

Part 2

Chapter 3

Environmental Resources

3.1 Introduction

- 3.1.1 Maintaining and improving environmental quality is an important objective of town planning. A good environment is necessary to maintain a good quality of life for people living and working in the borough, to safeguard wildlife, as well as to attract inward investment. This takes into account the principal aim of sustainable development which is about ensuring a better quality of life for all, now and for generations to come. In order to do this the following four objectives should be met:
- Social progress which recognises the needs of everyone;
 - Effective protection of the environment;
 - Careful use of natural resources; and
 - Maintaining high and stable levels of economic growth and employment.
- 3.1.2 To enable people to continue living in pleasant surroundings and ensure a similar standard for future generations, the environment needs to be protected and enhanced. Most development which is necessary to meet communities' needs, for example the provision of new housing, industrial or transport infrastructure, can have an impact on the environment. Environmental problems that may result from development and human actions include global warming, air pollution, water pollution, resource depletion and loss of wildlife and habitats.
- 3.1.3 The planning system can help to protect the environment through locating development so as to reduce the need to travel; locating polluting activities away from sensitive areas/uses and sensitive developments away from polluting activities; promoting the re-use of previously developed land; encouraging design that reduces pollution, energy use and waste generation; and ensuring that any waste generated is dealt with in an environmentally acceptable manner. This chapter sets out detailed policies for the protection of environmental resources, which aim to minimise any potentially adverse environmental impacts in accordance with the council's aims and priorities.

National Planning Policy Context

- 3.1.4 The government's objectives for the environment are set out in a series of Planning Policy Guidance Notes (PPGs), which as an effect of the Planning and Compulsory Purchase Act 2004, are replaced partly by Planning Policy Statements (PPSs).
- 3.1.5 PPG1 states that local authorities should adopt a sustainable planning framework that provides for the nation's needs for food production, minerals extraction, new homes and other buildings whilst respecting environmental objectives. The new PPS1 – *Delivering Sustainable Development* (2005) re-emphasises the government's commitment to sustainable development and states the need for planning authorities to take an approach based on integrating the four aims of sustainable development – economic development, social inclusion, environmental protection and prudent use of resources.
- 3.1.6 PPG12 – *Development Plans* (1999) places emphasis on taking environmental considerations into account when preparing development plans and provides advice on what environmental issues to consider. The guidance makes reference to the need for policies on pollution, energy conservation, flood prevention, hazardous installations, the protection of groundwater and the provision of adequate infrastructure. In addition, UDPs are required to include policies on minerals and waste.
- 3.1.7 PPG13 – *Transport* (2001) encourages the development of policies which seek to reduce the need to travel. The government recognises that land use planning can help promote sustainable distribution, including where feasible, the movement of freight by rail and water. PPS23 – *Planning and Pollution Control* (2004) and PPG24 – *Noise* (1994) give advice on determining appropriate locations for development that may give rise to pollution or noise.

- 3.1.8 PPS22 – *Renewable Energy* (2004) states that local development documents should contain policies designed to promote and encourage, rather than restrict, the development of renewable energy resources. At the local level, planning authorities should also set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects. Planning policies that rule out or place constraints on the development of all, or specific types of, renewable energy technologies should not be included in development plans without sufficient, reasoned justification. The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission. Local Planning Authorities should not make assumptions about the technical and commercial feasibility of renewable energy projects. Technological change can mean that sites currently excluded as locations for particular types of renewable energy development may in future be suitable.
- 3.1.9 PPS10 – *Planning for Sustainable Waste Management* (2005) encourages the inclusion of policies that identify sites or contain criteria for waste management facilities, that consider all options for managing any waste generated and ensure that there are adequate facilities in place to prevent transporting waste long distances for disposal. In addition, government guidance on waste is set out in its *Waste Strategy 2000 for England and Wales* (2000). This strategy states that the drive to more sustainable waste management, with a lessening reliance on landfill sites, means that there will be a greater need for waste sorting and bulking depots, and materials and energy recovery facilities, in the future. This document sets out and explains the waste management principles such as the Best Practicable Environmental Option, the proximity principle (which considers how far waste is transported) and the waste hierarchy (reduce, reuse, recover, recycle and dispose).
- 3.1.10 PPG25 – *Development and Flood Risk* (2001) advises that the susceptibility of land to flooding is a material planning consideration and that the Environment Agency has a lead role in providing advice on flood issues. It advises that policies in UDPs should outline the considerations which will be given to flood issues, recognising the uncertainties that are inherent in predicting flooding. Planning decisions should apply the precautionary principle to the issue of flood risk, avoiding such risk where possible and managing it elsewhere. Developers should contribute towards the cost of flood defences required as a consequence of the development. Also, UDP policies should recognise that flood risk management needs to be applied on a whole-catchment basis and should not be restricted to flood plains.

Regional Planning Policy Context

- 3.1.11 The *London Plan* (2004) states that boroughs' Unitary Development Plans should generally conform with the *London Plan*. The guidance states that planning authorities should encourage a pattern of land use and provision of transport which minimises harm to the environment and reduces the need to travel, especially by car, consistent with the principles of sustainable development. The *London Plan* also recognises the role the planning system has to play in managing waste, reducing pollution and encouraging the efficient use of resources, such as water and energy.
- 3.1.12 In addition, the Mayor has published several strategies for London, covering environmental issues in more detail. The Mayor's Municipal Waste Management Strategy, *Rethinking Rubbish in London* (2003) and the *London Wider Waste Strategy* (2004) note that more sustainable waste management means that there will be a greater need for waste sorting and materials recovery facilities in the future, set out waste management principles and introduce the Green Procurement Code to all London boroughs and over 230 companies.
- 3.1.13 The Mayor's *Energy Strategy* (2004) indicates that the government would be looking to work with regional and local bodies to deliver its objectives, including establishing regional targets for renewable energy generation. To support this process, the GLA published a toolkit for planners, developers and consultants to help integrate renewable energy into new developments. The Mayor's Ambient Noise Strategy *Southern City* (2004) focuses on reducing noise through better management of transport systems, better town planning and better design of buildings. This means minimising noise on roads and railways, being more careful where noisy activities are sited and protecting housing, schools, waterways and open spaces.

- 3.1.14 The Mayor’s Air Quality Strategy *Cleaning London’s Air* (2002), states that road traffic is the main cause of pollutants in London. Therefore the Mayor’s Air Quality Strategy emphasises the need to reduce pollution from road traffic by measures such as targeting emission reduction at the most polluting vehicles (mainly heavier diesel vehicles such as buses, coaches, goods vehicles, waste vehicles, and taxis), increasing the take-up of newer, cleaner vehicles and technologies, increasing the take-up of cleaner fuels and investigating the feasibility of introducing one or more low emission zones in London which would exclude the most polluting vehicles from specified areas.

Borough Context

- 3.1.15 The council recognises the importance of conserving and improving the environmental quality of the borough. A key aim for the council as set out in its Corporate Plan is to create a sustainable, healthy environment, which means integrating environmental, social and economic policies to promote a more just and equitable society. To meet this aim the council has prepared a Local Agenda 21 Strategy, *New Century, New Start*, which declares Barnet’s commitment to the principles agreed at the Earth Summit in 1992. The strategy contains a list of actions to be taken by various groups (the public, private and voluntary sectors) within the borough in order to help make Barnet a more sustainable place. Other work carried out by the council in this area includes an Environmental Policy Statement which contains a set of environmental aims for the council to achieve, and a Sustainability Status Report which contains 33 sustainability indicators measuring a range of environmental, social and economic trends in the borough. The council has committed itself to protecting the environment of the borough through the ‘Three Strands Approach.’ The theme of environmental protection is one of the guiding principles of this Plan:

To enhance the quality of the natural and built environment through ensuring that new development improves the quality of life for all Barnet’s residents.

Strategy

- 3.1.16 With regard to environmental protection the council has the following objectives:
1. To preserve and enhance the character of the environment, the quality of life and residential amenity in the borough;
 2. To conserve natural resources and energy so that there are adequate resources available for future generations to meet their needs; and
 3. To minimise waste and pollution to the atmosphere, water and land.

3.2 Strategic Policies

- 3.2.1 The key strategic policies to maintain and improve the borough’s environmental quality are as follows.

Policy GEA – Environmental Impact

~~The council will take full account of all aspects of environmental impact when assessing development proposals. For development defined in the Town and Country Planning (Environmental Impact Assessments) (England and Wales) Regulations 1999 as Schedule 2, the council will follow the guidance of DETR Circular 02/99 to determine whether it is likely to have a significant effect upon the environment and thereby require an environmental statement.~~

Policy GEnergy – Energy Efficiency

~~In planning for development in the borough the council will seek to conserve resources and minimise pollution by:~~

- ~~• Encouraging energy and water efficient developments;~~
- ~~• Promoting the use of renewable energy;~~
- ~~• Seeking to reduce traffic generation; and~~
- ~~• Improving air, water and land quality.~~

Policy GWaste – Waste Disposal

The council will encourage waste management practices that are carried out in accordance with the following waste management principles:

- The waste management hierarchy – reduce, re-use, recover (recycling, composting, energy recovery) and dispose;
- The Best Practical Environmental Option; and
- The proximity principle.

Policy GLand – Re-use of Brownfield Land

~~The council will encourage the re-use of previously developed land and existing buildings wherever possible. Before permitting development on greenfield land the council will wish to see that the opportunities for development on derelict, contaminated, underused or other vacant land have been fully explored.~~

3.3 Detailed Policies

Energy Supply and Conservation

- 3.3.1 Energy used in Barnet is derived mainly from fossil fuels (coal, oil and gas). It is used to heat homes, to power transport systems and in commercial and industrial processes. The production of energy by the combustion of fossil fuels not only depletes finite resources but also leads to a number of environmental impacts, such as global warming, and can pose a threat to human health.
- 3.3.2 Consideration in all developments should be given to energy efficiency and renewable forms of energy, particularly passive solar design. Proposals including such measures will be treated favourably. There are many opportunities for renewable energy in Barnet. Energy efficient measures and passive solar design can be incorporated into most forms of development at no extra costs. Other forms of renewables that are feasible in the borough and are particularly encouraged include solar water heating and photovoltaics. There are a number of methods that are likely to be economically viable or attractive in Barnet (according to advice in DETR Research Paper 55, *Renewable Energy in the UK*) such as solar water heating, photovoltaics, passive ventilation, passive solar design, biomass-fuelled combined heat and power, biomass boilers and building-mounted wind turbines. As stated in the annex to PPS22 (2004), photovoltaic arrays make no sound, but have a visual impact, which will need to be considered. Electricity from renewables can be purchased through the grid from most electricity suppliers, which should always be considered if renewables are not appropriate on the site.
- 3.3.3 The council will ensure that proposals for renewable energy projects are sensitively placed so as to prevent unacceptable adverse environmental impacts. Conditions will be used to control access, traffic and transport, and noise. Proposals involving listed buildings or affecting their setting, or buildings within conservation areas, will be subject to policies in the “Built Environment” chapter. Proposals that would adversely affect the important views and landmarks in the borough will be subject to Policy D18 of the “Built Environment” chapter.
- 3.3.4 Combined heat and power (CHP) schemes involve the simultaneous production of power, usually electricity, and heat. These schemes can achieve 80% efficiency using heat that is normally lost into the atmosphere. CHP schemes also result in less CO₂ emissions because less fossil fuels are needed to produce the same amount of energy. One of the other potential sources of energy is from waste. This is dealt with in the waste management section of this chapter.
- 3.3.5 The Home Energy Conservation Act 1997 places a duty upon all local authorities to improve the level of energy efficiency in all of their houses by 30% over 10 years. Since then, Energy Action Areas (EAAs) have been introduced in Barnet to help improve the energy efficiency of the borough’s housing in line with the Act.

- 3.3.6 Energy efficient development can be achieved through using certain layouts, designs and landscaping to maximise the use of natural sunlight and ventilation, such as south facing aspects and the use of passive solar design. Developers are referred to *Planning for Passive Solar Design* published by the Building Research Establishment Conservation Support Unit (BRECSU) for more detailed guidance. In addition, Part E of the *Building Regulations* (2003) sets minimum standards for insulation in new buildings or extensions. More detailed supplementary guidance and standards on designing developments to conserve energy can be obtained from the council's Building Control section.
- 3.3.7 The government has produced a Standard Assessment Procedure (SAP 2005) for the energy rating of dwellings. It is used to demonstrate the compliance of dwellings with Part L of the Building Regulations. In seeking proof that new buildings have been designed with sufficient thought to energy conservation, the council will recognise both the National Home Energy Rating (NHER) system and SAP 2005 in calculating the energy efficiency of dwellings. In the case of NHER, a minimum rating of 8.0 will be sought; in the case of SAP, a minimum rating of 81 (or a 'B rating') will be required for all new homes.
- 3.3.8 Transport accounts for a large proportion of energy consumption, therefore development should be planned to reduce the need to travel. Facilities should also be provided for cyclists and pedestrians to encourage travel by non-motorised modes of transport. The council will favourably consider plans to install equipment to provide alternative vehicle fuels where it is safe to do so. Mixed use developments give people the option to live, work and relax in one area, which can reduce the need to travel and provide opportunities for energy savings. The council will seek to encourage this through policies elsewhere in the UDP. Further guidance on energy efficiency is provided in the *Supplementary Planning Document on Sustainable Design and Construction*.

Policy ENV1 – Efficient Energy Production

~~The council will support and encourage proposals for efficient and environmentally acceptable forms of energy production, such as renewable energy sources and the use of combined heat and power schemes where appropriate, and will favourably consider plans to install equipment to provide alternative vehicle fuels where it is safe to do so.~~

Policy ENV2 – Energy Efficient Design

~~The council will encourage energy efficient development through:~~

- ~~• Seeking forms of layout, design, landscaping and materials used in developments, refurbishments and conversions that conserve energy;~~
- ~~• Expecting new developments to meet high standards of energy efficiency and achieve a National Home Energy Rating (NHER) of 8; and~~
- ~~• Encouraging the integration and mixture of land uses where appropriate.~~

Waste Management

- 3.3.9 The government's *Waste Strategy 2000 for England and Wales* sets out specific targets for waste and recycling over the period covered by the UDP. For commercial and industrial waste, the target for 2005 was to reduce the quantity landfilled to 85% of the figure for 1998. London's Municipal Waste Management Strategy superseded the national standards and for municipal and household waste the targets are:
- In 2005 to recycle or compost at least 25% of household waste and recover value from 40% of municipal waste;
 - In 2010 to recycle or compost at least 30% of household waste and recover value from 45% of municipal waste; and
 - In 2015 to recycle or compost at least 33% of household waste and recover value from 67% of municipal waste.

- 3.3.10 The Municipal Waste Management Strategy set out further statutory standards for Waste Disposal and Waste Collection Authorities between 2003 and 2006. Best Value authorities were also required to publish details of their performance in their annual Best Value Performance Plan. The waste management licensing regime is controlled by the Environment Agency with the aim of preventing and minimising the effects of pollution on the environment.

Policy ENV3 – Waste Management Facilities

~~Proposals for waste management facilities will be treated on their merits and will be assessed against the following criteria:~~

- ~~• The proximity of the facility to the source of waste;~~
 - ~~• The opportunity for access by rail to the waste management facility;~~
 - ~~• The impact of the proposal on the environment and residential amenities;~~
 - ~~• The scale and design of plant and buildings; and~~
 - ~~• The inclusion of energy recovery and recycling facilities on the site where possible.~~
- ~~Proposals which do not meet all of these criteria and have unacceptable impacts will not be permitted.~~

- 3.3.11 At present the majority of waste generated in the borough is sent to landfill. Most waste is landfilled because this is the cheapest and easiest means of dealing with it. However, landfilling causes air and water pollution and land contamination. Available land for the disposal of waste is also running out. Therefore the minimisation of waste is a key priority for the council. The council has prepared a waste prevention strategy to deal with waste management in the borough up to 2020. The objectives of the strategy are to:
- Reduce the amount of waste produced in Barnet;
 - Make the best use of waste that is produced; and
 - Choose waste management options which minimise the risk of immediate and future environmental pollution and harm to human health.
- 3.3.12 In order to decrease the amount of waste sent to landfill and to dispose of waste in accordance with the government's waste management hierarchy, the council will seek to increase the amount of waste recycled. To help achieve this, the provision of suitably located recycling facilities in the borough is needed. Recycling centres should be located in areas where they will not result in an increase in traffic, for example, within walking distance from homes (200 – 300 metres) or at locations where a trip to a recycling centre can be combined with other purposes such as work, shopping or leisure. New developments will be expected to include recycling facilities and the council will use planning conditions or legal agreements to secure this where appropriate. The council has produced guidance for waste facilities within new developments as part of the *Supplementary Planning Document on Sustainable Design and Construction*.
- 3.3.13 The council will consider the siting and design of recycling facilities so as to minimise any harm to amenity and the surrounding environment.
- 3.3.14 The construction industry also offers opportunities to increase the amount of waste recycled. Construction and demolition materials can be re-used in roads and buildings. Therefore the council will encourage the re-use of demolition materials.

Policy ENV4 – Recycling Facilities

~~The recycling of waste will be promoted by ensuring that there is an adequate network of recycling facilities in the borough and by requiring the provision of recycling facilities as part of new commercial, industrial, leisure and residential developments.~~

Minerals

- 3.3.15 There are no workable mineral supplies in the borough and the extraction of minerals is not an issue in Barnet. However, aggregates facilities (including mineral size reduction, ready-mix concrete batching plants and concrete crushing plants) are needed to handle, store and process aggregates. Any adverse environmental effects arising from such facilities should be minimised.

- 3.3.16 Dust is a significant feature of all aggregates operations, especially during the loading and unloading of aggregates, which can be alleviated if operations are fully housed and enclosed and if sprinkler systems are installed. Noise is generated when loading or unloading aggregates and from lorry movements to and from sites. This impact can be reduced through the careful layout of sites and restricting hours of operation. The built facilities and plant should be designed so as to minimise visual intrusion and to ensure that they fit in with the surrounding environment. Measures to reduce the effects of dust and noise can be enforced using planning conditions or Section 106 agreements. It is not considered appropriate to locate aggregates facilities in or close to residential areas due to the impacts on residential amenity of noise, dust and vehicle movements.
- 3.3.17 Traffic generation at handling and processing sites can also have a very significant impact if deliveries to and from sites are made by road. The impact is greatest in the immediate vicinity of plants and therefore good access to the primary road network is required in order to avoid residential roads. In order to decrease the impact of road transport, movement of aggregates by rail should be encouraged.

Policy ENV5 – Aggregates Facilities

Proposals for aggregates facilities within Barnet will be permitted provided that:

- **The facility is not located within or adjacent to predominately residential areas;**
- **There are no significant adverse environmental impacts, particularly those of dust and noise;**
- **The facility is designed to minimise the impact upon the character and appearance of the area; and**
- **There is satisfactory access to the primary road network.**

Light Pollution

- 3.3.18 Lighting schemes for sports facilities, streets, car parks and shop windows, or those used for security purposes, may be considered a form of pollution. Lighting schemes can affect amenity due to glare and light spillage, their visual impact in the daytime and increased disturbance from noise due to extending hours of activity into the evening. Developments built with lighting at night can increase their visual impact and the light may also adversely affect previously dark landscapes, and have a detrimental effect on wildlife such as the breeding habitats of certain species of birds. Also of concern is the impact of increased outdoor lighting on the night sky, making it more difficult to view stars.
- 3.3.19 Lighting can also have beneficial effects such as enabling evening activity, increasing safety and security and advertising/exhibiting particular buildings or landscape features. Therefore the council will seek to minimise any adverse impact of lighting schemes through design or technological solutions or by controlling the hours of use. Technological solutions may include the type of lighting used, since certain types of lighting can control the distribution of light and minimise glare. Design solutions could include screening, shielding, reducing lantern mounting heights and minimising glare.
- 3.3.20 When considering lighting schemes the council will apply the recommendations laid down by the DETR, the Institute of Lighting Engineers (ILE) and the Chartered Institute of Building Service Engineers (CIBE).
- 3.3.21 A specific policy on floodlighting is contained in the “Leisure, Recreation and Tourism” chapter. Further guidance on efficient lighting schemes is provided in the *Supplementary Planning Document on Sustainable Design and Construction*.

Policy ENV6 – Light Pollution

Proposals for lighting schemes will be permitted provided that they do not have a demonstrably harmful impact on residential amenity, on wildlife interests and on the environment generally. Where necessary the council will require developers to take measures to control the level of illumination and spillage of light and may restrict hours of usage.

Air Pollution

- 3.3.22 Air pollution is the result of emissions, such as carbon monoxide, nitrogen oxides and sulphur dioxide, being released into the atmosphere. The main sources of emissions are transport, combustion and industrial processes. Air pollution has been linked to health problems such as asthma and respiratory problems, and damage to the surrounding environment. In assessing acceptable levels of air pollution the council will take account of the air quality objectives set out in the Mayor's Air Quality Strategy (2002), the aims of any Air Quality Action Plans produced by the council, and the results of air quality monitoring in the borough. The review and assessment of air quality under the Environment Act 1995 has shown that road traffic is the main source of air pollution in the borough. The main air pollution problems are from nitrogen dioxide and fine particles (PM10 – particles less than 10 microns in size).
- 3.3.23 In order to minimise the impact of pollution the council will aim to locate polluting activities away from uses sensitive to pollution, and uses sensitive to pollution away from the sources of pollution. Where separation is not possible, measures should be taken to mitigate the effects of any potential pollution and developers will be required by conditions or otherwise to ensure that such measures are implemented. Traffic emissions account for the bulk of air pollution in London. Therefore, development should be planned to reduce road traffic and the need to travel and to increase the use of other modes of transport, in particular by providing for cyclists and pedestrians. Major trip-generating developments should be located close to public transport nodes.
- 3.3.24 Air pollution in Barnet is monitored by measuring the amount of nitrogen dioxide, carbon monoxide and particulate matter (PM10) in the atmosphere. The council has continuous air quality monitoring stations at Chalgrove School and Tally Ho. These monitor levels of fine particles and nitrogen dioxide. These measurements support the ongoing review and assessment of air quality in the borough. Quality assurance and quality control of the data are carried out by environmental consultants. They do this for many London boroughs as part of the London Air Quality Network. Borough monitoring data and further air quality information is available from the Environmental Health section within the council, on Barnet's website and on the website of the Environmental Research Group (ERG) at King's College London.
- 3.3.25 The results of long-term monitoring of nitrogen dioxide show that there are localised areas of poor quality that may get worse, which include:
- In Mill Hill – the Broadway, A1, A412 and M1 corridor.
 - In Finchley – Regents Park Road junctions with the A406 and A1.
 - In Finchley – the North Circular Road corridor, the Strawberry Vale area, and the junction with the A1000.
 - In the Brent Cross area – North Circular Road junctions with the A5, M1 and A41.
 - In High Barnet – the High Street and Wood Street junctions with Barnet Hill.
- 3.3.26 An Action Plan to improve the air quality in the borough-wide Air Quality Management Area will be developed and implemented. The Action Plan(s) and the AQMA(s) may change over time. Details of the AQMA(s) and the related Action Plan(s) can be obtained from the council's Environmental Health section. The council will prepare reports on air quality, as part of the ongoing process of reviewing and assessing air quality, and the Air Quality Management Area Action Plan(s).
- 3.3.27 Proposals for potentially polluting uses will not normally be considered acceptable in identified areas of poor air quality, nor will proposals for developments sensitive to pollution. Proposals for development in such areas should include measures that will improve or at least not worsen air quality. Examples include action to decrease traffic generation, cleaner vehicle technology, energy efficient buildings or landscaping. In addition, the council will take into account the sensitivity of uses proposed for development in areas of identified poor air quality, and will expect developers to demonstrate how potential problems will be addressed. Further guidance on air quality issues is provided in the *Supplementary Planning Document on Sustainable Design and Construction*.

Policy ENV7 – Air Pollution

Development proposals that could lead to unacceptable levels of air pollution will not be permitted unless the developer is able to demonstrate that measures can be implemented that will mitigate these effects. The council will seek to minimise the impact of pollution through the careful location of potentially polluting uses, the siting of uses sensitive to pollution away from the sources of pollution and through planning development to reduce road traffic and the need to travel. Barnet’s Air Quality Action Plan will use policies from the UDP and specify others to reduce pollution in designated Air Quality Management Areas.

~~**Policy ENV7(A) – Air Quality Management Areas**~~

~~Where development is proposed in identified areas of poor air quality the council will require developers to provide evidence of measures that will be taken to address air quality.~~

Water

3.3.28 Barnet’s main water courses are of fair to poor chemical quality according to assessments carried out by the Environment Agency. Maintaining the quality of water, especially groundwater, is important in ensuring the borough’s population has a good quality domestic water supply. Water pollution can also affect the supply of water for leisure, industrial and agricultural uses and have a harmful impact upon riparian wildlife habitats. There are 14,080 metres of streams and brooks in the borough with banks which provide corridors of natural habitat, which are rare in London. These link Barnet’s built-up areas with the countryside and areas of open space, such as the Welsh Harp reservoir and Hampstead Heath. The council will work with the Environment Agency to restrict development which may threaten the quality of either ground or surface water.

3.3.29 The council recognises that demand for water is likely to increase in line with population growth, which could lead to over-abstraction of water and reduced river flows in surrounding areas. Low river flows create problems for supply and increase the risk of pollution because there is less water to dilute any polluting substances. The council therefore welcomes water conservation measures such as grey water recycling or metering, water efficient toilets, rainwater utilisation systems and tap flow regulators, where they can be included as part of any new development. More information on such devices can be obtained from the relevant water company. A further problem that may affect water courses is caused by underground structures obstructing groundwater flows. Consequently, a building-up of groundwater levels may occur on the up-gradient side of such structures. Any drainage systems proposed for such structures should also be capable of allowing groundwater flows to bypass the structure without causing any unacceptable change in groundwater levels or flow in groundwater-fed streams, ditches or springs. Further guidance on water conservation and drainage systems is provided in the *Supplementary Planning Document on Sustainable Design and Construction*.

~~**Policy ENV8 – Water Quality**~~

~~The council will not permit development that is likely to adversely affect ground or surface water quality or quantity. In addition, the council will encourage all new development to incorporate water conservation measures.~~

3.3.30 Floodplains and urban washlands perform an important function in preventing flooding in developed areas. They can also contribute to the quality of the environment through their open character, ecological and amenity value, and consequently will be protected from development that increases flood risk.

3.3.31 Where development or ground raising is proposed in floodplains, the council will require the developer to undertake a Flood Risk Assessment into any potential flood risk in advance of development. Developers will be required to identify, and make arrangements to implement, any necessary measures in agreement with the council in consultation with the Environment Agency’s Development Control Team.

- 3.3.32 Large new developments on land which was previously undeveloped or less intensively developed, can significantly increase run-off and consequently increase the risk of flooding in water courses and overloading in surface water sewers. In such cases the council, in conjunction with the Environment Agency, will encourage the implementation of measures such as source control, local flood storage and Sustainable Urban Drainage Systems to minimise the increase in potential flood risk. If necessary the council will require a scaling down of the proposed development to a more viable level.
- 3.3.33 Care needs to be taken with land raising as in some cases it may adversely affect natural habitats, land drainage and the general catchment characteristics. No land raising will be permitted in flood plain areas without the completion of a hydraulic study and implementation of any necessary measures to alleviate increased flood risk. Development will only be acceptable in flood plains where issues of flood risk have been addressed and environmental and ecological mitigation has been agreed with the council in consultation with the Environment Agency. Further information may be obtained from the Environment Agency (see www.environment-agency.gov.uk), including the most up to date flood map of Barnet.

Policy ENV9— Flood Risk Areas

~~In areas at risk from flooding, new development or intensification of existing development will only be permitted where applicants have properly assessed the flood risk and made arrangements to implement flood prevention measures. The council will seek to ensure this through the use of planning conditions or obligations.~~

Policy ENV10— Increased Flood Risk

~~Development that will generate significant surface water run-off likely to result in increased flood risk, or changes to natural habitats, will not be permitted unless appropriate prevention measures are taken as part of the development.~~

Drainage

- 3.3.34 Most forms of new development will need infrastructure for drainage, placing an extra demand on existing facilities. Inadequate foul and surface water drainage can have an adverse effect on water quality and increase the risk of flooding. Where existing infrastructure is inadequate to support additional development, the developer will normally be required to ensure that adequate infrastructure, including preventative measures to protect receiving water courses from accidental releases, is provided before development starts. The council, in consultation with the Environment Agency, will encourage the use of Sustainable Urban Drainage Systems where conditions are appropriate. This can help to provide the means of minimising the risk of flooding and surface and ground water pollution.

Policy ENV11— Drainage Infrastructure

~~The council will require new developments to include adequate foul and surface water drainage infrastructure and will seek to ensure this through the use of planning conditions or obligations. Wherever this is practicable, the council will require the use of sustainable drainage systems.~~

Noise

- 3.3.35 In Barnet, the number of complaints the council receives regarding noise has been increasing. Complaints are mainly generated by noise from entertainment activities, alarms, neighbour activities, commerce and construction. There are areas within the borough where noise levels are already high, such as close to railways and main roads (the North Circular Road, M1, A1 and A41). Noise can have a considerable impact on the quality of life of people living or working in the borough. Therefore it is important to minimise noise disturbance by exercising planning control on new developments.

- 3.3.36 The separation of noise sensitive developments (houses/residential homes/hospitals/schools) from noise generating sources can reduce the effects of noise on those developments. Noise generating sources within the borough include transport routes, construction sites, commerce, sport, recreation and other leisure time activities. Planning conditions can be used to control the operating hours of a particular noise generating development, or to influence the layout and design of buildings, in order to reduce the effects of nearby noise sources. The layout of buildings can be designed or modified to reduce the effects of noise disturbance through the use of measures such as screening with natural barriers or other buildings.
- 3.3.37 When considering noise issues the council will have regard to advice contained in PPG24 – *Planning and Noise* about acceptable noise levels, in particular the noise exposure categories for dwellings set out in Annex 1. For other noise-sensitive developments the council will use the standards set out for internal noise levels in BS8233 or by National Health Service Estates and the Department for Education and Skills. For developments likely to generate significant noise, the council will expect a Noise Impact Assessment to be provided by developers. Further guidance on noise is provided in the *Supplementary Planning Document on Sustainable Design and Construction*.

Policy ENV12 – Noise Generating Development

Proposals to locate development that is likely to generate unacceptable noise levels close to noise sensitive developments will not normally be permitted. Proposals to locate noise sensitive development in areas with existing high levels of noise will not normally be permitted.

Policy ENV13 – Minimising Noise Disturbance

Where development is proposed to be located close to a permanent source of noise generation, the council will require applicants to minimise the effect of noise through design, layout, landscaping and insulation and will seek to ensure this through the use of planning conditions or legal agreements.

Contaminated Land

- 3.3.38 Redeveloping former commercial and industrial land is in line with the principles of sustainable development. This will allow the best use to be made of previously used land and reduce pressure on greenfield sites. Under Part IIA of the Environmental Protection Act 1990, which came into force in April 2000, the council will implement a strategy for the inspection of potentially contaminated sites in the borough. Some examples of this type of land in the borough include old gas works, redundant landfill sites/mineral workings, old sewage works, and land used for a large number of other industrial and commercial purposes.
- 3.3.39 When considering planning applications for the development of potentially contaminated land, the council will need to be sure that the development proposed is suited to the constraints of the land and takes account of any contamination. The council will also take into account any nature conservation value that may have accrued. The council will have regard to PPS23 (2004), which states that contamination is a material planning consideration and that the responsibility for the safe development and secure occupancy of a site lies with the developer. Therefore, the developer will be required to carry out a full site investigation of potentially contaminated sites, considering both the possible risk to future users of the site and threats to ground and surface water quality. Before development can start appropriate remedial measures will be agreed with the planning authority and carried out in line with current guidelines, having regard to relevant legislation. The developer will be required to provide a report verifying that the works have been carried out as agreed. This will normally be achieved by imposing conditions on planning applications.

Policy ENV14 – Contaminated Land

The council will encourage applications for the development of land which is or may be contaminated. However, any such applications will only be considered once a site investigation to establish the level of contamination in the soil and/or groundwater/surface waters has been undertaken by the developer. Planning permission subsequently granted will, if necessary, be subject to conditions requiring a further detailed survey and a strategy and measures for remediation of the site.

Notifiable Installations

- 3.3.40 Certain sites and pipelines are designated as Notifiable Installations where the presence or use of hazardous substances is in excess of the quantities set out in the Planning (Hazardous Substances) Act 1990. Where development is proposed near such installations the council will seek the advice of the Health and Safety Executive (HSE) on the potential risk to health and safety of people occupying the proposed development. It may be necessary to keep sensitive development, such as housing, schools or hospitals, away from Notifiable Installations. If a new Notifiable Installation is proposed the council will seek the advice of the HSE on any potential risk to the surrounding population and environmental quality. Any such development will be expected to provide rigorous safeguards and be located in appropriate areas where risk can be minimised. The views of the HSE will be taken into account when deciding a planning application for such a development.
- 3.3.41 There are two existing Notifiable Installations within Barnet, the Mill Hill gas holder station and the Barnet gas holder station, which are shown on the Proposals Map.

Policy ENV15 – Notifiable Installations

Proposals for Notifiable Installations or developments near to existing Notifiable Installations will only be permitted provided that:

- There is no unacceptable risk to an individual's health and safety; and
- There will be no significant threat to environmental quality.