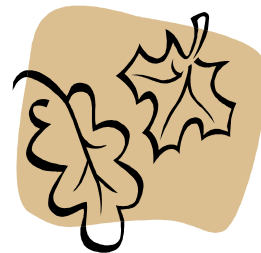




Local Development Framework Issues and Options Paper

SUSTAINABLE ENVIRONMENT

Including Energy; Flood Risk & Drainage; Air Quality;
Water Quality, Resources and Infrastructure; Noise & Light;
Contaminated Land and Hazardous Substances &
Aggregates and Building Materials.



London Borough of Lewisham
Planning Policy July 2005

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PART I: BACKGROUND TO ISSUES AND OPTIONS

1. INTRODUCTION

1.1. WHAT IS THIS PAPER ABOUT?

This discussion paper relates to the preparation by the London Borough of Lewisham (the Council) of the Spatial (Core) Strategy and Development Policies which are Development Plan Documents in the Local Development Framework. It has been prepared to present issues and possible options associated with the broad issues relating to creating a sustainable environment. More specifically, this paper will explore in detail the following issues: -

- Renewable Energy and Energy Efficiency
- Flood Risk & Climate Change, Sustainable drainage
- Air Quality
- Contaminated Land and Hazardous Substances.
- River Water Quality, Water Resources and Infrastructure
- Noise and Light Effects
- Sustainable use of Building Materials and Aggregates

1.2. WHAT IS THE ROLE OF THE COMMUNITY AND STAKEHOLDERS?

A series of other Issues & Options Papers have been prepared covering a wide range of matters which need to be reviewed by the Council. All are the subject of extensive consultation. In preparing this and other Issues & Options Papers, the Council is looking to the community and stakeholders to tell us the following: -

- What you think of the options presented;
- What improvements could be made to the options;
- What option(s) are your preferred options that you want the Council to take forward;
- Any options we haven't considered that you would like us to consider before identifying a preferred option(s).

In thinking about the options presented, it must be remembered that the preferred option may not be a single discreet option presented below, but rather may be a combination of a range of options taking the best parts of each.

1.3. LOCAL DEVELOPMENT FRAMEWORK

The Local Development Framework (LDF) will provide the overall planning strategy for Lewisham, made up of a number of separate but inter-related policies and plans. **The Spatial Strategy** will be that part of the planning framework that will set out the planning aims and objectives for the borough as a whole. All the other documents in the Local Development Framework must be consistent with it.

The Development Policies and Site Allocations document is being prepared alongside the Spatial Strategy. It will provide the framework for the detailed implementation of the strategic aims and objectives to be found in the Spatial Strategy. It will include a set of policies by which applications for new development will be judged.

Within this document it has been determined that if a policy option will form either a part of the Core Spatial Strategy or Development Policies, it will be noted with reference - '**CSS**' or '**DCP**' within the OPTION column. Following development of the preferred options these options will be split into their respective policy documents.

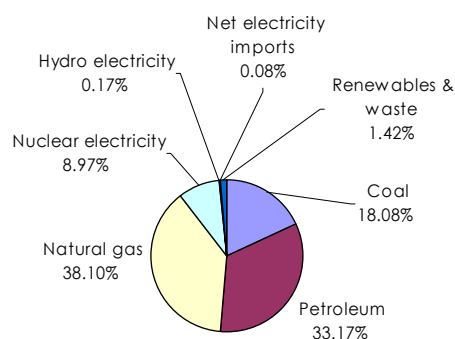
PART II: DISCUSSION OF THE ISSUES AND POSSIBLE OPTIONS

2. RENEWABLE ENERGY AND ENERGY EFFICIENCY

2.1. THE EVIDENCE BASE

Energy resources used in the United Kingdom typically consist of non-renewable sources, Petroleum, Coal and natural gas. Renewable energy sources presently only make a small contribution to the U.K.'s energy demands as seen in the adjoining table (source: DTI Digest of U.K Energy Statistics 2004).

The Council was directly responsible for the emission of 54.14 million kg of carbon dioxide (CO₂ -greenhouse gas emissions) due to its consumption of fuel and energy for transport and buildings between April 1999 and March 2000. In 1999, Lewisham became the first London Authority, and second only nationally, to buy 100% renewable or 'green' energy. The move to the use of renewable energy resulted in a 26.4% reduction over one year as indicated below.



U.K Energy Use (2003)

	1999 / 2000	2000 / 2001	% Reduction
Buildings	50.08	36.21	27.7
Fleet	3.77	3.35	0
Staff travel to work	0.28	0.27	3.6
TOTAL	54.14	39.82	26

Table 2: million kg CO₂ emitted due to energy and fuel use- Source: Lewisham Environmental Statement 2001

2.2. WHAT ARE THE ISSUES?

Under the broad issue of Renewable energy and energy efficiency three specific policy issues have been grouped. These issues will be discussed and options proposed separately.

2.2.1. Issue 1: Improving the use of Energy

The London Borough of Lewisham is committed to renewable energy, affordable warmth, energy efficiency and sustainable transport in order to ensure the long term comfort of the community. Energy drives everything that we do and can have a significant bearing on the social, environmental, and economic wellbeing of the borough.

Energy (gas and electricity) used in the home, is responsible for 25% of the UK's carbon dioxide emissions. Carbon dioxide, a greenhouse gas produced when electricity is generated or gas is burned, is a major contributor to climate change ("global warming").

Improved energy efficiency is therefore a key element of the UK Climate Change Programme and within Lewisham's Energy Policy. The environmental benefits of energy efficiency are:

- Reduced carbon dioxide (CO₂) emissions and global warming
- Reduced emissions of other pollutants
- Conservation of non-renewable natural resources
- Improved air quality.

It is considered that the **planning framework** can have an indirect impact on the efficient use of energy through encouraging sustainable development in the community. All new building and conversions must comply with the Building Regulations, where Part L is relevant to conservation of

energy. However Part L is not concerned with those aspects of a building's energy efficiency, factors as location, density, aspect and orientation. These are planning matters that should be reflected in the Core Strategy and Development Policy documents and agreed in negotiation with development control.

The design of new development provides an opportunity to implement best practice environmental design including such features as water conservation, super insulation and design for solar gain. The wider contribution of the planning system to improve energy efficiency can be made through reduction of the need to travel and encouragement of travel by more efficient modes. This is addressed specifically in the Transport issues and options paper.

2.2.2. Issue 2: Providing for Renewable energy

The 20th century is likely to go down in history as the fossil fuel and nuclear age, when mankind developed at an unprecedented rate, mainly fuelled by oil, gas and coal. Ironically, the very fuels that helped human development are now known to cause major long-term environmental damage through their legacy of emissions.

The Government is a signatory to an international agreement to reduce CO₂ emissions (the Kyoto Protocol), and is committed to reducing emissions by 20% (over 1990 levels) by 2010. The government are therefore keen to increase our reliance on 'greener' renewable energy sources, such as solar, wind, thermal, waste to heat, wave, hydro, bio, landfill gas and geothermal. These are preferable as they do not produce carbon dioxide gas (except wood which can be carbon neutral) and have an unlimited supply.

Lewisham wishes to encourage renewable energy whenever possible and is actively looking at the possibilities for installing renewable energy capacity in homes, shops and offices throughout the Borough. As such the Planning Framework must contain policies which support these initiatives and provide assessment criteria to determine where renewable energy schemes or equipment is most appropriate.

2.3. WHAT DO OTHER PLANS AND PROGRAMMES SAY ABOUT THE ISSUE?

2.3.1. PPS1: Creating Sustainable Communities

This national policy guidance states (para 1.21) *'policies should promote and encourage, rather than restrict, the development of renewable energy sources. Consideration should be given to encouraging energy efficient buildings, community heating schemes and the use of combined heat and power in developments.'*

2.3.2. PPS22: Renewable Energy

PPS22 provides guidance on various types to renewable energy sources and how planning authorities should include requirements for renewable energy in their Local Development Frameworks. The key principles include:

- Renewable energy projects should be accommodated where the technology is viable, and the environmental, economic, and social impacts can be addressed satisfactorily.
- Promote and encourage rather than restrict the development of renewable energy sources.
- Foster community involvement in renewable energy projects to promote knowledge and acceptance.
- A percentage of energy in new development to come from onsite renewable energy.

2.3.3. Energy White Paper – Our Future, Creating A Low Carbon Economy

This national paper encourages the U.K to achieve a 60% reduction in CO₂ emissions relative to 2000, by 2050 and emphasises the Government target to generate 10% of U.K electricity from renewable energy sources by 2010 and 20% by 2020.

2.3.4. The London Plan and Mayor of London 'Green Light to Clean Power' Energy Strategy

The Mayor has set challenging policies and strategies relating to the renewable energy use and energy efficiency in London including:

- London Plan Policy 4A.7 (Energy efficiency and renewable energy) states that:
'The Mayor will and boroughs should support the Mayor's Energy Strategy and its objectives of

reducing carbon dioxide emissions, improving energy efficiency and increasing the proportion of energy use generated from **renewable sources...**'

- Policy 4A.8 (Energy assessment) states that: 'The Mayor will and boroughs **should request an assessment of the energy demand** of proposed major developments, which should also demonstrate the steps taken to apply the Mayor's energy hierarchy.
- London Plan policy 4A.9: The Mayor will and boroughs should require major developments to show how the development would **generate a proportion of the site's electricity or heat needs from renewables, wherever feasible'**
- Policy 4A.10 (Supporting the provision of renewable energy) states that: 'The Mayor will support and encourage the development of at least one large wind power scheme in London together with building mounted schemes, where these do not adversely affect the character and amenity of the area. UDP policies should identify suitable sites for wind turbines and other renewable energy provision...

The Mayors Energy Strategy contains the specific proposal 13 which states: 'To contribute to meeting London's targets for the generation of renewable energy, the Mayor will expect applications referable to him **to generate at least 10% of the sites energy needs (power and heat) from renewable energy on the site, where feasible.** Boroughs should develop appropriate planning policies to reflect this strategic policy'

2.3.5. Lewisham Energy Policy (2001)

This policy supports using energy efficient technology in council buildings; using environmentally friendly energy sources; providing advice and education; monitoring energy consumption; using fuel efficient vehicles and promotion of alternative modes of transport. The target set is to reduce domestic CO2 emissions by 30% by 2011 (1996 baseline) and supports the use of renewable energy schemes.

2.3.6. Lewisham Community Strategy

The Lewisham Community Strategy does not specifically address the issue of energy. The strategy broadly refers to the improvement of the quality and sustainability of the local environment through Action Plan 6, linking to Local Agenda 21.

2.3.7. Unitary Development Plan (UDP)

The UDP currently contains four policies that deal with energy. Strategic policy STR.ENV PRO 3 encourages energy and natural resource conservation and promotes environmentally acceptable forms of energy generation, in particular renewable forms of energy and resource consumption.

ENV.PRO 18 provides criteria for the assessment of Electricity generation facility proposals, including Combined Heat and Power plants (CHP).

Policy ENV.PRO 19 Energy Efficiency, states that 'Developments should have regard to the principles of energy and natural resource efficiency through their design, orientation, density and location.'

Policy ENV.PRO 20 Renewable Energy, states that 'the Council will consider environmentally acceptable forms of renewable energy where there is no conflict with other policies in the Plan.' The explanation for this policy outlines that advice on energy efficiency matters is provided in the Council's Energy Policy and Building Control sections.

2.4. POLICY OPTIONS FOR ADDRESSING ISSUE 1: IMPROVING THE USE OF ENERGY

OPTION	NAME	DESCRIPTION
OPTION 1.1 (CSS)	<p>The Council will take a proactive approach to improving energy efficiency and reducing carbon dioxide emissions and in the borough.</p> <p>The Council will seek an improvement in the integration of land use and transport, reducing the need to travel by car.</p> <p>Energy efficiency should be encouraged within existing building stock and within new build developments.</p>	<p>This option is consistent with London Plan policy 4A.7. Lewisham's Core strategy must ensure that the spatial, transport and design policies support the Mayors Energy Strategy and contribute towards achieving CO2 and renewable energy targets.</p> <p>In considering how effect can be given to this policy option through the planning system in Lewisham, construction of zero-carbon developments represent the ultimate solution. As the domestic sector is responsible for 44% of London's overall energy consumption, there are some obvious ways</p>

		planning policy can influence this goal. This can involve improving the energy performance of new or existing housing fabric and house layout through passive design. Encouragement can be given to support building regulations.
OPTION 1.2 (DCP)	The Council will require improved energy efficiency through consideration of the following criteria for assessment of new building developments : <ul style="list-style-type: none"> - Design of the buildings with passive solar design (orientated so living spaces face within 45° of south) – shading for non-residential. - Maximise Day lighting angles. - High insulation Window Glazing - Clothes Drying / amenity space provided. - Siting of doors & windows for natural ventilation. - Integration of renewable energy equipment should be encouraged where appropriate. 	This option supports Policy 4A.7 of the London Plan and could lead to a criteria based policy with the development policies. Part L of the Building regulations sets out the legal requirements for the conservation of fuel and power in buildings. These regulations cover thermal performance, heating systems, and lighting. Therefore the planning framework can only have influence on limited matters in relation to energy efficiency. The criteria proposed cover these aspects.
OPTION 1.3 (CSS)	The Council shall require an assessment of energy demand of proposed major developments (either new build or conversion) with a floor space of 1000m² or ten or more residential units demonstrating steps to apply the energy hierarchy .	This option is consistent with Policy 4A.8 of the London Plan. The energy hierarchy states that essential energy needs of a development should be met through applying in sequence the following factors: using less energy, using renewable energy, supplying energy efficiently and the use of fossils fuels. The London Plan policy also states that all strategic referrals of commercial and residential schemes should demonstrate that the proposed heating and cooling systems have been selected in order of their efficiency. This list includes: passive design; solar water heating; combined heat and power for heating and cooling preferably fuelled by renewables; community heating and cooling; heat pumps; gas condensing boilers and central gas heating.

2.5. POLICY OPTIONS FOR ADDRESSING ISSUE 2: PROVIDING FOR RENEWABLE ENERGY

OPTION	NAME	DESCRIPTION
Option 2.1 (CSS)	The Council will require all new residential and non-residential developments (either new build or conversion) with a floor space of 1000m² or ten or more residential units to incorporate on-site renewable energy equipment to provide at least 10% of the predicted energy requirements of the development.	This option is consistent with the London Plan and National Planning Policy. This option is directly consistent with Policy 4A.9 of the London Plan and is inline with the direction other Local Authorities are taking in relation to incorporating renewable energy into Local Development Frameworks. This option is the most restrictive and demanding of the renewable energy options proposed giving no option other than to require 10% of renewables with no exemptions in large developments.
Option 2.2 (CSS)	The Council will require all new residential and non-residential developments (either new build or conversion) with a floor space of 1000m² or ten or more residential units to incorporate on-site renewable energy equipment to provide at least 10% of the predicted energy requirements of the development, where feasible .	This option provides the considers the variability of different building types and proposed uses, and reflects the feasibility of achieving the set target of 10% renewable energy. The feasibility for supplying a certain proportion of a development's delivered energy requirement from renewable sources may depend on technical issues, financial issues or both. On some sites, only 5% may be possible, however on others it could be 15% or more. Developers will be expected to demonstrate they have explored all renewable energy options for a particular development. Building form and construction may need to be adapted to make renewable energy installation more feasible. Strong justification from developers will be required if they do not think they can provide the required proportion. What is considered feasible is also likely to vary as energy process fluctuate, the cost of technologies change and as new grants and legislation comes in.

<p>Option 2.3 (CSS & DCP)</p>	<p>The Council will support the development of stand alone and roof mounted renewable energy schemes, where site conditions make them feasible. Criteria for assessment will include:</p> <p>Wind turbines:</p> <ul style="list-style-type: none"> • More viable in low density areas • Assess suitability of the site (design, location, size, scale, access for maintenance – dependant on size of turbine). • Assess likely impact of noise from blades and mechanical components for noise sensitive receptors assessed against local background noise. • Assess visual obtrusiveness from public viewpoints • Ensure minimum distances for reflected light and shadow flicker from sensitive adjoining landuses. • Special consideration in Open Space areas / conservation area / historic interest area. <p>Solar Panels / Photovoltaic's:</p> <ul style="list-style-type: none"> • Discrete siting on a building, designed as integral part of roof. • Panels to lie flush with the roof slope avoiding visual obtrusiveness. • Assess visual compatibility in Conservation areas or on historic buildings – from public viewpoints. <p>Any other renewable energy schemes (if external to the building):</p> <ul style="list-style-type: none"> • Sited appropriately without creating adverse amenity effects on adjoining land uses. 	<p>This option is consistent with Policy 4A.10 of the London Plan which supports the provision of renewable energy. The policy asks councils to identify suitable sites for wind turbines and other renewable energy provisions.</p> <p>This option suggests that potential sites for renewable energy schemes will be assessed on a case by case basis using the suggested criteria as guidance for suitable locations – rather than identifying exact sites within the Site allocations process.</p> <p>The implications of this option for developers and the community is that a case by case approach with set assessment criteria can allow flexibility encouraging greater implementation of renewable energy into developments, whilst protecting the community against potential negative amenity effects.</p> <p>Other supplementary planning guidance has been prepared by London Renewables group and through the companion to PPS22, setting out criteria for assessment of such schemes.</p> <p>As such it is considered that there is no other option other than to propose a flexible criteria based policy, although the aspects of the criteria may / can vary through the consultation process (rather than to propose a separate option).</p>
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
3. FLOOD RISK & CLIMATE CHANGE, SUSTAINABLE DRAINAGE

3.1. THE EVIDENCE BASE

The Map below (Map 4.1 from the UDP) indicates the known extent of flood hazard in 2000. The second Map (2) is sourced from 2005 data supplied by the Environment Agency expanding the areas at risk from flood hazard. The 2005 data indicates both zone 2 (low – medium risk) and zone 3 (High risk) Flood zones from both river (1% - 1 in 100 year event) and tidal (Thames) flooding (0.5% - 1 in 200 year event).



Map 4.1 AREAS LIABLE TO FLOOD FROM THE MAIN RIVERS

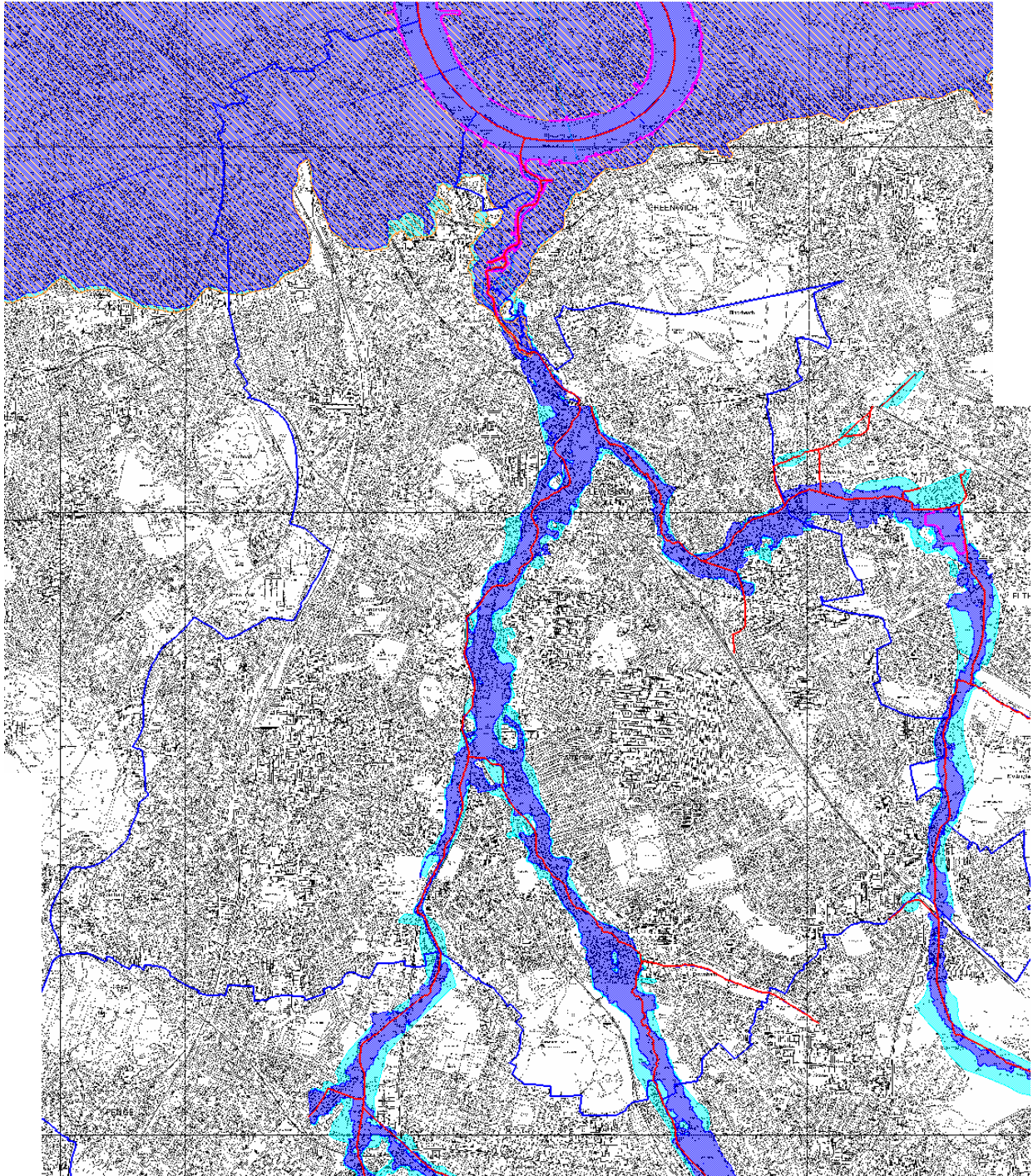
-  Main Rivers
-  Areas at risk from flooding

(Source: Environment Agency 2000)

Map (2): Flood Hazard Data (2005) - supplied by the Environment Agency

NOTE: Darker shaded area indicates Zone 3 (High risk) flood zones from both river (1% - 1 in 100 year event) and tidal (Thames) flooding (0.5% - 1 in 200 year event).

Please note, these maps are more easily read in colour. You may view this discussion paper on our website. (<http://www.lewisham.gov.uk/Environment/Planning/PlanningPolicy>).



3.2. WHAT ARE THE ISSUES?

3.2.1. Avoidance of Flood Risk in Lewisham

The management of flood risk is extremely pertinent to Lewisham and to the whole of London. The twice daily fluctuations in the tidal Thames estuary and built up nature of Lewisham's tributary rivers are a major cause for concern, especially when the effect is exacerbated by weather conditions and predicted sea level rise.

The main implications in Lewisham are for development within the Thames Gateway area, where significant areas are shown to be within an area at risk from flooding and areas adjoining the rivers Pool, Quaggy, Ravensbourne and Kid Brook. Climate change is likely to mean that there will be up to 10 per cent more rainfall, which may occur in more unpredictable weather patterns.

PPG 25 on Development and Flood Risk requires local authorities to take into account information provided by the Environment Agency which holds records of main river flood plains. The limits of the flood plain shown on these maps are indicative of the area, which could be affected by flood events, overtopping or breaching of flood defence structures. They are based on the approximate extent of floods with a 1% annual probability (1 in 100 year event) occurrence for rivers, and a 0.5% (1 in 200 years) annual probability of occurrence for tidal (Thames) flooding.

The Thames Gateway London Partnership has also commissioned a Strategic Flood Risk Assessment which will look in more detail at flood risk across South East London, preliminary mapping indicating widespread zone 3 (0.5% - 1%) flood risk in the north of the borough and along river tributaries.

To undertake the **PPG25** (Table 1 and Paragraph 30) **Sequential Flood Risk Test (SFRT)**, as a first port of call, one has to use the Flood zone maps published by the Environment Agency. The maps identify the Low, Medium and High Flood Risk Zones of undefended floodplain referred to in PPG25. They give the horizontal extent of the three zones. However, they do not describe the vertical dimension of flood risk and in particular do not take into account the moderating effect of the Thames Tidal Defences (TTD) which protect East London to a very high standard (in excess of 0.1% probability).

Whilst the TTD reduce the risk of flooding considerably, they do not eliminate flood risk altogether. Risk is not finite and risk behind any defence must be considered no matter how remote. More extreme events or conditions may occur when those defences are breached or overtopped. The term "**Residual Risk**" is used for East London because a considerable proportion of the risk is being effectively managed by the TTD. The East London SFRA produced residual flood risk maps to describe this vertical dimension of flood risk behind defences in a map context. The maps give a generic indication of the scale of the residual risk, and identify where a more detailed site specific study will be necessary when looking at a particular development allocation or application.

Given that this new flood mapping is available and extreme climatic trends are predicted to continue, all planning policies relating to flood hazards need to be based on a precautionary approach. This will ensure that development minimises future risks of flooding in a sustainable way by making reasonable allowances for possible future climate scenarios.

3.2.2. Issue 2: Implementation of Sustainable Surface Water Drainage:

PPG 25 stresses the importance of ensuring that development proposals take account of the effects of potentially increased run-off. New development can increase the rate and volume at which run-off reaches watercourses in times of heavy or prolonged rainfall, leading to an increased risk of flooding and damage to watercourses and habitats.

Wherever possible development should incorporate features to reduce the run-off from impermeable surfaces such as roofs, car parks and roads. Sustainable surface water drainage methods include water butts, soakaways, porous pavements, storm water wetlands and balancing ponds. The methods adopted will need to have regard to the hydrological setting of individual sites and the use of appropriate pollution prevention measures.

3.2.3. Issue 3: Climate Change

London is already feeling the effects of climate change. Sea-level rise relative to the land is now widely accepted as occurring at 6mm/year at high tide in the London area. A significant proportion of future development in the Thames Gateway area could be increasingly at risk from tidal flooding. The Planning system will need to ensure that preventative measures are taken, including the construction of appropriate flood defenses in new developments. The flooding section of this paper addresses these issues.

Some likely impacts from climate change that could affect London in the future include; higher temperatures; increased risk of flooding with rising sea levels and increased closures of the Thames Barrier; higher water demand; effects on health; change in biodiversity, disruptions to transport, with many other impacts being possible.

3.3. WHAT DO OTHER PLANS AND PROGRAMMES SAY ABOUT THE ISSUES?

3.3.1. PPG25: Planning and the Floodplain

This guidance states that policies in Local Development Plans should outline the consideration which will be given to flood issues, recognising the uncertainties that are inherent in the prediction of flooding and that flood risk is expected to increase as a result of climate change.

It states that councils should consider potential flood risk on a catchment wide basis, at all stages of planning and development process in order to reduce future damage to property and risk to human health and safety. Councils must also identify flood hazard areas and avoid inappropriate development in those areas, using a risk based approach.

THE SEQUENTIAL TEST: The government expects local planning authorities to apply a risk based approach to the preparation of development plans through the **sequential test**. This is a summary of the sequential test taken from table 1 of PPG25.

FLOOD ZONE (as indicated on Maps)	Appropriate Planning Response / Constraints
(1) Little or no risk <i>River & Tidal <0.1%</i>	No Constraints
(2) Low to Medium Risk <i>River 0.1 – 1.0%</i> <i>Tidal 0.1 – 0.5%</i>	Suitable for most development - Local flood risk assessments and mitigation appropriate to nature and scale of development.
(3) High Risk <i>River 1.0% or greater</i> <i>Tidal 0.5% or greater</i>	(a) Developed areas (all of Lewisham) May be suitable for residential, commercial and industrial provided minimum standard of flood defense can be maintained. (<i>Local flood risk assessments and mitigation appropriate to nature and scale of development required</i>). Development should not be permitted where existing defences, properly maintained, would not provide an acceptable standard of safety over the lifetime of a development, should a flood defense be breached.

The Sequential test: Table 1 PPG25

PPG25 states that in applying the sequential test the Council should take the advice of the Environment agency on the distribution of flood hazards (on the supplied maps) and the availability / adequacy of flood defences in Lewisham.

THE RISK BASED APPROACH: PPG25 states that the Council needs to adopt a risk based approach to proposals for development in or affecting flood risk areas. This approach is fundamental to the management of flood risk through land use planning and as such has been proposed as an option.

3.3.2. The London Plan

The London Plan contains four main policies that deal with increased flood risk, sustainable water drainage and climate change. In summary they are:

- **Policy 4C.5 Impounding of rivers:** '... boroughs should resist proposals for the impounding of any rivers... and removal of impounding structures should generally be welcomed.' Dams, barrages, or concrete culvert enclosures disrupt natural ecology and result in maintenance burdens in order to manage the flood risks and silt build-up that can occur.
- **Policy 4C.6 Flood plains:** In reviewing their (LDF's), boroughs should identify areas at risk from flooding (flood zones)..... (where) the assessment of development proposals should be carried out in line with PPG25.
- **Policy 4C.7 Flood defences:** ... permanent built development should be set back from (flood) defences to allow for the replacement/repair.... and boroughs should, ensure that development does not undermine or breach flood defences in any way.
- **Policy 4C.8 Sustainable drainage:** 'Boroughs should seek to ensure that surface water run-off is managed as close to its source as possible. The use of sustainable urban drainage systems should be promoted for development'.
- **Policy 4A.15 Climate change:** ... boroughs should assess and develop policies for the likely impacts of climate change on London identified in the work of the London Climate Change Partnership.

3.3.3. UDP – Lewisham Unitary Development Plan

There are four policies within the UDP that deal with flood hazards and sustainable drainage. In summary they are:

- **STR.ENV PRO 5:** To protect areas liable to river or tidal flooding and to control surface water drainage.
- **ENV.PRO 14** Controlling Development in the Flood Plain: Within the area liable to flood as shown on Map 4.1, development will not normally be permitted unless it can be demonstrated that the proposal would not; impede the flow of water, reduce the capacity of flood water storage, or increase risk from flooding.
- **ENV.PRO 15** Sustainable Surface Water Drainage in New Development: Where appropriate surface water should be disposed of as close to source as possible, or be attenuated before discharge to a watercourse or surface water sewer.
- **ENV.PRO 16** Protection of Tidal and Fluvial Defence: Development will not be permitted which would adversely affect the integrity of London's tidal or fluvial defences.

3.3.4. Lewisham Community Strategy

The Lewisham Community Strategy does not specifically address the issues of flood risk & climate change, sustainable drainage and river water quality. The strategy broadly refers to the improvement of the quality and sustainability of the local environment through Action Plan 6, linking to Local Agenda 21.

3.4. POLICY OPTIONS FOR ADDRESSING THE ISSUES

OPTION	NAME	DESCRIPTION / DISCUSSION
OPTION 3.1 (CSS)	<p>FLOOD RISK AND THE SEQUENTIAL TEST</p> <p>The Council will consider development applications in areas identified as being subject to <i>Zone 3 flooding (high risk) in line with the sequential test</i> (PPG25). Flood hazard maps will be sourced from <i>the most up to date information</i> supplied by the Environment agency.</p> <p>Within these areas residential, commercial and industrial may be suitable, provided minimum standard of flood defence can be maintained (with the exception of minor householder applications). A local flood risk assessment and mitigation appropriate to nature and scale of</p>	<p>This policy is sourced from guidance given in PPG25 relating to the implementation of the sequential test.</p> <p>Stating that the Council will use the most up to date information means planning staff can be as informed as possible. Using the new information as it comes to hand means that planners are not bound by a plan adopted into a formal plan document, which is amended yearly by the Environment Agency to incorporate improvements and changes to the known flood risk extent.</p>

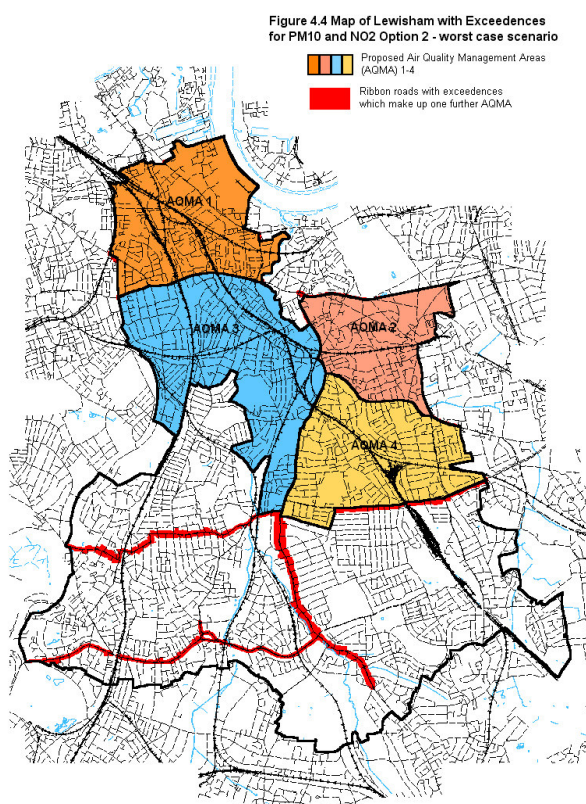
	<p>development will be required.</p> <p>Development will not be permitted where existing defences, properly maintained, would not provide an acceptable standard of safety over the lifetime of a development, should a flood defence be breached.</p>	<p>This option is considered necessary direction from national guidance advises the Council this is the approach the must be taken in relation to Zone 3 flood risk.</p>
<p>OPTION 3.2 (CSS)</p>	<p>FLOOD RISK ASSESSMENT FOR MINOR HOUSEHOLDERS</p> <p>The Council considers that applications by individual householders for <i>minor extensions</i> within identified flood hazard areas should not raise significant issues unless it would:</p> <ul style="list-style-type: none"> - Have a direct and adverse effect on a watercourse or flood defences; - Impede access to flood defences; and - Have a cumulative effect on flood storage capacity or flood flows. 	<p>This option is taken from PPG 25, providing a policy option within a development plan</p>
<p>OPTION 3.3 (CSS)</p>	<p>RISK BASED APPROACH AND ASSESSMENT CRITERIA</p> <p>The Council will take a <i>risk based approach</i> to assessing proposals for developments in or affecting flood risk areas in line with the <i>assessment criteria provided in PPG25</i>.</p>	<p>This option is in line with Policy 4C.6 of the London Plan. It also makes practical sense to link the actual assessment criteria provided in PPG25 to the Development Plan framework to provide clarity to developers and planning officers.</p>
<p>OPTION 3.4 (CSS)</p>	<p>BALANCED MANAGEMENT OF FLOOD RISK</p> <p>The Council will employ the principle of '<i>balanced management</i>' in relation to flood risk, allowing development which <i>serves the social and economic needs</i> of the community to proceed, whilst ensuring that flood risk is <i>properly managed and mitigated</i>, subject to the overriding principle that the Council will not normally permit development which places people or property at direct risk from flooding, or places this risk into other areas.</p>	<p>This option ensures that the Councils approach to flood risk is inline with the principles of sustainable development.</p>
<p>OPTION 3.5 (CSS)</p>	<p>MITIGATION MEASURES IN DEVELOPMENTS</p> <p>For major development in Flood Zone 3, depending on the outcome of a Local Flood Risk Assessment, <i>the Council may require flood protection and mitigation measures</i> to be included in development which may be on or off site. This may <i>include works, or contributions</i> to the cost of works to <i>provide, improve and maintain flood defences</i>. In such cases, planning permission may be granted subject to appropriate planning conditions or planning obligations (s.106).</p>	<p>This option provides the policy directive within Development Plans to require developers to contribute to flood protection and mitigation measures.</p>
<p>OPTION 3.6 (CSS)</p>	<p>SUSTAINABLE SOLUTIONS TO MITIGATE FLOOD RISK</p> <p>The Council will require <i>mitigating measures accompanying development proposals</i> within Zone 3 flood hazard areas to be subject to a sustainability appraisal. There will be a presumption in favour of:</p> <ul style="list-style-type: none"> • Employing good standards of urban design incorporating flood defences; • Protection of ecology and safeguarding water resources • Utilisation of sustainable urban drainage systems. <p>Unsustainable solutions such as culverting and other engineering solutions will be scrutinised in order to determine whether a more environmentally sustainable alternative may be more appropriate.</p>	<p>This option expands on Option F4 above and provides guidance in terms of the type of flood mitigation measures that the Council will expect from major development in Flood Hazard Areas.</p>
<p>OPTION 3.7 (CSS)</p>	<p>SUSTAINABLE DRAINAGE SYSTEMS (SUDS)</p> <p>The Council will require developers where there is a proposed reduction the permeability of a site through construction or redevelopment, to demonstrate how surface water run-off is managed as close to its source as possible. The use of sustainable urban drainage systems will be encouraged for all developments regardless of whether they are in a flood risk area or not.</p>	<p>This option is inline with national and the London Plan policy guidance. Sustainable drainage systems should become an integral part of new developments to reduce the cumulative effects of stormwater runoff from developed sites.</p> <p>Sustainable surface water drainage methods include water butts, soakaways, porous pavements, storm water wetlands and balancing ponds. These methods can also be beneficial in reducing pollutants entering waterways through the filtering process and as such should be encouraged extensively in Lewisham.</p>

4. AIR QUALITY

4.1. THE EVIDENCE BASE

The government's Air Quality Strategy (AQS) establishes the framework for air quality improvements, both internationally and nationally. However, it recognises that despite these improvements, areas of poor air quality will remain and are best dealt with using local measures implemented through the Local Air Quality Management (LAQM) regime. The role of the local authority review and assessment process is to identify the areas where it is considered that the objectives laid down in the AQS will be exceeded. As a result of detailed modelling and monitoring of air quality, Lewisham has predicated that there is a risk that the annual mean (2005) objective for Nitrogen dioxide (NO₂) and the 24-hr mean, 35 exceedences objective for Particulates (PM₁₀) will be exceeded at locations with relevant public exposure. It is also likely that the suggested changes to the Particulate objectives for 2010 will also be exceeded. The main ongoing source of these pollutants in the Borough is road transport.

As a result of the areas of exceedences, five Air Quality Management Areas (AQMA) were originally designated.



4.2. WHAT IS THE ISSUE?

Poor air quality affects human health and the environment. The government adopted the AQS to deal with the assessment and management of air quality. Although national policies are expected to deliver country wide improvements, it is recognised that in some locations air quality will remain poor as a result, primarily of transport but also commercial and industrial activities. Where this is the case a more focus approach to improve air quality will be necessary.

The land use planning system has a vital role to play in ensuring that the objectives of the AQS are met. To ensure that the land use planning system makes an appropriate contribution, it is important to recognise the links between air quality and land use planning and traffic management, these all being important tools in the Council's Action Plan.

Local planning authorities are required to achieve a balance between economic, social and environmental consideration in arriving at a decision about a specific proposed development. For this reason, appropriate

consideration of factors such as air quality, noise and visual amenity are necessary. In terms of air quality, the impact of a development should be considered in terms of the potential for breaches of the national air quality objectives, and the EU Limit Values, the impact on any air quality action plan or strategy implementation, overall degradation of local air quality and the increase or introduction of public exposure to poor air quality.

The designation of the AQMAs will require developers to consider and present the likely impact of the proposal in those parts of the Borough which can be regarded as air pollution 'hot spots'. In this way the planning system can have a more direct influence on air quality in addition to the encouragement the use of alternative transportation modes reducing need for private car use.

4.3. WHAT DO OTHER PLANS AND PROGRAMMES SAY ABOUT THE ISSUE?

4.3.1. PPS23: Planning and Pollution Control

This national guidance advises that Development Plans should work to compliment existing pollution control regimes by controlling development and use of land through:

- The need to carry out a review and assessment of air quality, especially where new development is likely. This will involve Identifying the existing and likely future air quality in an area, including an air quality management area (AQMA's) or other such areas where air quality is likely to be poor (including the consideration of the cumulative impacts of a number of smaller developments on air quality, and the impact of development proposals in rural areas with low existing levels of background air pollution). The findings of air quality reviews and assessments will be important in the consideration of local air pollution problems and the sighting of certain types of development.
- The need to consider the possible impact of new development in drawing up any air quality action plans and local air quality strategies.
- The need to consider the direct or indirect impacts that development control decisions may have on exiting air quality or creating exposure to poor air quality.
- The need for compliance with any statutory environment quality standards or objectives such as the air quality objectives prescribed by the air quality regulations 2002 and amending regulations 2002.
- The need to consider the result of air quality review and assessments in the preparation of development plans

4.3.2. U.K Air Quality Strategy – ‘Working together for clean air’

The primary objective of the strategy is that everyone can enjoy a level of ambient air quality in public places which poses no significant risk to health or quality of life. It also encourages local authorities to develop their own strategies and advice on air quality which has been achieved in Lewisham through the Local Air Quality Action Plan.

4.3.3. Cleaning London's Air – Mayors Air Quality Strategy

This strategy aims to minimise the adverse effects of air pollution on human health and improve air quality to enjoyable levels. It recognises that achievement of national air quality objectives needs to be balanced by work in partnerships with London Boroughs. Primarily improvements to air quality will be made by reducing impacts of: road transport, industrial sources, construction and fires, and energy and heating. The strategy notes that the planning system can influence the improvement to air quality through assessments for developments within designated AQMA's.

The strategy outlines that development plans should:

- Promote the integration of transport and land use policies;
- Identify environmental constraints on activities to protect air quality;
- Reduce the impacts of transport; and,
- Promote sustainable design and construction, sustainable transport choices (for people and freight), energy efficiency and better energy use.

It should be noted that the last three bullet points are addressed within the Transport Issues and Options Paper.

4.3.4. The London Plan

The London Plan, specifically Policy 4A.6 calls for development plans to implement the Mayor's Air Quality Strategy and achieve reductions in pollutant emissions. Policy 4A.6 sets out the points made in the Mayors Air Quality strategy bullet pointed above.

4.3.5. Draft Lewisham Local Air Quality Action Plan

As seen above the key aim of the strategy is to bring about change to reduce emissions (NO₂ and PM₁₀) from the main source of pollution, road transport, in a cost-effective and proportionate way.

The council has put together a collect of action that will primarily focus on three main areas: -

- Reducing traffic volumes
- Greater use of alterative fuels and technology to reduce emissions from various sources, including motor vehicles

- Greater use of public transportation by residents, visitors, commuters and businesses within Lewisham and beyond.

4.3.6. Lewisham Community Strategy

The Lewisham Community Strategy does not specifically address the issue of air quality. The strategy broadly refers to the improvement of the quality and sustainability of the local environment through Action Plan 6, linking to Local Agenda 21.

4.3.7. Unitary Development Plan (UDP)

The UDP currently contains a policy (ENV.PRO 8 Air Quality Management Areas) stating that 'the Council will define Air Quality Management Areas (AQMA) in the Borough. Any significant development proposed within an AQMA, will be required to include an assessment of its likely impact on air quality. The Council will resist development that is expected to worsen air quality within an AQMA.'

4.4. POLICY OPTIONS FOR ADDRESSING THE ISSUE

OPTION	NAME	DESCRIPTION / DISCUSSION
Option 4.1 (CSS)	<p>AIR QUALITY ASSESSMENTS</p> <p>The Pollution Control Group within Lewisham Council requires an Air Quality Assessment (AQA) to be carried out where a significant change in air quality is expected or anticipated. There will also be a need to assess air quality implications where a significant change in relevant exposure (i.e. introduction and/or increase) is anticipated, such as the building of residential properties in an area of already poor air quality.</p> <p>Permission will not be granted unless mitigating measures are adopted to ensure compliance with national standards, not lead to an increase in the current exceedences levels and/or to eliminate or minimise public exposure.</p>	<p>The Mayors Air Quality Strategy requires that Development Plans refer to the need to undertake air quality assessments of development proposals where appropriate.</p> <p>Given the statutory guidance surrounding air quality management, this option is considered necessary to be in conformity with this.</p>
Option 4.2 (CSS & DCP)	<p>AIR QUALITY ASSESSMENT CRITERIA</p> <p>Areas exposure to the highest concentrations of pollutants and where significant public exposure occurs will be afforded the highest level of protection and the Council is determined to work towards the improvements of ambient air quality in those areas where the air quality objectives are likely to be exceeded.</p> <p>When assessing planning applications for major developments the Council will consider:</p> <ul style="list-style-type: none"> • The severity of the impacts on air quality and the scale of the emissions. • The air quality in the area surrounding the proposed development • The likely use of the development, that is the length of time people are likely to be exposed at that location • Whether the proposal would impede the Council's overriding objectives to improve air quality such as a conflict with Lewisham Air Quality Action Plan. <p>The Council does not intend to be prescriptive about the contribution to pollution levels that should be regarded as significant; each case will be assessed on its merits.</p>	<p>The Mayors Air Quality Strategy requires that Development Plan Policies consider both the direct and indirect (e.g. traffic-related) air quality impacts of developments.</p> <p>This assessment based policy option ensures that the consideration of air quality is paramount in development applications. This option is considered necessary to be in conformity with National and London plan policies.</p>

CROSS CUTTING ISSUE: By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, planning can help to reduce the need to travel and reduce the length of journeys. This will potentially have a considerable impact on **air quality** over the longer term. Therefore these policy options **are discussed in the transport issues and options paper.**

5. CONTAMINATED LAND AND HAZARDOUS SUBSTANCES.

5.1. THE EVIDENCE BASE

The Lewisham contaminated land strategy has begun to identify and prioritise numerous sites throughout the borough that are considered to be contaminated. At the time of drafting this issues and options paper, information about the extent and location of areas of contaminated land was not able to be obtained, however following the completion of the Inspection programme, this information may be more readily available to Council officers.

5.2. WHAT IS THE ISSUE?

Part IIA of the Environmental Protection Act (1990) was introduced specifically to address the historical legacy of land contamination. It focuses on the identification and remediation of land where there is unacceptable risk, assessed on the basis of the current use. Part IIA requires Councils to take a strategic approach to the identification of contaminated land, meaning that this information can feed into the planning and development process.

The planning system aims to control risks arising from contamination when faced with a proposed new use. The Part IIA regime was designed and intended to encourage voluntary remediation rather than regulatory action and to work with the established role of planning and building control in those cases where the land is suitable for or scheduled for redevelopment. Government policy recognises that voluntary remediation will often be funded by redevelopment and that the planning system can and should secure appropriate investigation and remediation of land.

DETR Circular 02/2000 makes clear that, where new development is taking place, it is the developer's responsibility to carry out the necessary remediation and that, in most cases, the enforcement of remediation requirements will be through planning conditions and building control rather than through a remediation notice under Part IIA.

The majority of the know information on contamination within the Borough has been derived as a result of the planning development control process. Where land has been considered to have a history indicating potential contamination, planning conditions have been imposed requiring the developer to undertake site investigations of that land and remediation where necessary.

Development Plans need to continue to ensure that planning policy takes a risk based approach to the redevelopment of contaminated land and the siting of hazardous substances supporting national and London Plan guidance, reducing the potential adverse effects on human health and the environment. The Council liaises closely with the Environment Agency in its investigation of contaminated sites to also ensure the protection of controlled waters.

5.3. WHAT DO OTHER PLANS AND PROGRAMMES SAY ABOUT THE ISSUE?

5.3.1. PPS23: Planning and Pollution Control

This national guidance advises that Development Plans should work to compliment existing pollution control regimes by controlling development and use of land through:

- Identifying land or establishing criteria, for the acceptable location of potentially polluting developments and the reviewing the availability of alternative sites.
- Highlighting the need to separate necessary but potentially polluting land uses from pollution sensitive developments such as housing to reduce conflicts.
- Including appropriate policies for dealing with the potential for contamination and the remediation of land, promoting the re-use of contaminated land and protecting uncontaminated Greenfield land.

5.3.2. PPS23: Annex 2 – Development on Land Affected by Contamination.

This policy document provides specific guidance to Councils how to ensure that new LDDs take into account any potential implications of land contamination. It states that the Council 'should include appropriate policies for the remediation of contamination where it is known or suspected to exist and for dealing with the implications of contamination for other policies and proposals. In particular, LPAs should recognise that the development process is often the most effective

way of achieving action to remove unacceptable risks arising from the contaminated state of land.'

5.3.3. The London Plan

Policy 4A.16 of the London Plan States: 'The Mayor will work with strategic partners to identify best practice mechanisms to enhance remediation of contaminated sites and bring the land into beneficial use.'

Policy 4A.17 dealing with hazardous substances, states that 'Development Plan documents should include policies relating to the location of hazardous substances to limit the consequences of any potential accidents, and boroughs should take into account the presence of hazardous substance... (in relation to) the development of land.'

5.3.4. Lewisham Contaminated Land Strategy 2001

The key aim of this strategy is to establish a framework for the strategic identification of areas of contaminated land, through a risk assessment approach. Mapping and prioritisation of contaminated sites through an inspection programme will provide valuable information about potential risks to human health and the environment. This will reduce the potential damage from past activities by permitting contaminated land to be kept in, or returned to, beneficial use wherever practical, when faced by redevelopment opportunities.

5.3.5. Lewisham Community Strategy

The Lewisham Community Strategy does not specifically address the issue of contaminated land or pollution. The strategy broadly refers to the improvement of the quality and sustainability of the local environment through Action Plan 6, linking to Local Agenda 21.

5.3.6. Unitary Development Plan (UDP)

STR.ENV PRO 2: To reduce levels of environmental pollution and to improve air and water quality and locate activities with the potential to pollute so as to minimise any environmental impact.

STR.ENV PRO 4: To use the planning system, where appropriate, to facilitate improvement and decontamination of poor quality, degraded and contaminated land.

ENV.PRO 9 Potentially Polluting Uses: Sets out criteria for assessment of applications for a polluting or potentially polluting use. This policy has been carried through into the options for dealing with polluting uses.

5.4. POLICY OPTIONS FOR ADDRESSING THE ISSUES

OPTION	NAME	DESCRIPTION / DISCUSSION
OPTION 5.1 (CSS)	<p>DEVELOPMENTS ON CONTAMINATED LAND</p> <p>Where development is proposed on contaminated land, or land suspected of being contaminated, the Council will require developers to investigate and identify any remedial measures that may be required to deal with the hazards.</p> <p>Full details of proposals for remedial treatment will be required before a planning application is considered. Where necessary, the Council may appoint independent consultants to assess such proposals.</p> <p>The Council will require best practice mechanisms to enhance remediation of contaminated sites and encourage in principle the transformation of land back into beneficial use.</p>	<p>This option is consistent with London Plan policy 4A.16 and is considered necessary, with no other practical option available.</p>
OPTION 5.2 (DCP & CSS)	<p>POLLUTING DEVELOPMENTS</p> <p>Applications for a polluting or potentially polluting use will be assessed against the following criteria:</p> <ul style="list-style-type: none"> • the impact on neighbouring uses including loss of amenity; • the design and appearance of the development; • the hours of operation of the proposed development and its transport requirements, including the scope for transport by rail or water; • the proposed after use of the site; 	<p>This Policy will ensure that polluting developments are separated from sensitive uses such as housing; also that any expansion or intensification of existing polluting uses are not jeopardised by encroachment of other uses.</p>

	<ul style="list-style-type: none"> any environmental benefits arising from the development, for example regeneration of derelict land; the possibilities for a time-limited permission in order to assess the impact of the development; the adoption of a waste reduction / minimisation strategy by the applicant which takes account of the disposal of solid / water / liquid wastes and airborne discharges. 	
<p>OPTION 5.3 (CSS)</p>	<p>HAZARDOUS SUBSTANCES</p> <p>The Council will require any proposed or existing development containing hazardous substances to be stored in a manner than meets National Regulations, limits the risk to human health and safety and avoids all contamination of air, ground and water resources.</p> <p>Full details of mitigational storage facilities for hazardous substances will be required before a planning application is considered.</p>	<p>The EU Directive on hazardous substances requires land use policies to take prevention and minimisation of consequences into account, also reflected in PPG 12. This policy also takes into account Regulation 6(1)(c)(ii) of the Town and Country Planning Regulations 2000</p> <p>The Council also advises that where appropriate, advice should be sought from the Health and Safety Executive.</p>

6. RIVER WATER QUALITY, WATER RESOURCES AND INFRASTRUCTURE

6.1. THE EVIDENCE BASE

River water quality levels in the Pool, Quaggy, Ravensbourne and Kid Brook within Lewisham during the period 1997-2001 were classified as good (B grade), having improved from C grade, fairly good during 1988 – 1997. Within the rest of England 93% of rivers rated good or fair (2003) with 62% good quality compared with 43% in 1990 (source: DEFRA EDigest River Water Quality Database.)

6.2. WHAT ARE THE ISSUES?

6.2.1. River Water Quality

Historically London's waterways have suffered from severe pollution. Changes to legislation and regulation of pollution, combined with significant shifts in the types of industry in London, have reduced pollution and led to subsequent improvements in the biodiversity and attractiveness of most waterways.

However, water quality is still a major environmental issue, with periodic pollution from urban run-off following heavy rainfall. There are still a number of tributary streams that are highly polluted, often with domestic sewage, and there is the on-going problem of sewage overflow into the Thames during times of high rainfall. The LDF needs to ensure that the planning system can control and avoid any adverse effects on water quality resulting from polluting landuses, and needs to contain policies to address this risk.

6.2.2. Water Resources and Infrastructure

The provision of safe drinking water is often a resource that many people take for granted. However as development increases and the threat of climate change becomes more significant, it is crucial that Local Authorities recognise the importance of ensuring the long term sustainability of water resources. It is also prudent that there is adequate infrastructure, including water supply and sewerage drainage capacity is available to deal with additional demand created by new development.

6.3. WHAT DO OTHER PLANS AND PROGRAMMES SAY ABOUT THE ISSUE?

6.3.1. PPS12 Local Development Frameworks – Water resources and infrastructure

Para 4.9 of the guidance states 'LPA's should ensure that delivery of housing and other strategic and regional requirements is not compromised by unrealistic expectations about the future availability of infrastructure, transportation and resources.'

Paragraphs B3 to B8 of PPS12 place specific emphasis on the need to take account of infrastructure such as water supply and sewerage in preparing LDD's. Paragraph B3 in particular states: 'The provision of infrastructure is important in all major new developments. The capacity of existing infrastructure and the need for additional facilities should be taken into account in the preparation of all local development documents. Infrastructure here includes water supply and sewers, waste facilities...'

6.3.2. The London Plan

The following policies deal with water supplies, water quality and water and sewerage infrastructure. In summary they state;

Policy 4A.11 Water supplies: (Boroughs need to)... protect and conserve water supplies in order to secure London's long term needs by ensuring that adequate water resources are available for major new developments, minimising the use of treated water, maximising rainwater harvesting opportunities and using grey water recycling systems.

Policy 4A.12 Water quality: (Boroughs should seek to)... protect and improve water quality by ensuring adequate sewerage infrastructure capacity is available, not supporting proposals that will lead to a reduction in water quality, and encouraging sustainable urban drainage systems.

Policy 4A.13 Water and sewerage infrastructure: developers and local planning authorities (should) work together with water supply and sewerage companies to enable the maintenance of water supply and sewerage infrastructure, during development. The Mayor will work with Thames Water, the Environment Agency and other relevant organisations to ensure that London's drainage and sewerage infrastructure is sustainable.

6.3.3. Unitary Development Plan (UDP)

The UDP contains the following policies on these issues:

STR.ENV PRO 2: To reduce levels of environmental pollution and to improve air and water quality and locate activities with the potential to pollute so as to minimise any environmental impact.

ENV PRO 17 Management of the Water Supply

New development should incorporate measures to... (protect) groundwater or surface water ... (and) future supplies. The Council will encourage water efficiency and minimisation of adverse impacts on water resources... ecology of rivers and groundwater.

The Council will approve applications for development only where adequate foul and surface water drainage capacity is adequate ...and environmentally acceptable.

6.3.4. Lewisham Community Strategy

The Lewisham Community Strategy does not specifically address the issue of water resources. The strategy broadly refers to the improvement of the quality and sustainability of the local environment through Action Plan 6, linking to Local Agenda 21.

6.4. POLICY OPTIONS FOR ADDRESSING THE ISSUES

OPTION	NAME	DESCRIPTION / DISCUSSION
OPTION 6.1 (CSS)	<p>RIVER WATER QUALITY</p> <p>The Council will seek to protect and improve the water quality of Lewisham's Blue Ribbon Network to ensure healthy, and attractive natural habitats by ensuring major new developments:</p> <ul style="list-style-type: none"> • Provide adequate sewerage infrastructure capacity. • Incorporate sustainable urban drainage systems to reduce the amount and intensity of urban run-off and pollution, where feasible, <p>The Council will oppose proposals that are likely to lead to a reduction in water quality, unless suitable mitigational measures are provided.</p>	<p>This option is consistent with Policy 4A.12 of the London plan and is considered necessary to propose as an option to ensure the long term sustainability of Lewisham's natural water courses.</p>
OPTION 6.2 (CSS)	<p>WATER RESOURCES</p> <p>The Council will protect and conserve water supplies in order to secure Lewisham's long term needs. In determining planning applications, boroughs should have proper regard to the impact of proposals on water demand and existing capacity.</p> <p>Preference will be given to proposals that ensure that adequate sustainable water resources are available and:</p> <ul style="list-style-type: none"> • Minimise the use of treated water • Maximise rainwater harvesting opportunities • Incorporate grey water recycling systems. 	<p>This option is consistent with Policy 4A.11 of the London plan and is considered necessary to propose as an option to ensure the long term sustainability of Lewisham's and London's water resources.</p>
OPTION 6.3 (CSS)	<p>WATER AND SEWERAGE INFRASTRUCTURE CAPACITY</p> <p>Planning permission will only be granted for development which increase the demand for off-site service infrastructure (water supply, sewer drainage and treatment) where:</p> <ol style="list-style-type: none"> 1. Sufficient capacity already exists, or 2. Extra capacity can be provided in time to serve the development which will ensure that the environment and the amenities of local residents are not adversely affected. 	<p>This option is consistent with PPS12 and the London Plan Policy 4A.13.</p> <p>This option seeks to require developers to demonstrate that there is adequate water supply, surface water, foul drainage and sewerage treatment capacity both on and off site, to serve all new developments.</p> <p>This is to ensure that new development and a demand in service will not lead to problems for existing users from overloading or lack of supply.</p>

	When there is a capacity problem and improvements in offsite infrastructure are not programmed, planning permission will only be granted where the developer funds appropriate improvements which will be completed prior to occupation of the development.	Where there is a capacity problem and no improvements are programmed by Thames Water, the council will require the developer to fund appropriate improvements.
OPTION 6.4 (CSS)	UTILITIES DEVELOPMENT The development or expansion of water supply or waste water facilities will normally be permitted, either where needed to serve existing or proposed development in accordance with the provisions of the Development Plan, or in the interests of land term water supply and waste water management, provided that the need for such facilities outweighs any adverse land use or environmental impact, and that any such adverse impact is minimised.	This option is consistent with PPS12 (para B6) where local authorities should consider both the requirements of the utilities for land to enable them to meet the demands what will be placed upon them, and the environmental effects from additional users.

7. NOISE AND LIGHT EFFECTS

7.1. THE EVIDENCE BASE

During 2003/ 2004 8,147 noise complaints were dealt with in Lewisham. This was an increase of 14% from 01/02 (source: Lewisham Corporate Plan, Environmental Enforcement Team statistics). GLA London Household Survey 2002, identified that 13% of households rated noise from road traffic as a 'serious problem', compared to 4% for noisy neighbours.

The Council does not presently hold any data relating to complaints made over light effects.

7.2. WHAT IS THE ISSUE?

The impact of obtrusive noise and light (glare or direct light) can have a serious detrimental effect on the amenities enjoyed in residential areas. At the strategic level, main roads, major rail corridors and aircraft are the principal sources of ambient noise. The planning system should have a mitigational approach to activities that have the potential to cause nuisance to residents and businesses. Where a new development is proposed it should also ensure that the development is separated from major noise sources. Where this is not possible design of the building envelope should at all times ensure a good internal noise environment.

7.3. WHAT DO OTHER PLANS AND PROGRAMMES SAY ABOUT THE ISSUE?

7.3.1. PPG24: Planning and Noise

This policy guidance asks Councils to ensure that new 'noisy' developments should be sited away from noise sensitive land uses such as housing. It also states that wherever practicable, noise sensitive developments are separated from major sources of noise (such as road, rail, air transport and certain types of industrial development). It requires consideration of the feasibility of controlling or reducing noise levels, mitigation through use of contributions or planning conditions. It emphasises the importance of minimising the adverse impacts of noise without placing unreasonable restrictions on development or adding unduly to the costs and administrative burdens of business.

7.3.2. The Mayor's Ambient Noise Strategy

Key aim of this strategy is to minimise the adverse impacts of noise on people living and working in, and visiting London. The strategy recognises that no one approach will address all the noise issues and to that end it identifies some key issues to be addressed, three of which are:

- Securing good, noise reducing surfaces on roads
- Securing a night aircraft ban across London
- Reducing noise through better planning and design of new housing.

7.3.3. The London Plan

Policy 4A.14 Reducing noise in summary states: (boroughs) should reduce noise by:

- Minimising the adverse impacts of noise from new development proposals;
- Separating new noise sensitive development from major noise sources wherever practicable;

- Supporting new technologies and improved practices to reduce noise at source, especially in road, rail and air transport.
- Reducing the impact of traffic noise through highway management and transport policies
- Containing noise from late night entertainment and other 24-hour activities

7.3.4. Lewisham Community Strategy

The Lewisham Community Strategy does not specifically address the issue of noise. The strategy broadly refers to the improvement of the quality and sustainability of the local environment through Action Plan 6, linking to Local Agenda 21.

7.3.5. Unitary Development Plan (UDP)

ENV.PRO 11 Noise Generating Development: The Council will resist development that could lead to unacceptable levels of noise. Where noise-sensitive development is proposed close to an existing source of noise, or when a noise generating development is proposed, the Council may require the developers to have prepared a detailed noise impact survey outlining possible attenuation measures.

ENV.PRO 12 Light Generating Development: Proposals for light-generating development, floodlights or otherwise obtrusive lighting may be required to be accompanied by a detailed light-impact survey outlining possible attenuation measures.

7.4. OPTIONS FOR ADDRESSING THE ISSUES

OPTION	NAME	DESCRIPTION
Option 7.1 (CSS)	<p>NOISE ATTENUATION</p> <p>The Council will seek to minimise the adverse impacts of noise from new development proposals. In particular, separation of new noise sensitive development from major noise sources will be sought wherever practicable.</p> <p>The Council will support new technologies and improved practices to reduce road and rail noise and will seek to contain noise from late night entertainment and other 24-hour activities</p> <p>The Council will resist development that could lead to unacceptable levels of noise. Where noise-sensitive development is proposed close to an existing source of noise, or when a noise generating development is proposed, the Council may require the developers to have prepared a detailed noise impact survey outlining possible attenuation measures.</p>	This option is consistent with the London Plan and National Guidance. This option is considered necessary to address the potential impacts of noise.
Option 7.2 (CSS)	<p>LIGHT ATTENUATION</p> <p>Proposals for light-generating development, floodlights or otherwise obtrusive lighting may be required to be accompanied by a detailed light-impact survey outlining possible attenuation measures.</p>	This option is consistent with the London Plan and National Guidance. This option is considered necessary to address the potential impacts of light.

8. SUSTAINABLE USE OF BUILDING MATERIALS AND AGGREGATES

8.1. THE EVIDENCE BASE

The Council presently does not hold any information or data about the amount of available sustainable or recycled building materials, or exact volumes of aggregates held and processed in Lewisham.

8.2. WHAT IS THE ISSUE?

Lewisham is a built-up, primarily residential inner London borough practicably with no opportunities for aggregates working. Nor is Lewisham in a position to make provision for more river-borne traffic; the Borough's Thames frontage is very limited with only one wharf (not in aggregates use), which is safeguarded under Secretary of State Directions.

However, the Council recognises the need for London to contribute more significantly to supply of its aggregates requirements to ease demand elsewhere and to reduce transport and distribution costs and associated pollution. Each borough in London can address this in Lewisham's case, primarily through encouragement of use of recycled aggregates.

8.3. WHAT DO OTHER PLANS AND PROGRAMMES SAY ABOUT THE ISSUE?

8.3.1. The London Plan

The main guidance given in the London Plan comes from **Policy 4A.4 Better use of aggregates**. To ensure an adequate supply of aggregates the Mayor will work with strategic partners to achieve targets of:

- 80 per cent re-use of construction and demolition waste
- 60 per cent re-use of that waste as aggregates in London by 2011.

Policy 4A.5 UDP policies should contain spatial policies to support the better use of aggregates by:

- Supporting the development of aggregate recycling facilities in appropriate and environmentally acceptable locations,
- Safeguarding wharves with an existing or future potential for aggregates handling
- Protect existing railhead capacity to handle and process aggregates, and minimise the movement of aggregates by road.

8.3.2. Unitary Development Plan (UDP)

ENV PRO 13 Aggregates

New developments will be encouraged to demonstrate an efficient use of building materials, including appropriate use of high quality materials and recycled aggregates, where appropriate.

8.4. OPTIONS FOR ADDRESSING THE ISSUE

OPTION	NAME	DESCRIPTION
Option 8.1 (CSS)	BUILDING MATERIALS AND AGGREGATES New developments will be encouraged to demonstrate an efficient use of building materials, including appropriate use of high quality materials and recycled aggregates, where appropriate. Guidance can also be taken from the Mayor of London's SPG on Sustainable Design and Construction.	This option is consistent with the London Plan and National Guidance. This option is considered necessary to achieve sustainable management of building material and aggregates.

9. CONCLUSION

This paper sets out a series of issues relating to achieving a Sustainable Environment. Stemming from those issues broad options have been proposed which the Council now wishes to consult on. These broad options will lead us towards the preferred options which will form the new policy direction for the Core Strategy and Development Policies & Site Allocations Development Documents (CS/DP&SA Plans).

A series of other Issues & Options Papers have been prepared covering a wide range of matters which need to be reviewed by the Council. All are the subject of extensive consultation. The Council is seeking your comments and/or views on the issues and options set out in this discussion paper in order to ensure that all feasible options are considered as part of the appraisal process and in developing the CS/DP&SA Plans.

In preparing this and other Issues & Options Papers, the Council is looking to the community and stakeholders to tell us the following: -

- What you think of the options presented;
- What improvements could be made to the options;
- What option(s) are your preferred options that you want the Council to take forward;
- Any options we haven't considered that you would like us to consider before identifying a preferred option(s).

In thinking about the options presented, it must be remembered that the preferred option may not be a single discreet option presented below, but rather may be a combination of a range of options taking the best parts of each.

Please forward or email planning@lewisham.gov.uk any comments by

Monday 12 September 2005 to:

**Planning Services - London Borough of Lewisham
5th Floor Laurence House
1 Cafford Rd, Cafford
LONDON SE6 4SW**