and energy efficiency; and
- (b) a reduction in greenhouse gas emissions through re-use, or the more efficient

use, of resources.

Policy NR2: Energy Generation

Proposals for energy generation will be assessed by the local planning authorities in terms of:

- Their impact on landscape and nature conservation, health, built environment, air quality, atmosphere (including the level of emissions) and water resource interests; and
- The effectiveness of proposed mitigation measures; and
- The proximity of proposals to the energy source and their contribution to meeting the energy needs of local communities; and
- The prospective life of energy plants and, where appropriate, the site restoration measures proposed.

Policy NR3: Renewable and Sustainable Energy Production

Development necessary for the production of energy from renewable sources will be supported where there would be no overriding conflict with environmental interests and Local Development Documents will include criteria for their location. Provision of renewable and sustainable energy production as an integral component of new development and in small-scale and community projects will be supported. Local Development Documents will include renewable energy production targets in support of Sub Regional targets for individual energy sources, and will identify sites for renewable and sustainable energy facilities where viable proposals have been put forward.

Policy NR4: Combined Heat and Power Generation

Proposals for combined heat and power generation and district heating systems will be supported particularly where they are based on the harnessing of renewable energy sources and can be integrated with new development. Local Development Documents should assess, and where viable, provide for such schemes in the planning of major development proposals.”

Policy 12: The Council will continue to work together with the Kent Energy Centre to promote and implement energy efficiency measures in Gravesham. Gravesham Borough Council will work in partnership with Kent County Council to implement the Kent Strategy sustainable energy policies.

10 Health Strategy Initiatives

Poor air quality has been closely linked to adverse health effects and increased morbidity as discussed in Chapter 2. Health strategies therefore need to take into account the need for environmental improvements to secure public health benefits.

“Building Better Health Together – Towards a Public Health Strategy for Dartford, Gravesham, Swanley and Northern Parishes of the Sevenoaks District” (February 2002) was developed through joint working with neighbouring local authorities and the Primary Care Trust.

The goals of the Public Health Strategy include consideration to environmental regeneration as one of the means of improving public health, as shown below. The Strategy does not specifically refer to the link between health and air quality although one of the main target areas of the Strategy is addressing transport and public health, including consideration to pollution and climate change impacts.

“Goal 8: Champion and actively work towards the health, economic, social and environmental regeneration of the area, seeking to meet the aspirations of local communities and the area as a whole.

We will promote and use environmental, social, integrated, community and health impact assessments as a way of measuring the impacts of new developments.”

Policy 13: The Council will continue to work together with the Primary Care Trusts to promote and implement health initiatives in Gravesham and help deliver environmental improvements to secure public health benefits. Subsequent reviews of the Public Health Strategy will emphasise the link between air quality and health to raise awareness of the impacts of poor air quality.

11 Consultation And Partnership Working

11.1 Consultation

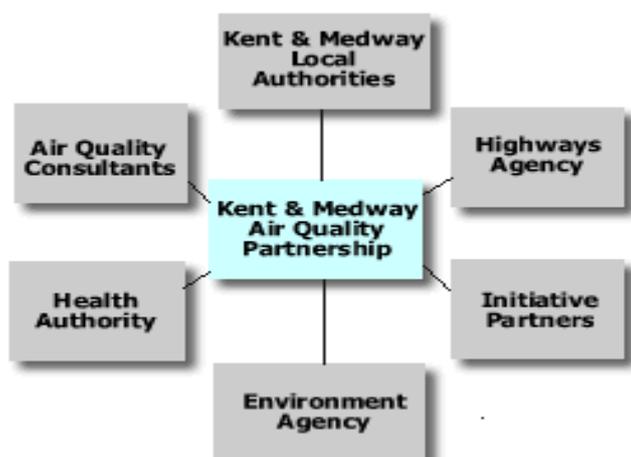
It is important to the success of the Air Quality Strategy to have active involvement by all local stakeholders including local residents, schools, community groups and local businesses in helping to implement the Strategy policies and to deliver improvements in air quality. This will be achieved largely through partnership working on the linked local and regional policies and strategies referred to in earlier sections of the Strategy, through internal cross department liaison and joint working on initiatives with the County Council and other Kent district local authorities.

It is also important that information on air quality is provided to the public in a clear and accessible way by the Council. The Council web site <http://www.gravesham.gov.uk> and that of the Kent and Medway Air Quality Partnership <http://www.kentair.org.uk> provides details on air quality within the Borough and Local Air Quality Management Review and Assessment Reports are available for viewing. The Strategy will similarly be made accessible via the website and through Council offices and local libraries.

Policy 14: Gravesham Borough Council will make details of the Air Quality Strategy policies and review and assessment reports available on the Website to ensure broad access to the consultation and implementation process.

11.2 Kent and Medway Air Quality Partnership

Gravesham Borough Council is a member of the Kent and Medway Air Quality Partnership, which was formed in 1992. The members of the Partnership are shown below.



The major aims and objectives of the Partnership are:

- To facilitate a co-ordinated approach throughout Kent and Medway to the Local Air Quality Management (LAQM) obligations placed on local authorities under the Environment Act 1995.
- To compile, update and maintain an Emissions Inventory of air pollution sources in and around Kent, to assist with the LAQM process.
- To comment on and influence the economic, planning and transport policies within the county so that air quality issues are properly considered and dealt with.
- To gain an understanding of the health implications associated with poor air quality and the extent to which air quality threatens the health of Kent and Medway's communities.
- To work with national agencies, neighbouring authorities and European partners to promote an awareness of air quality issues and to participate in joint initiatives to further the knowledge and understanding of air quality issues.
- Liaise with Defra and government bodies to assist with the implementation of the National Air Quality Strategy.

Policy 15: The Council will continue to work together with the Kent and Medway Air Quality Partnership on promotional activities to raise the profile of air quality in Gravesham.

11.3 Kent Environment Strategy (2003)

The Kent Environment Strategy was drawn up by Kent County Council in partnership with the Kent District Authorities which includes objectives relevant to air quality. In February 2005, Kent County Council launched the 2005 Kent Environment Strategy Progress Report (2005). Progress with actions relating to air quality is shown in Table 2.

Table 2 Kent Environment Strategy Progress Report 2005 –Air Quality

What we said we would do	What has happened?	What next?
Develop and implement strategies and action plans to work towards achieving National Air Quality Objectives -implement and revise Air Quality Management Area (AQMA) Actions Plans and designate further AQMAs as necessary	<ul style="list-style-type: none"> •Detailed Assessments completed for Ashford, Dartford, Dover, Gravesham, Maidstone, Tonbridge and Malling and Tunbridge Wells, identifying potential AQMAs •Action Plans prepared by Medway, Dartford, Dover, Gravesham, Sevenoaks and Tonbridge and Malling •Some Air Quality Management Plans stalled or not yet adopted by local authorities –no implementation of actual measures 	<ul style="list-style-type: none"> •Quantify results of modelling undertaken in Detailed Assessments -areas predicted to exceed National Air Quality Objectives will be formally designated as AQMAs •Action Plans to be (i)implemented (ii)produced where further AQMAs designated(iii)incorporated in Local Transport Plans •Thanet and Canterbury to proceed to Detailed Assessment for NO₂ and PM₁₀ •Develop awareness raising campaigns to change behaviour, especially in problem areas
Establish and disseminate information about levels of Nitrogen Dioxide (NO ₂), Sulphur Dioxide (SO ₂), Carbon Monoxide (CO) Particulates (PM ₁₀ and PM _{2.5}) and Ozone (O ₃)	<ul style="list-style-type: none"> •Continuous monitoring network exists in the County and a number of new sites have been brought on-line to assist with Local Air Quality Management •New sites located in Swale 	<ul style="list-style-type: none"> •Continue monitoring, including annual reports •Relaunch Kent Monitoring Network website in 2005 to improve user-friendliness •Address further monitoring requirements identified in Ashford (M20 and Canterbury Road)and Tunbridge Wells
Incorporate air quality policies in Kent and Medway Structure Plan (KMSP) and local plans informed by Kent and Medway Air Quality Model (KMAQM) predictions of cumulative impacts of proposed new development	<ul style="list-style-type: none"> •KMSP includes policies to improve air quality and reduce pollution •Some local plans have incorporated air quality policies •KMAQM used to assess impact of major developments (e.g.Cliffe Airport) 	<ul style="list-style-type: none"> •Emerging LDFs to take on board changes in National Air Quality policy •Apply policies in ongoing consideration of planning applications •Update KMAQM in 2005 to allow modelling at regional and local level •Produce Supplementary Planning Guidance for developments
Raise awareness and encourage greater interaction among decision-makers on environment, health, transport and land use	<ul style="list-style-type: none"> •County wide air quality seminar held in 2003/•Local Air Quality Management action has raised awareness 	<ul style="list-style-type: none"> •Hold air quality seminar April 2005 •Re-launch website •Increase involvement of planners and health sector in KMAQP
Regulate industrial processes through Integrated Pollution Prevention Control (IPPC) and Local Air Pollution Control (LAPC)and raise environmental standards through the use of environmentally friendly technology	<ul style="list-style-type: none"> •EA and district councils regulate industrial processes – new system of regulation introduced in past 2 years •KCC and district councils assessing planning proposals on a case by case basis 	<ul style="list-style-type: none"> •Ongoing •Run KMAQM where appropriate to assess cumulative impacts
Incorporate more sustainable forms of transport, incentives and traffic management measures into the LTP 2006-11	<ul style="list-style-type: none"> •LTP reviews and Strategic Environmental Assessment underway 	<ul style="list-style-type: none"> •Submit Draft LTPs July 2005 – Strategic Environmental Assessments will test sustainability
Tackle transboundary pollutants (i.e. ozone and particles)at regional level by sharing information and working together with neighbouring authorities in the UK and northern France	<ul style="list-style-type: none"> •Work underway to understand composition of dust particles and their cross-Channel Movement 	<ul style="list-style-type: none"> •Complete project June 2006 – concluding with conference •Conduct further work on ozone with a bid being progressed with Sussex Air Quality Steering Group

12 Air Quality Strategy Policy Summary

The Council's commitment to air quality as laid out within this Air Quality Strategy are summarised below:

Policy 1: The Council will continue to fulfil its statutory duties under the Environmental Act 1995 Part IV Local Air Quality Management and meet the target deadlines for reporting as set by Defra.

Policy 2: The Council will implement the Council's Sustainable Travel Plan measures and encourage uptake of sustainable modes of transport. The Council will periodically review the Travel Plan and assess progress will achieving the targets set.

Policy 3: The Council will ensure that the recommendations to further improve emissions from the Council fleet will be fully considered and developments reported within air quality strategy progress updates

Policy 4: The Council will continue to address its own energy usage within Council buildings through adoption of efficient energy practices and use of the best available technology to deliver energy savings.

Policy 5: The Council, in partnership with the other Kent local authorities, will continue to fulfil its statutory duties with respect to waste management and build upon its current achievements to meet the recycling and composting targets. The Council will ensure that air quality is integrated into the waste management option appraisal process.

Policy 6: The Council will monitor its procurement to ensure that the Council's Procurement Strategy aims are implemented and subsequent Procurement Plans include appropriate consideration to environmental impacts and sustainability appraisal.

Policy 7: The Council will continue to work together with Kent County Council on sustainable transport issues within the Borough to secure necessary air quality improvements and encourage more sustainable transport modes to the car to prevent further deterioration in air quality.

Policy 8: The Council will ensure that the aims of the Air Quality Strategy are integrated into all relevant Council's policies and strategies, (including the Local Development Framework, Community Strategy and Corporate Plan) and that air quality policies are adopted which ensure that future air quality is protected and enhanced through sustainable development.

Policy 9: The Council will regularly review its Code of Construction Practice to ensure that changes in guidance are taken into account and the recommendations represent best practice.

Policy 10: The Council will continue to work closely with businesses and industries within the Borough to secure necessary air quality improvements and encourage more sustainable practices through uptake of Travel Plans and awareness raising initiatives through the Local Business Partnership.

Policy 11: The Council will continue to work together with Kent County Council on work with schools within the Borough to secure air quality improvements through the development of school Travel Plans and encouragement of sustainable practices.

Policy 12: The Council will continue to work together with the Kent Energy Centre to promote and implement energy efficiency measures in Gravesham. Gravesham Borough Council will work in partnership with Kent County Council to implement the Kent Strategy sustainable energy policies.

Policy 13: The Council will continue to work together with the Primary Care Trusts to promote and implement health initiatives in Gravesham and help deliver environmental improvements to secure public health benefits. Subsequent reviews of the Public Health Strategy will emphasise the link between air quality and health to raise awareness of the impacts of poor air quality.

Policy 14: The Council will make details of the Air Quality Strategy policies and review and assessment reports available on the Website to ensure broad access to the consultation and implementation process.

Policy 15: The Council will continue to work together with the Kent and Medway Air Quality Partnership on promotional activities to raise the profile of air quality in Gravesham.

13 Implementation and Monitoring

Gravesham Borough Council will work jointly on the action quality strategy measures with the relevant partners including Kent County Council (Kent Highways Unit), transport operators, schools and local businesses. To secure the necessary air quality improvements there must be involvement by all local stakeholders and Gravesham Borough Council will actively work to encourage community participation in the process.

Gravesham Borough Council, as part of its responsibilities under Local Air Quality Management, produces an annual progress report on the Air Quality Action Plan measures. Future progress reports will additionally include an update on the Air Quality Strategy policies. The Strategy will be periodically reviewed to ensure that the Strategy remains relevant and takes into account current air quality policies and strategies.

14 Glossary Of Terms

Abbreviation	Full name
AQMA	Air Quality Management Area
AQS	Air Quality Strategy
BAT	Best Available Technology
CTRL	Channel Tunnel Rail Link
DEFRA	Department for Environment, food and Rural Affairs
DETR	Department for Transport and Regions
DOE	Department of the Environment
GBC	Gravesham Borough Council
HGV	Heavy goods vehicles
KCC	Kent County Council
K&MAQN	Kent & Medway Air Quality Network
K&MAQP	Kent & Medway Air Quality Partnership
LA21	Local Agenda 21
LAQM	Local air quality management
LDD	Local Development Documents
LDF	Local Development Framework
LEZ	Low Emission Zone
LTP	Local Transport Plan
NAQS	National Air Quality Strategy
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
NSCA	National Society for Clean Air
PM ₁₀	Fine particle matter less than 10µm diameter
ppb	Parts per billion
SO ₂	Sulphur dioxide
µg/m ³	Micrograms per cubic metre
UTMC	Urban Traffic Management Control
VMS	Variable Message Signage

15 References

Dartford, Gravesham and Swanley Primary Care Trust (2002) Building Better Health Together – Towards a Public Health Strategy for Dartford, Gravesham, Swanley and Northern Parishes of the Sevenoaks District

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