Environmental Sustainability

2035 Vision - Delivering an environmentally sustainable borough

Hammersmith and Fulham's vision is to be the greenest borough by 2035, with new buildings being designed to be energy and resource efficient and much more of the borough's waste to be sustainably managed with an increase in recycling. In particular, new development will be required to minimise energy use and the use of other non renewable resources, as well as facilitating an increase in the use of low and zero carbon technologies to help minimise carbon dioxide (CO₂) emissions. This will particularly be required of major developments.

All development in the borough, both buildings and infrastructure will be encouraged to be intelligently designed for durable and resilient futures, supporting the move to a low-carbon economy and taking account of climate change impacts, particularly the risk of flooding. New developments will also be expected to contribute towards improving local air quality, particularly where they include potentially major new sources of emissions or could significantly increase traffic-generated emissions.

Developments will be encouraged to contribute to the concept of a "smart city", where multiple information and communication technology (ICT) solutions are integrated in a secure fashion to enable effective performance in terms of energy, water, waste and reducing CO₂ emissions and to improve quality of life. Sustainable Drainage Systems (SuDS) will be sought in new developments, and major developments in the regeneration areas will be promoted as zero carbon exemplars.

Policy CC1 - Reducing Carbon Dioxide Emissions

The council will require all major developments to implement energy conservation measures by:

- a. implementing the London Plan (2016) sustainable energy policies and meeting the associated carbon dioxide (CO₂) reduction targets;
- b. ensuring developments are designed to make the most effective use of passive design measures, and where an assessment such as BREEAM (or equivalent) is used to determine a development's environmental performance, this must be supplemented with a more detailed Energy Assessment in order to show compliance with the London Plan's CO₂ reduction targets;
- c. requiring energy assessments for all major developments to demonstrate and quantify how the proposed energy efficiency measures and low/zero carbon technologies will reduce the expected energy demand and CO₂ emissions;
- d. requiring major developments to demonstrate that their heating and/or cooling systems have been selected to minimise CO₂ emissions. This includes the need to assess the feasibility of connecting to any existing decentralised energy systems or integrating new systems such as Combined (Cooling) Heat and Power units or communal heating systems, including heat networks; and
- e. using on-site renewable energy generation to further reduce CO₂ emissions from major developments, where feasible.

Where it is not feasible to make the required CO₂ reductions by implementing these measures on-site or off-site as part of the development, a payment in lieu contribution should be made to the council which will be used to fund CO₂ reduction measures in the borough or elsewhere in London; and

Encouraging energy efficiency and other low carbon measures in all other (i.e. non-major) developments, where feasible. The council will also encourage developers to use energy performance standards such as Passivhaus to guide development of their Energy Strategies.

Justification

6.246 Local planning authorities have a statutory duty to take action on climate change and include policies in local plans that will help reduce CO₂ emissions. To this end, this policy supports the move to a low carbon future as outlined in The National Planning Policy Framework (NPPF)⁽⁵⁷⁾ and helps apply the London Plan's established energy hierarchy. This encourages sustainable energy practices in new developments by requiring them to:

- use less energy;
- supply energy efficiently; and
- use renewable energy.

- **6.247** The policy ensures that new development will be designed to be as energy efficient as possible, help improve the provision of energy efficient and low emission heating and cooling networks in the borough and also promotes the generation of on-site renewable energy, where this is feasible.
- **6.248** Where a development has maximised CO₂ emissions reduction on or off site but still falls short of meeting the required London Plan (2016) target, a payment in lieu should be made to the council. This will be used to implement sustainable energy measures off-site in the borough or elsewhere in London. The payment should be based on the council's accepted price of offsetting carbon emissions and be calculated for a 30 year period, in line with national guidance. Further details on the council's approach to calculating payment in lieu requirements is provided in the council's Planning Guidance SPD.
- **6.249** Energy Assessments will be required to be submitted as part of the supporting information accompanying every application for a major development. Further details on the requirements for Energy Assessments are provided in the council's Planning Guidance SPD.
- **6.250** Developers are encouraged to use energy performance standards such as PassivHaus to guide development of their Energy Strategies, particularly in relation to reducing demand for heating. The Passivhaus standard can be applied not only to new residential dwellings but also to new commercial, industrial and public buildings and may also be suitable for refurbishment projects where the external appearance of a building would not be harmed as a result of the alterations required.

Policy CC2 - Ensuring Sustainable Design and Construction

The council will require the implementation of sustainable design and construction measures in all major developments by:

- a. implementing the London Plan sustainable design and construction policies to ensure developments incorporate sustainability measures, including:
- minimising energy use;
- making the most effective use of resources such as water and aggregates;
- sourcing building materials sustainably;
- reducing pollution and waste;
- promoting recycling and conserving and promoting biodiversity and the natural environment;
- ensuring developments are comfortable and secure for users and avoiding impacts from natural hazards (including flooding); and
- b. Requiring Sustainability Statements (or equivalent assessments such as BREEAM) for all major developments to ensure the full range of sustainability issues has been taken into account during the design stage.

The integration of sustainable design and construction measures will be encouraged in all other (i.e. non-major) developments, where feasible.

- **6.251** Sustainable design and construction principles are supported by a number of policies in the London Plan (2016). New buildings need to be constructed to meet a high level of environmental performance. In particular, major developments need to ensure that as well as reducing CO_2 emissions, they also consider climate change adaptation issues in their design and construction.
- **6.252** Developments can have a wide range of impacts on the environment, health and well being of residents that need to be properly managed and minimised. This policy ensures that new major developments are designed and constructed to take account of these impacts whilst also helping to reduce the consumption of scarce resources, reduce pollution, enhance open spaces and contribute to the health and wellbeing of residents.
- **6.253** A sustainably designed and constructed development is also one that incorporates measures that allow adaptation to the potential impacts of climate change during its lifetime such as heatwaves and droughts in summer months and potentially wetter winters.
- **6.254** Smaller developments are also encouraged to consider sustainable design and construction principles, where this is feasible.
- **6.255** Any assessments carried out to determine a major development's environmental performance using BREEAM (or similar) must be supplemented with an Energy Assessment which shows compliance with the requirements of Policy CC1 on reducing CO₂ emissions.
- **6.256** Further details on the requirements for the Sustainability Assessment are provided in the council's Planning Guidance SPD. This policy also needs to be read in conjunction with the Mayor of London's SPG's on Sustainable Design and Construction and control of dust and emissions during construction and demolition⁽⁵⁸⁾.

Policy CC3 - Minimising Flood Risk and Reducing Water Use

The council will require developments to reduce the use of water and minimise current and future flood risk by implementing the following measures:

- a site specific Flood Risk Assessment (FRA) will be required for the following development proposals:
 - all proposals for developments in the Environment Agency's Flood Zones 2 and 3;
 - All proposals for new developments over 1 hectare in size in Flood Zone 1:
 - all proposals for new development in areas identified in the council's SWMP as being susceptible to surface water flooding – i.e. those located in a flooding hotspot; and
 - all proposals for new development which includes a subterranean element in areas identified in the council's SWMP as being at risk from elevated groundwater levels
- as part of the FRA, the requirements of the National Planning Policy Framework must be addressed and, where applicable, an Exception Test must also be carried out and included in the FRA;
- the FRA must assess the risk of flooding from all relevant sources, in particular tidal, surface and ground water, as well as sewer flooding and where there is a risk of flooding, appropriate flood proofing measures must be integrated, in accordance with the guidance in the Hammersmith and Fulham SFRA;
- new self-contained basement flats will not be permitted in the Environment Agency's Flood Zone 3 areas where there is a risk of rapid inundation by flood waters in the event of a breach of the river's flood defences or in surface water flooding hotspots where the flood hazard rating is defined a significant or higher in the SWMP, unless a satisfactory means of escape can be provided;
- where development is proposed in the Environment Agency's Groundwater Source Protection Zones 1 or 2, measures must be taken to ensure the protection of groundwater supplies;
- all developments that include a subterranean element must provide details of the structural waterproofing measures to be integrated to prevent any increase in on or off-site groundwater flood risk;
- all developments that are classified as 'more' or 'highly' vulnerable to flooding that include proposals at basement or lower ground floor level must install a non-return valve or equivalent to protect against sewer flooding;
- all development proposals will be required to demonstrate that there is sufficient water and wastewater infrastructure capacity both on and off site to serve the development or that any necessary upgrades will be delivered ahead of the occupation of development;
- in line with the requirements of the Thames Estuary 2100 Plan, developments adjoining the River Thames must maintain and where necessary enhance or raise flood defences (or show how they could be raised in the future),

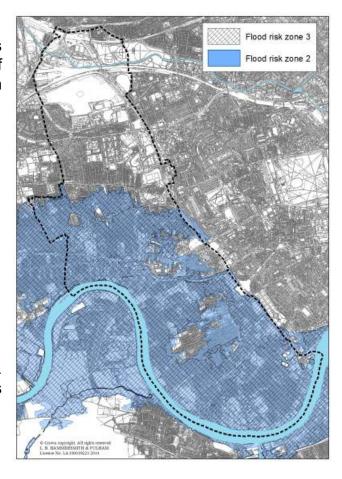
- demonstrating that they will continue to provide adequate flood protection for the lifetime of the development; and
- all developments must include water efficient fittings and appliances, where
 provided, in line with London Plan water consumption targets. In addition,
 major developments and high water use developments must include other
 measures such as rainwater harvesting and grey water re-use.

Justification

As shown in Map 8, over 60% of the borough and about 75% of the population are in the Environment Agency's Flood Zones 2 and 3 (medium-high risk of flooding from the River Thames), although the actual extent of tidal flooding from the river is mitigated by existing flood defences. Although these provide a high level of flood protection, Flood Risk Assessments are required for all developments in Flood Zones 2 and 3 to assess the risk of flooding to the site e.g. in the event of a failure or breach of the defences and to identify appropriate mitigation measures to be integrated to minimise this risk.

6.258 FRA's for proposals in Flood Zones 2 and 3 should consider flood risk from all sources, not just the River Thames. It should also be noted that developments located in Flood Zone 1 are not exempt from the need to consider flood risk, as there could be risks from surface, sewer and groundwater sources that need to be assessed and mitigated.

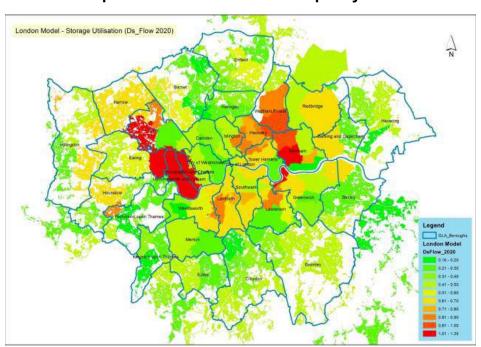
Map 8 Environment Agency's Flood Zones



- 6.259 As most of the borough is at risk from some form of fluvial/tidal flooding from the River Thames, it would be unreasonable to restrict development only to Flood Zone 1 in the north of the borough, particularly as much of this area is also at risk from sewer and surface water flooding (covered by Policy CC4). The council considers that from a borough-wide perspective, the Sequential Test permits the consideration of all sites for development, subject to individual sites satisfying the requirements of the Exception Test (as outlined in the council's Planning Guidance SPD).
- **6.260** Some parts of the borough could be impacted very quickly by fast flowing flood waters if the defences failed or were overtopped. The council's SFRA includes detailed maps showing which parts of the borough are inside this Rapid Inundation Zone which could be impacted within 30 minutes of a breach or failure of defences. As a result, there is a restriction on self-contained basements being constructed in this zone as such developments are highly vulnerable to flood impacts and there is a potential risk to life. A satisfactory means of escape must therefore be provided for any basement proposal in a

rapid inundation area. This restriction also applies in those parts of the borough identified in the SWMP as a flooding hotspot where the flood hazard rating from surface water flooding is defined as significant or higher.

- **6.261** There is an increased potential for elevated groundwater in some parts of the borough, mainly to the south of Goldhawk Road.
- **6.262** Groundwater needs to be taken into account where new basement construction or extensions are planned to ensure that any new development does not increase flood risk either on-site or by impacting on groundwater flows to the detriment of neighbouring properties. Policy HO11 on basements and lightwells sets out further requirements in this respect.
- **6.263** Groundwater needs to be taken into account where new basement construction or extensions are planned to ensure that any new development does not increase flood risk either on-site or by impacting on groundwater flows to the detriment of neighbouring properties. Policy DC11 on basements and lightwells sets out further requirements in this respect.
- **6.264** Sewer flooding is also a potential problem for the borough, with Thames Water identifying over 2,000 locations in the borough affected by sewer flooding in the past 10 years. This distribution across the borough is shown by postcode area in the council's SWMP. The sewer network in the borough is a combined system which drains both foul water flows as well as surface water. Sewer flood risk is therefore intrinsically linked to the surface water flood risk, dealt with by Policy CC4. Sewer flooding occurs when high volumes of surface water are directed into the sewer during heavy rainfall events and the system surcharges due to lack of capacity. Flood risk from sewers is a particular problem for basement and lower ground floor properties but it can be mitigated by fitting devices such as non-return valves.
- 6.265 Thames Water has modelled the impact of London's projected population growth and climate change on its drains and sewers to understand their ability to cope with these future challenges. The modelling shows that for a relatively common rainfall event in 2020 (one that would be expected on average once every other year), some areas of London, including Hammersmith and Fulham, would not have sufficient drainage or sewerage capacity to manage the expected flows, leading to an increasing risk of surface water and sewer flooding. Map 9 provided by Thames Water shows the mapped output of this modelling for the 2020s.



Map 9 Thames Water Sewer Capacity 2020

6.266 Water is an increasingly scarce resource, and with an increasing population in Hammersmith and Fulham there is rising demand. Therefore, there is a need to ensure that new and refurbished buildings are designed to minimise the use of water by installing water efficient fittings and appliances where these are provided as part of the development. Required water efficient fittings include water efficient shower heads, tap fittings and toilets. Water efficient appliances include removable fixtures such as dishwashers and washing machines. As well as reducing water demand, integrating water efficiency measures can help reduce foul water flows from developments. This is particularly important in the borough as the sewer system is a combined system that takes all wastewater, including foul and surface water run-off.

6.267 Major new developments and those that use high volumes of water such as hotels, offices, schools, commercial and leisure uses will be expected to implement water efficiency measures such as those outlined above, including the collection and re-use of water (grey water recycling) and rainwater harvesting.

6.268 Further guidance on FRA requirements is included in the Hammersmith and Fulham Strategic Flood Risk Assessment (2015), and the council's Planning Guidance SPD. The SPD also provides additional details on water efficiency measures to be installed in new developments.

Managing Surface Water

6.269 The council's Surface Water Management Plan 2015 (SWMP) identifies that the risk of exceedance of the drainage system and surface water flooding in the borough is likely to increase in the future unless steps are taken to manage and mitigate this form of flooding. In line with the council's duties as a Lead Local Flood Authority, surface water therefore needs to be properly managed in new developments, particularly major developments.

6.270 Landscaping schemes associated with major and minor schemes will be expected to minimise the use of impermeable surfaces and maximising use of permeable materials. Where feasible, the inclusion of rainwater harvesting systems should also be considered as a way of helping to reduce run-off while also reducing potable water usage within developments.

Policy CC4 - Minimising Surface Water Run-off with Sustainable Drainage Systems

All proposals for new development must manage surface water run-off as close to its source as possible and on the surface where practicable, in line with the London Plan drainage hierarchy. Other requirements include:

- all major developments must implement Sustainable Drainage Systems (SuDS) to enable a reduction in peak run-off to greenfield run off rates for storms up to the 1 in 100 year event (plus climate change allowance);
- all major developments will be required to provide a sustainable drainage strategy that demonstrates how SuDS will be integrated to reduce peak flow volumes and rates in line with the requirements of this policy;
- all other developments must maximise attenuation levels, achieving greenfield run off rates where possible, particularly where they are located in surface water flooding hotspots, or increase a site's impermeable area;
- as well as being designed to minimise flood risk, surface water drainage measures must be designed and implemented where possible to help deliver other Local Plan policies such as those on biodiversity, amenity and recreation, water efficiency and quality;
- all new outdoor car parking areas and other hard standing surfaces shall be designed to be rainwater permeable with no run-off being directed into the sewer system, unless there are practical reasons for not doing so;
- all flat roofs in new developments should be green or brown roofs to help contribute to reducing surface water run-off; and
- where installed, SuDS measures must be retained and maintained for the lifetime of the development and details of their planned maintenance must be provided to the council.

- **6.271** As shown in the council's Surface Water Management Plan (2015) (SWMP), surface water flood risk is spread across much of the borough, as is the risk from sewer flooding.
- **6.272** The SWMP identifies that over 7,000 residential properties and almost 900 non-residential properties could be at risk of surface water flooding of greater than 0.1m depth during a 1 in 100 year rainfall event.
- 6.273 As discussed earlier, most of the sewer infrastructure in the borough is combined rather than separate which means that sewers not only convey foul water to the sewage treatment plants further downstream, but also all surface water that enters the system i.e. water that drains from paved areas, roads, roofs etc when it rains. Under normal circumstances, there is capacity in the sewers for all foul and surface water to be accommodated without significant flood risk, however, during storm conditions when there

can be high levels of rainfall in a short period of time, the volume of surface water and the rate at which it is entering the sewers can overwhelm the system and cause sewers to surcharge. This includes causing flood water to flow back into properties through drains, toilets, sinks etc. In some locations, particularly the central and southern parts of the borough, surface water flooding tends to be a result of localised ponding of surface water.

- 6.274 Thames Water plan to upgrade the existing sewer system in the borough through their Counters Creek Flood Alleviation Scheme which will help to reduce sewer and surface water flooding. However, in consultation with Thames Water, developers will still be required to demonstrate that there is adequate capacity in the sewer system both on and off site to serve their development and that it would not lead to problems for existing users. In some circumstances, including all major developments impacting on surface or foul water drainage within the catchment of the Counters Creek sewer, this may make it necessary for developers to carry out appropriate studies to ascertain whether the proposed development would lead to overloading of existing infrastructure.
- 6.275 All development schemes, including minor proposals will be expected to show that they have managed surface water by utilising all available techniques to avoid increasing runoff and to reduce it as far as possible. This could include a combination of options including, but not limited to, the provision of water butts and rainwater harvesting systems, maximising the area of permeable surfaces and using green walls, green, blue or brown roofs, or integrating water features. Direct discharge into watercourses such as the Thames, may also be feasible for some developments. Where above ground SuDS measures are not feasible it may be necessary to use underground attenuation tanks and flow control mechanisms to manage run-off.
- **6.276** SuDS measures detailed in FRA's or separate Sustainable Drainage Strategies must clearly demonstrate how they will achieve the required attenuation of peak surface water run-off, in line with the drainage hierarchy outlined in London Plan (2016) in order to minimise run-off, achieving greenfield run off rates where necessary. An on-going maintenance programme must also be included for implementation to ensure the effectiveness of the system for the lifetime of the development.
- **6.277** The inclusion of rainwater harvesting systems must be considered as a way of helping to reduce runoff while also reducing potable water usage within developments. To help minimise run-off from new areas of hard standing, including car parks, these must be designed to be permeable and allow infiltration of surface water with no run-off being directed to the sewer system (unless there are practical reasons for this not being possible i.e. unsuitable underlying soils). Landscaping schemes associated with major and minor schemes will be expected to minimise the use of impermeable surfaces, maximising use of permeable materials.

Policy CC5 - Water Quality

The council will require that where a private supply or distribution system is proposed as part of a development, the quality of water is assessed so that any required treatment is identified and an on-going monitoring and maintenance plan is established.

Justification

- 6.278 The availability and supply of water must be assessed in the development of land and the potential for sourcing a supply from water run-off harvesting or utilising groundwater sources may be considered. Potable and non-potable water must meet minimal levels of quality to ensure they do not adversely effect human and animal health, vegetation or other sensitive receptors. It is therefore necessary that when a private supply is to be included in a development that they are appropriately tested, monitored, protected and treated as required.
- **6.279** In conjunction with a private water supply or complementary to a water supply from the statutory provider, a private distribution system may be installed as part of a development. Standards for the materials used in these distribution systems as well as their layout and flow must be met. Regular inspections and maintenance plans shall be required to ensure distribution system safety.

Policy CC6 - Strategic Waste Management

The council will pursue sustainable waste management, including:

- a. planning to manage 247,000 tonnes per annum of waste in LBHF by 2036;
- b. promoting sustainable waste behaviour and maximum use of the WRWA Smuggler's Way facility; and
- c. seeking, where possible, the movement of waste and recyclable materials by sustainable means of transport.

- **6.280** London Plan (2016) policies are seeking to manage as much of London's waste within London as practicable, and are working towards managing the equivalent of 100% of London's waste (municipal and commercial and industrial waste) arising in London by 2026. Hammersmith and Fulham's apportioned waste total for 2036, as specified in the London Plan (2016), comprises 106,000 tonnes household waste and 141,000 tonnes commercial and industrial waste.
- 6.281 The borough's municipal waste, together with that of the three other boroughs in the Western Riverside Waste Authority area (WRWA), is managed through a riverside site (Smuggler's Way), close to Wandsworth Bridge in the London Borough of Wandsworth. Currently most of the non-recyclable municipal waste is transported by river to an Energy from waste facility in Bexley. The contract which does not expire until the early 2030's does not commit the Waste Authority to a specified amount of waste for incineration and therefore recycling rates can continue to rise without any penalty. Recyclable materials are dealt with by a materials reclamation facility (or MRF) with a capacity for 84,000 tonnes located at WRWA's Smuggler's Way site at Wandsworth. If recycling targets are met there will be a need for further facilities.
- **6.282** In order to manage increasing tonnages of recyclables and compostable waste, there is a need to ensure that major new developments, such as those within the White City Opportunity Area and Earl's Court and West Kensington Opportunity Area and Fulham Regeneration Area and the development at Imperial Road, make provision for managing their waste on site.

- **6.283** In addition to the Wandsworth facilities for managing the disposal of municipal waste, two large sites (Powerday at Old Oak Sidings and the EMR site), and some other smaller sites exist within the Old Oak Common Opportunity Area. Since April 2015 this Opportunity Area and the waste sites have fallen within the boundary of the Old Oak and Park Royal Development Corporation (OPDC).
- 6.284 The Old Oak Sidings site is approximately 3.5ha and is licenced to manage up to 1.6 million tonnes of waste per annum. The site is capable of managing both household/commercial/industrial waste and construction and demolition waste. In 2013, the site received 219,000 tonnes of household/commercial/industrial waste out of a total of 360,000 tonnes of waste received. This represented approximately 60% of waste received at the site. Based on this proportion, it is estimated that the site has an ultimate licenced capacity to manage a maximum of 960,000 tonnes of household and commercial and industrial waste (subject to market variation and realising the potential of rail and canal for waste transport). The EMR site is approximately 3.3ha and has a licenced capacity of 419,000 tonnes per annum. The site specialises in metal recycling and materials recovery (particularly end of life vehicles and white-goods).
- **6.285** The council notes that the London Plan (2016) states in paragraph 5.80 that "Where a Mayoral Development Corporation (MDC) exists or is established within a Borough, the MDC will co-operate with the borough to ensure that the Borough's apportionent requirements are met". The council considers that the Old Oak Sidings (Powerday) site could meet the borough's waste apportionment target set out in the London Plan (2016). The council will encourage the OPDC to safeguard the Old Oak Sidings site for waste management activities, whilst acknowledging that its long term future is subject to the OPDC's regeneration proposals for the Old Oak Common Opportunity Area. The council is investigating ways forward with the OPDC as well as the potential for pooling apportionment requirements with other authorities. In addition, major development sites will be expected to sort, process and recover materials on site thereby further increasing LBHF's capacity to locally manage waste.

Policy CC7 - On-site Waste Management

All new developments must include suitable facilities for the management of waste generated by the development, including the collection and storage of separated waste and where feasible on-site energy recovery.

- a. all developments, including where practicable, conversions and change of use, should aim to minimise waste and should provide convenient facilities with adequate capacity to enable the occupiers to separate, store and recycle their waste both within their own residence and via accessible and inclusive communal storage facilities, and where possible compost green waste on site;
- b. in major development proposals, on-site waste management should be provided, particularly for commercial and industrial waste streams; and
- c. sustainable waste behaviour, including the re-use and recycling of construction, demolition and excavation waste will be encouraged and recyclable materials should, wherever feasible, be segregated on site, providing there is no significant adverse impact on either site occupants or neighbours. On larger demolition sites, the council will expect details of the type and quantity of waste arising and details of proposed methods of disposal, including means of transport.

- **6.286** As a Waste Collection Authority (WCA), Hammersmith and Fulham Council collects municipal waste which includes household refuse and recyclables, street sweepings, litter, flytipped materials and commercial/industrial waste. Waste collected by the council is delivered to Western Riverside Waste Authority (WRWA) for disposal or recycling. Mixed recycling comprising glass, metal, paper, cardboard, plastic and cartons is sorted at a Materials Recycling Facility in Wandsworth. Refuse not separated for recycling is disposed of at an Energy from Waste facility in Bexley.
- **6.287** In 2013/14, 20.53% of household waste collected by the council was recycled. In recent years, the amount of overall waste produced per household has reduced, but is expected to rise again in the future. The council has targets for increasing the amount of waste diverted from disposal, as this delivers an environmental, social and economic benefit to the borough and its residents.
- **6.288** In order to facilitate the sustainable management of waste in the future it is essential that all developments provide adequate facilities for the separation of waste and recyclables in the home and for its satisfactory storage prior to collection. Where feasible space or facilities for the composting of green waste should also be provided.
- **6.289** In the regeneration areas and other major redevelopment schemes, consideration should be given to the provision of on-site waste management in order to facilitate the re-use and recycling of waste generated by the development, particularly for the industrial and commercial waste streams. On-site waste management could have the added benefit of reducing transport trips.

6.290 Construction, excavation and demolition waste should, wherever feasible, be segregated on site in order to maximise reuse and recycling of the waste. On some smaller construction sites in close proximity to residential or noise dust sensitive uses this may not be possible. On larger sites the council will expect developers to produce a site waste management plan to ensure the efficient handling of waste and materials.

Policy CC8 - Hazardous Substances

The council will ensure the protection of new and existing residents, by rejecting proposals involving provision for hazardous substances that would pose an unacceptable risk to the health and safety of occupants of neighbouring land, and rejecting development proposals in the vicinity of existing establishments if there would be an unacceptable risk to future occupants.

The council will ensure that development takes account of major hazards identified by the Health and Safety Executive, namely:

- Fulham North Holder Station, Imperial Road;
- Fulham South Holder Station, Imperial Road; and
- Swedish Wharf, Townmead Road.

- **6.291** Within the borough there are a number of facilities (gas holders and pipelines) which handle and transport hazardous substances. Although the facilities are strictly controlled by health and safety regulations, it is necessary to control the type of development around these sites and to resist new development which might pose a risk to people occupying sites and buildings in the vicinity.
- **6.292** This policy ensures the protection of new and existing residents by resisting the expansion of, or new developments which would cause an unacceptable safety risk. The council will consult the Health and Safety Executive (HSE) on all hazardous substances consent applications. We will also consult the HSE about certain developments (essentially those that will increase the number of people) within the consultation distances around installations, for example, so that risks presented by installations can be given due weight.
- **6.293** In Fulham there are three installations handling notifiable substances, including pipelines. Whilst they are subject to stringent controls under existing health and safety legislation, it is important to control the kinds of development permitted in the vicinity of these installations. The council will consult the Health and Safety Executive on appropriate application prior to the granting of planning permission about the risks to the proposed development from the notifiable installation and this could lead to refusal of permission, or restrictions on the proximity of development to the notifiable installation. The notifiable sites and pipelines are shown on the Proposals Map, together with the distance from the notifiable site for which consultation with the Health and Safety Executive will be required. The distance from the pipelines in which buildings will not normally be permitted is also listed.

Policy CC9 - Contaminated Land

When development is proposed on or near a site that is known to be, or there is good reason to believe may be, contaminated, or where a sensitive use is proposed, an applicant should carry out a site assessment and submit a report of the findings in order to establish the nature and extent of the contamination.

Development will not be permitted unless practicable and effective measures are to be taken to treat, contain or control any contamination so as not to:

- a. expose the occupiers of the development and neighbouring land uses including, in the case of housing, the users of open spaces and gardens to unacceptable risk;
- b. threaten the structural integrity of any building built, or to be built, on or adjoining the site;
- c. lead to the contamination of any watercourse, water body or aquifer; and
- d. cause the contamination of adjoining land or allow such contamination to continue.

Any application will be assessed in relation to the suitability of the proposed use for the conditions on that site. Any permission for development will require that the measures to assess and abate any risks to human health or the wider environment agreed with the authority must be completed as the first step in the carrying out of the development.

- **6.294** In a heavily built up borough such as Hammersmith and Fulham where there has been a history of heavy industry, land contamination is known to exist. It is important therefore that any land that is known or suspected of being contaminated, or where a sensitive use is proposed, is dealt with before the development takes place.
- **6.295** Any potential risks associated with contaminated land should be identified and assessed at the planning pre-application stage. Some sites may be contaminated as a result of being in the vicinity of a contaminated site. The risk of this contamination depends on ground conditions and the type of contamination. Where necessary, developers will be required to carry out remediation works and satisfy the council that their development can be safely built and occupied without posing any unacceptable risks to human health or the environment.
- 6.296 Developers must ensure that their remediation works are sustainable and result from a robust site investigation and risk assessment and that remediation is conducted in-situ when possible to reduce the amount of waste produced which requires transport, and recycle soils and aggregates when possible to avoid the need for disposal hence minimising the pollution of the wider environment. Any investigation or treatment of the contamination must be agreed with the council before they are implemented.

Policy CC10 - Air Quality

The council will seek to reduce the potential adverse air quality impacts of new developments by:

- a. requiring all major developments to provide an air quality assessment that considers the potential impacts of pollution from the development on the site and on neighbouring areas and also considers the potential for exposure to pollution levels above the Government's air quality objective concentration targets;
- requiring mitigation measures to be implemented to reduce emissions, particularly of nitrogen oxides and small particles, where assessments show that developments could cause a significant worsening of local air quality or contribute to the exceedances of the Government's air quality objectives; and
- c. requiring mitigation measures that reduce exposure to acceptable levels where developments are proposed that could result in the occupants being particularly affected by poor air quality.

Justification

6.297 Nearly one in seven deaths (15%) in Hammersmith and Fulham are caused by Nitrogen Dioxide via pollution - the eighth highest level in London according to Kings College London. The whole of Hammersmith and Fulham is an Air Quality Management Area for Nitrogen Dioxide (NO2) and particulate matter (PM10) and the council is implementing measures to help meet national air quality objectives for these and other pollutants. New developments are expected to contribute towards improving local air quality, particularly where they include potentially major new sources of emissions or could significantly increase traffic-generated emissions. Some developments such as schools, nurseries, hospitals and care homes for the elderly and also housing, may be particularly affected by the potential impacts of poor air quality on the occupants of the development.

6.298 Requiring air quality issues to be considered early in the planning process and to be assessed in detail if necessary (i.e. for developments that may increase local emissions significantly) is the best way of establishing a design led approach to mitigating those emissions and reducing exposure.

Policy CC11 - Noise

Noise (including vibration) impacts of development will be controlled by implementing the following measures:

- a. noise and vibration sensitive development should be located in the most appropriate locations and protected against existing and proposed sources of noise and vibration through careful design, layout and use of materials, and by ensuring adequate insulation of the building envelope and internal walls, floors and ceilings as well as protecting external amenity areas;
- b. housing, schools, nurseries, hospitals and other noise-sensitive development will not normally be permitted where the occupants/users would be affected adversely by noise, both internally and externally, from existing or proposed noise generating uses. Exceptions will only be made if it can be demonstrated that adequate mitigation measures will be taken, without compromising the quality of the development; and
- c. noise generating development will not be permitted, if it would be liable to materially increase the noise experienced by the occupants/users of existing or proposed noise sensitive uses in the vicinity.

Where necessary, applicants will be expected to carry out noise assessments and provide details of the noise levels on the site. Where noise mitigation measures will be required to enable development to take place, an outline application will not normally be acceptable.

- **6.299** The dominant sources of noise in Hammersmith and Fulham are road and rail traffic, construction (including DIY), noisy neighbours, pubs/clubs and other entertainment venues, pavement cafés/outdoor seating and noisy building services, plant and equipment. Aircraft and helicopter noise is also a concern in parts of the borough.
- **6.300** Noise and associated vibration can affect and have a direct impact on noise sensitive uses, particularly housing, but also other sensitive uses such as schools and hospitals and impact upon people's health and well being. Some areas of the borough are subject to significant noise disturbance. Existing and potential noise levels will be taken into account when assessing a proposal for residential development. Noise levels both inside the dwelling and in external amenity spaces will be considered. The council will therefore require a careful assessment of likely noise levels before determining planning applications.
- 6.301 Any proposal (including new development, conversion, extension, change of use) for a noise generating development close to dwellings or other noise sensitive uses will be assessed to determine the impact of the proposed development in relation to these existing uses. In this borough, noise generating activities that cause particular problems tend to be late-closing entertainment and food and drink establishments. Also an issue is noise disturbance in existing buildings where sound insulation is inadequate. Proposals for conversions and change of use should minimise noise disturbance from adjoining uses by improving sound insulation and the arrangement of rooms, such as stacking/locating rooms of similar uses above/adjacent to each other.

6.302 Issues of noise and nuisance are considered on a site-by-site basis having regard to the proposal, site context and surrounding uses in the context of related policies and quidelines.

Policy CC12 - Light Pollution

The potential adverse impacts from lighting arrangements will be controlled by requiring all developments that include proposals for external lighting including illuminated signs and advertisements, security and flood lights and other illuminations to submit details showing that it:

- a. is appropriate for the intended use;
- b. provides the minimum amount of light necessary to achieve its purpose;
- c. is energy efficient; and
- d. provides adequate protection from glare and light spill, particularly to nearby sensitive receptors such as residential properties and Nature Conservation Areas, including the River Thames and the Grand Union Canal.

Justification

6.303 External lighting is often required in new developments to help provide a healthy and safe environment and can also be used to enhance the appearance of some buildings and extend the use of other facilities, e.g. outdoor sports facilities. However, excessive lighting can have a negative impact on residents' quality of life, adversely affect wildlife, contribute to 'sky glow' and waste energy. Requiring the submission of details of external lighting in line with the recommendations of the Institute of Lighting Professionals for approval will allow external lighting and its impacts to be controlled and minimised.

Policy CC13 - Control of Potentially Polluting Uses

All proposed developments (including new buildings, demolition of existing buildings, conversions and changes of use) will be required to show that there will be no undue detriment to the general amenities enjoyed by existing surrounding occupiers of their properties, particularly where commercial and service activities will be close to residential properties. In the case of mixed use developments, similar protection will also be afforded to the prospective residents and other users where there is potential for activities within the new development to impact on their immediate neighbours on the same site.

The council will, where appropriate, require precautionary and/or remedial action if a nuisance, for example, from smoke, fumes, gases, dust, steam, light, vibration, smell, noise, spillage of gravel and building aggregates or other polluting emissions, would otherwise be likely to occur, to ensure that it will not.

Justification

6.304 Many activities can be a source of nuisance, a hazard to health, or both. The council wishes to encourage enterprise. However, the benefits of any new enterprise or commercial activity must always be set against any adverse effects on the amenities of local residents and existing businesses. It is also necessary to take account of potential impacts within new mixed use developments where new residents and other users could be impacted by activities on the same site or building. Developments that may give rise to environmental nuisance must therefore be designed appropriately, so as not to unduly interfere with the existing and future quality of life in the borough.