

# Waste management technologies for putrescible and polluting wastes

- The Waste Management Plan seeks to secure the development of alternative waste treatment technologies to landfill in order to recover resources and reduce the volume of waste for disposal to landfill. It proposes a flexible approach to the precise combination and configuration needed in the county area, but identifies three methods preferred by the former County Council which in order of preference are: industrial reprocessing; composting of mixed household waste; and anaerobic digestion. In addition, two other methods are included: waste derived fuel and waste-to-energy. However, waste to energy is identified as a contingency method of waste treatment. Further details of these technologies are provided in Appendices 2 and 4. There is a need to provide for a waste treatment capacity of some 400,000 tonnes per annum or more to be in place by 2005/06.
- The Waste Management Plan also recognises the need to identify road-to-rail transfer sites to enable possible transport of waste to sites outside the county area if such a facility is needed as a transitional measure before the 'alternatives to landfill' technologies have been established. In addition, the waste strategy forecasts set out in Chapter 3 point to a continuing need for landfill for putrescible/polluting waste. A further consideration already referred to (Chapter 6) is the potential to establish other waste management facilities at the sites used for major waste treatment facilities.
- This Chapter sets out the Plan's policies in respect of these technologies and facilities, which involve major sites:
  - Waste treatment technologies: industrial reprocessing, composting and anaerobic digestion;
  - Waste derived fuel;
  - Waste to energy;
  - Road to rail waste transfer;
  - Major recycling facilities;
  - Engineered landfill;

The Chapter also covers the following matters:

- Sites for difficult and Special waste;
- Policies for waste management development outside Preferred Areas;
- Sites safeguarded for waste management development;
- Provision for other wastes;
- Potential for energy recovery from waste.

#### **Waste treatment technologies**

This generic term covers three types of technology - industrial reprocessing, composting and anaerobic digestion - which can be operated together or separately in process and commercial terms. The requirements and implications of each are slightly different and are discussed below, but on the basis of these requirements eight Preferred Areas have been identified which are considered suitable for developing a waste treatment plant. These are listed in Policy WLP11.

#### Industrial reprocessing

8.5 This technology would be likely to involve developing two or three plants to serve the whole of Berkshire. Industrial reprocessing involves separating waste into different materials: glass, plastics, aluminium, paper etc and processing these into raw materials. Some of these materials can undergo further processing on site to manufacture products. The organic waste fraction can be treated by composting or anaerobic digestion. (These processes are considered below). The process is housed in a large industrial type building or buildings and could include separate tanks occupying an operational area of over 4ha. There processes can be effectively controlled to minimise nuisance. These factors point to a fairly central location in Berkshire preferably sited away from housing areas and other sensitive uses. A site within or adjacent to a mixed or general industrial area may be appropriate. The extensive industrial buildings require the impact on the landscape to be carefully assessed on brownfield sites in areas being restored or improved in landscape terms.

#### Mixed waste composting

- 8.6 Composting plants for mixed household waste are likely to have a capacity of up to about 160,000 tonnes of waste per year giving rise to a requirement for up to 3 plants to serve Berkshire.
- A plant would occupy a site of up to 4ha and the process can either be totally or partially enclosed in a large industrial style building. The process involves initial sorting and preparation of waste, followed by the composting of waste in an enclosed building under controlled conditions, including aeration and mechanical turning of the material. Process control would include air filtration to prevent odours outside the building. The resulting material is a compost-like soil conditioner. The final part of the process (maturing) should preferably take place under cover to reduce the risk of contaminated run-off which would otherwise need to be treated. The industrial appearance of the operation would require the impact on the landscape to be carefully considered especially in greenfield or brownfield sites and in areas being restored or improved in landscape terms. The potential for smell and other nuisance can be effectively mitigated by enclosure, process control and air treatment which is important at the initial stage of composting. A large compost plant would be a significant traffic generator.
- 8.8 Siting considerations include the need to take account of the potential for adverse impacts on living conditions and on adjacent land uses, and for sites to have good road access. Enclosure of the whole process may be required except in locations away from residential areas.

#### Anaerobic digestion

8.9 This technology would be likely to involve developing up to 4 plants to serve Berkshire. A typical anaerobic digestion (AD) plant is likely to have a capacity of around 100,000 tonnes per annum and would occupy a large building possibly with separate sealed tanks, and might require a site of up to 2ha depending on the system used. The impact of buildings and plant, which would be 15-25m in height, could be minimised by appropriate design and landscaping. The process involves initial sorting and preparation of waste to separate out organic materials which are then put into sealed vessels to be broken down by micro-organisms under controlled conditions in the absence of oxygen. The end product is substantially reduced in volume and can be used as a soil conditioner. Biogas (methane) is produced during the process and can be used for energy production, including electricity generation potentially involving additional equipment linking the site to the national electricity grid. There appears to be some potential for smell and other nuisance but a number of mitigation measures can be employed to minimise these including process control measures and ensuring that all handling operations are enclosed. A large AD plant would be a significant traffic generator.

8.10 Siting considerations include the need to take account of any impact on living conditions. Locations away from housing and other sensitive uses would be preferable. Where sites are closer to housing additional mitigation measures should be employed. Good road access would also be required.

## Waste derived fuel

- 8.11 The production of waste derived fuel (WDF) involves the receipt of sorted and unsorted waste, sorting of suitable combustible waste materials (paper and some plastics) and other recyclable and non-recyclable wastes, and the manufacture of a handleable fuel (by shredding or pelletising and adding some water). Household waste is susceptible to this treatment but packaging waste on its own results in a more consistent product. Any such operation would be fully enclosed in a substantial industrial unit of between 3,000m' and 10,000m' on a site of up to 2ha in area. Full environmental controls would be employed to minimise nuisances.
- Slough Power Station has an existing capability to burn up to 70,000 tonnes of WDF fuel, mixed with coal. The Local Planning Authority supports, in principle, maximising the use of this facility and has identified a preferred area adjoining the Power Station in Fairlie Road (Preferred Area WLP Site 21) as a suitable site for a plant to produce WDF for the Power Station which could receive waste from industrial and commercial sources in east and part of central Berkshire and beyond. Planning applications have been approved for a smaller 'initial' plant on Slough Trading Estate, and for a full scale plant at Fairlie Road.
- 8.13 There could be sufficient suitable industrial and commercial waste in central and west Berkshire to support the provision of a second WDF plant. A further Preferred Area is identified for this use at Colthrop Board Mill where there may be potential for production of WDF in tandem with the recovery of paper for recycling in the Mill, and use of the fuel to burn in a power plant serving the Mill and other users. These sites are listed in Policy WLP11.

#### Waste to Energy

- The 'minimum optimum' capacity of waste to energy (WTE) plants is currently approximately 200,000 tonnes/annum. (However, the local planning authorities are prepared to consider WTE plants as small as 100,000 tonnes per annum). If waste to energy has to be developed as a contingency technology in due course, this would be likely to involve a single plant unless a number of smaller plants were developed as part of realising some other, wider industrial process opportunity.
- 8.15 The following issues are important in considering suitable locations for new waste to energy plant:
  - They would have a large catchment area. It is therefore preferable to locate them close to the major sources of waste in the county area (central and east Berkshire);
  - A WTE plant is a major industrial development which is not incompatible with a general industrial location;
  - The buildings are likely to be abnormally large, including tall buildings and a stack, and would be likely to have a significant and extensive landscape impact wherever they are located in Berkshire. This makes it particularly important to avoid sensitive landscapes and choose locations where views are limited, or where the extent of the plant's visual impact can be reduced by natural screening, by the scale of the landscape, or by the visual relationship with other development. A reduction in plant capacity does not result in a commensurate reduction in plant size. The site boundary must be sufficiently extensive to enable major landscaping around the plant, and additional strategic off-site planting may be necessary;
  - A plant will generate a large volume of heavy traffic during the day. It is essential
    that there is already access to the primary road network and that the haul route
    to the primary network should avoid sensitive properties such as houses and
    schools;
  - The process is largely enclosed and controlled so, with the exception of limited noise impact, nuisances from such plants can be effectively minimised. However, the size of the building and potential overshadowing results in the need for a buffer zone to houses. In addition, the plant will work continuously (24 hours a day), which points to locations where impacts on nearby development can be minimised;
  - Waste to energy will generate electricity and heat, so locations are needed close to the national electricity grid and where there are opportunities for developing 'district heating systems';
  - The incineration process produces residues which are likely to require disposal to an engineered landfill. Proximity to a suitable landfill site is therefore an advantage;
  - A WTE plant involves major investment and can provide a focus for other related waste management development. There is therefore merit in identifying sites where there is space for other facilities; and
  - The issue of emissions from waste to energy is dealt with in the Waste Management Plan (Chapter 8) and in Chapter 10 of this Plan.

- As a result of the above, the preferred locations need to be close to urban areas within or adjoining industrial-type development, with access to the primary route network. Greenfield sites in open countryside are not considered appropriate for a development of this magnitude due to the scale, visual impact and incompatibility with a rural location.

  The locations have been identified as Preferred Areas for HTTE and the installation of the scale.
- Two locations have been identified as Preferred Areas for WTE on the basis of the above criteria. The first at Smallmead (Preferred Area 11C or 11D) is the 'contingency site' for developing a facility to serve the needs of all or part of Berkshire in the event that the waste treatment methods identified in the Plan are not capable of meeting that need. The site would only be required for WTE. The second site at Colthrop (Preferred Area 4A/4B) is identified because of the potential to link a WTE plant with the existing Colthrop Board Mill to provide heat and energy to the Mill. The sites are listed in Policy WLP11.
- 8.18 It is important to stress that some of the sites identified for waste treatment, as well as the different waste treatment technologies, are alternatives. Whilst there could be number of small treatment sites (e.g. green waste) it is unlikely that there would be more than four major treatment plants (including WDF and WTE) to serve the needs of the county area and not more than one treatment plant would be likely to secure permission in a particular location.

#### Rail and water transport of waste

- National policy and regional planning guidance (RPG9) encourage increased use of rail and water transport. Regional guidance on waste planning (RPC2266) states that there should be a presumption in favour of rail and river transport, wherever feasible, for longer distance movements of waste in bulk.
- The sustainable objectives of county self-sufficiency in waste management and the 'proximity principle' mean that the majority of journeys involving the transportation of waste which result from the Plan's proposals are likely to be short local trips within the county area. Given the limited geographical extent of the county area and the extent of its rail network, there is likely to be only limited potential to utilise rail transport, where minimum economic transport distances are currently 40-50 miles. The navigable waterways in the county area are also limited in extent, are primarily geared to recreational use, and have nature conservation value. Bulk transportation of waste could potentially be in conflict with these interests, and the Plan does not identify any specific locations for road-to-water or water-to-rail transfer stations.
- 8.21 However, the Plan recognises the potential importance of rail transport to the strategy by identifying three sites for road-to-rail waste transfer, and giving priority to this mode of transport for long distance disposal of waste. These facilities could be used in the short and medium term for export of putrescible wastes from the county area while alternative treatment technologies are being developed, but with scope for longer-term arrangements if waste is taken to suitable treatment plants outside the county. They might also provide opportunities for the rail transport of recyclable material recovered and bulked up in the county area which needs onward transport to distant specialist manufacturing or treatment plants.

<sup>&</sup>lt;sup>1</sup>Operators considering the use of water transport should seek advice from British Waterways about the feasibility of their proposals, as well as consulting the relevant District/Borough Council about their likely acceptability in environmental terms.

- These transfer stations can be simple operations in which sealed containers are loaded and unloaded by gantry or forklift. However, they can also include full transfer operations and major recycling facility. Such operations are fully enclosed in an industrial type building. As the sites would generate significant lorry traffic, the suitability of locations is clearly dependant on both existing or potential links to the rail network and good road access. For full waste transfer/recycling operations, a buffer zone to housing and other sensitive uses may be necessary. The industrial appearance of such an operation would require the impact of the development to be carefully considered especially in open locations.
- 8.23 A minimum of two road-to-rail transfer stations would be required to deal with the whole of the household waste generated in the county area. On the basis of the site requirements described, three locations have been identified as Preferred Areas in the Plan. These are listed in Policy WLP11.

#### **Major recycling facilities**

These are large strategic facilities for receiving and comprehensively sorting pre-sorted and unsorted non-inert wastes including household and industrial/commercial wastes to recover recyclable materials. It is likely that three to five facilities will be required across the county area. Some of these may also operate as transfer stations for bulking up waste for transfer to waste treatment facilities. Proposals for waste treatment plants would normally be expected to incorporate major recycling facilities. Consequently, the Plan identifies eight Preferred Areas for major recycling facilities (see Chapter 6, Policy WLP 11).

#### Sites for engineered landfill

- 8.25 The waste disposal strategy seeks to create conditions in Berkshire such that long term demand for engineered landfill sites is minimised. It also seeks to ensure that the disposal of putrescible waste to landfill is phased out before the end of the Plan period. This will be achieved by a combination of reducing waste generation at source, increasing recycling and the introduction of alternative treatment capacity. However, the effects of these measures will not be immediate. They will make a progressively larger contribution over time. Even when operating at their maximum currently predicted potential (by the end of the Plan period) the alternative disposal methods will not completely remove the requirement for engineered landfill since some polluting wastes are not susceptible to recycling or treatment. In addition the treatment methods themselves produce residues. While some of these residues may be recyclable, a proportion is likely to need disposal at engineered landfill sites since it is potentially polluting.
- The waste strategy will therefore have two consequences. Not only will the demand for engineered landfill sites diminish over the period of the plan, but the nature of waste requiring disposal at these sites will also change progressively. The high proportion of putrescible wastes currently disposed of will be treated by other methods so that by the end of the Plan period the only wastes being deposited in landfills should be the rejects and residues from recycling and treatment, including those wastes which are not susceptible to the treatment methods being used.

- The waste forecasts indicate that taking account of the predicted contribution made by recycling and waste treatment to reducing landfill requirements, existing landfill arrangements (in and out-county) for putrescible/polluting waste start to become insufficient to meet landfill requirement from around 1995/96. This results from current sites filling up and the existing out-county contracts (for household waste) coming to an end. Without further provision of landfill sites, the shortfall would increase to over 400,000 cubic metres before decreasing to up to 300,000 cubic metres by the end of the Plan period (Chapter 3). There is therefore a requirement to identify and bring into operation two or three engineered landfill sites during the Plan period if continued export of a proportion of the waste from the county area is to be avoided. This compares to a requirement for as many as seven sites required for putrescible and polluting waste, if the Councils did not change the previous strategy.
- The local authorities therefore recognise the continuing need to dispose of some polluting wastes by landfill to engineered sites and the need for limited temporary interim arrangements for landfilling putrescible waste whilst alternative treatment capacity is being developed. In the case of putrescible waste this can be provided for by in-county landfill or a combination of in-county landfill and out-county treatment and/or disposal.
- 8.29 The Berkshire Structure Plan (Policy W5) considers that in general the disposal of waste by tipping should be restricted to the landfilling of active mineral extraction sites, or of other mineral sites which have either been restored unsatisfactorily or not restored at all. The search for suitable sites has therefore focused on existing and potential mineral sites where waste disposal would be a necessary means of achieving the restoration and after-use priorities of the site. Other key constraints in site selection include existing nature conservation, landscape and recreational interests in mineral workings, adequate access, adequate size of site, suitability of the underlying geology, the need to avoid groundwater protection zones, the need to prevent loss of flood storage and adverse effect on flood flows; the ability to integrate the proposed landform into the surrounding landscape; and the need to provide adequate buffer zones to minimise impacts on adjoining uses.
- On the basis of these criteria, five Preferred Areas have been identified for engineered landfill. They are listed in Policy WLP11.
- 8.31 It should be recognised that not all of the sites identified may be available for engineered landfill, or wholly available, during the Plan period since several are prospective mineral extraction sites where waste disposal is dependent upon a decision to proceed with mineral extraction and upon the timing and rate of extraction. It is therefore appropriate to identify more than the minimum requirement to meet Berkshire's future landfill needs. However, it is stressed that identifying more sites than are likely to be needed does not mean that they are all committed to be used for engineered landfill purposes. The grant of planning permission for individual sites will depend upon, in the first instance, whether the policies of the Replacement Minerals Local Plan are satisfied and whether the release of further capacity is required to meet the waste disposal needs of the county area at a particular point in time and whether all other relevant policies of the Plan are satisfied.

- The sites identified as suitable for engineered landfill (and any that might come forward through Policy WLP20) represent an extremely limited potential resource in Berkshire. The objective of the Waste Local Plan is to husband this resource and to ensure that new sites which are released contribute towards, and do not conflict with, the overall waste strategy. The waste strategy seeks to maximise the waste available for alternative treatment methods and minimise the disposal of putrescible waste to landfill in order to give fullest encouragement to the development of minimisation, re-use, recycling and treatment. These objectives will be supported by restricting the release of new engineered landfill sites and, where appropriate, the rate of fill on such sites to that which is essential to meeting Berkshire's own needs.
- 8.33 The Plan therefore includes policies which seek to confine the types of waste landfilled at such sites to those which cannot be disposed of practicably by any other means (Policy WLP14). In practice, any planning permission will be subject to conditions and/ or legal agreements as appropriate restricting the nature of wastes which may be disposed of in the site, taking account of the changing character of waste requiring disposal over the Plan period. Depending upon the timing of release of specific sites, this could involve permitting only a temporary provision for small amounts of putrescible waste disposal in the early years of the Plan and phasing out and replacing such provision by the disposal of rejects and residues from recycling and treatment (to coincide with the development of alternative treatment capacity). Permissions for any sites released later in the Plan period are therefore likely to be restricted purely to the disposal of recycling and treatment rejects and residues.
- Another way to husband the limited engineered landfill capacity of the county area is to ensure that as much waste as possible is sorted, recycled and treated before being taken for landfilling. To this end, the Plan identifies a number of sites on which permanent sorting, recycling and treatment facilities can be developed. It will normally be inappropriate to locate temporary non-inert waste recycling facilities on engineered landfill sites. To achieve high operating standards and to avoid problems of smell, dust and litter, the sorting and recycling of such waste is best carried out under cover in purpose-built, permanent facilities. The disposal of inert waste in engineered landfill sites is a wasteful use of a limited resource. However, it is recognised that some inert waste may be difficult wastes and may require disposal in such sites. Temporary facilities to sort and recycle inert wastes brought to such sites may also be useful in providing materials for use in covering waste and site restoration. Accordingly, such temporary facilities will normally be permitted on engineered landfill sites (Policy WLP15).
- Policy WLP14 All planning permissions granted for the disposal of wastes in engineered landfill sites will be restricted to the disposal of waste in the following categories:
  - (i) putrescible/polluting waste which is not recyclable and not suitable for alternative treatment by processing;
  - (ii) the rejects and residues of waste recycling and treatment;
  - (iii) putrescible/polluting waste which cannot practicably be disposed of by any other means; and
  - (iv) inert waste which is necessary for operational needs.

- Policy WLP15 Proposals for temporary inert waste and skip waste recycling facilities on engineered landfill sites will be permitted provided that
  - the recycling relates to waste brought to the site for disposal and is required to separate inert waste from putrescible/polluting waste and recover recyclable materials; and
  - (ii) the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies in the Plan.

# Sites for difficult and Special waste

- 8.35 Special and difficult wastes, whilst forming a relatively small proportion of all wastes produced, pose particular waste management problems. A network of facilities is required to provide for the safe and effective recycling, treatment and disposal of these wastes.
- There are small quantities of potentially hazardous materials in household. commercial and industrial waste. The Waste Management Plan (Chapter 8) highlights the importance of removing these contaminants before the waste is subjected to treatment by the proposed treatment technologies. As a result there will be a requirement for these wastes to be stored and sorted properly before they can be removed for subsequent treatment and disposal. This may allow some of these difficult wastes to be concentrated in sufficient quantities to allow new recycling or treatment systems to be introduced to address these wastes.
- Waste tyres are classified as difficult waste. There are currently two waste tyre transfer stations in the county area which collect waste tyres for re-use, recycling, etc.
- There are also a number of industrial and commercial liquid wastes (landfill leachates, wastes from the food industry, interceptor wastes etc) which pose potential difficulties for disposal in landfills but can be efficiently recycled or treated using existing sewage treatment technology or pretreated to render them suitable for subsequent treatment at sewage works.
- There are already some recycling or recovery plants for solvents, oil and water mixtures and photographic wastes in the county area at present as well as transfer stations where these and other recyclable materials are collected for processing in other parts of the UK. An additional treatment facility for liquid industrial wastes is desirable in the eastern part of the county area.
- A number of agricultural operations involving the spreading of wastes on land as fertiliser are exempt from the need for planning permission. This practice involves some wastes classed as Special and difficult waste, including sewage sludge, brewery sludge, wastes from the dairy industry, abattoir waste and cesspit waste. Such operations are governed by other regulations and controls administered by the Ministry of Agriculture Fisheries and Food and the Environment Agency.
- It is anticipated that a collection and preliminary sorting area for special and difficult wastes will be needed at each of the major urban areas in Berkshire. The most appropriate locations include major civic amenity sites, household waste transfer stations and new industrial reprocessing or WTE plant. In addition, there will be a need for one or two new sites to act as final sorting areas and to house any recovery or treatment systems. These could also be located at the above sites. There could also be a requirement for free-standing recycling, transfer and treatment facilities to deal with particular Special and difficult waste streams. In the light of the above assessment, the Plan (Policy WLP11) identifies 16 Preferred Areas considered suitable for Special and difficult waste recycling treatment or transfer facilities.

- As a result of recent changes in legislation relating to contaminated land, increasing quantities of contaminated soils (which are classed as difficult waste) may be identified for remediation. It is not possible at this time to assess properly the scale of demand for such a service in the county area and the resulting land-use/environmental implications. It is possible that some of the Preferred Areas in the Plan may be suitable for this purpose.
- Current engineered landfill sites in the county area provide disposal points for certain solid Special wastes, predominantly asbestos and pharmaceuticals, and for a range of difficult wastes such as tyres, filter cakes, contaminated soil and sewage screenings. Disposal to engineered sites ensure the risk of pollution by these wastes is minimised.
- It is important that a number of landfill sites are available in the county area for disposing of these wastes. Some of the sites identified for engineered landfill in Policy WLP11 should, subject to detailed consideration, be authorised for this purpose to replace existing authorised landfill sites as these are completed.
- However, due to their nature, some of these wastes benefit from being deposited along with household waste. If alternative technologies treat household waste which would otherwise have gone to landfill, then this will mean that these Special or difficult wastes could require an alternative method for disposal. The above wastes and other Special and difficult wastes can be treated in commercial incineration plants and the technology exists to burn tyres to recover steel and energy.
- Due to the limited quantities of such wastes, incineration facilities are likely to be provided on a regional basis. The Waste Management Plan does not include proposals for these facilities and consequently there are no sites identified for these facilities in this Plan.
- Clinical waste from Berkshire is disposed at National Health Service incinerators either 8.47 inside or outside the county area, or else at the major clinical waste incinerator at Colnbrook. Movement of these wastes may require waste transfer facilities. Existing clinical waste incinerators will have to be upgraded to higher standards, and many may be closed as a result. The facility at Colnbrook serves a wide area, including the major NHS hospitals in the eastern part of the county area, and also including hospitals well beyond the county area. This plant, which its operators are seeking to upgrade to meet the new higher emission standards, is designed for continuous operation. Planning permission has already been granted for doubling its present capacity of approximately 1 tonne per hour, although separate authorisation for such an increase would have to be sought from the Environment Agency. In principle, it would therefore appear that adequate capacity exists for the incineration of clinical waste arising in the county area. If any additional facilities are nevertheless needed in the county area, they would be likely to require a separate plant using similar technology to waste-to-energy. Any proposals should ideally be located in conjunction with waste-to-energy, at a site identified for that purpose in this Plan.

#### **Policies outside Preferred Areas**

# Waste management facilities - non landfill

- 8.48 In addition to the specific sites identified as potential preferred areas in the Plan there are other locations which may be suitable for the development of facilities for sorting, separating, recycling and treating waste. These include:
  - existing permanent authorised waste management facilities where there may be scope for changing, intensifying or diversifying the use of the current site;

- temporary facilities where it may be appropriate in certain circumstances to extend the life of the existing planning permission; and
- industrial locations although not generally sites with a preponderance of office or light industrial style industrial uses. Temporary use of industrial sites awaiting development or undergoing development may also be acceptable.
- The Plan also includes non site specific policies for certain categories of development, including green waste composting and waste treatment at sewage works.
- 8.50 In all cases, proposals would be required to satisfy all other relevant policies of the Plan.
- Policy WLP16 Outside Preferred Areas, proposals for waste management development other than landfill will normally be permitted on sites within existing permanent waste management facilities or within existing or proposed industrial areas [i.e. areas containing a proportion of uses in the Use Classes categories B2 to B8], subject to:
  - (i) consideration of environmental impacts; and
  - (ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.
- The general presumption in favour of waste management facilities in appropriate industrial locations is a way of providing further opportunities for securing the development needed to implement the waste management strategy. However, such locations cannot be relied upon to supply all the sites required; hence specific preferred areas are identified in the Plan. Nevertheless, appropriate proposals in industrial type locations will stand an equal chance of securing planning permission as proposals in preferred areas.
- In assessing need, if suitable sites outside Preferred Areas secure permission, then this will reduce the number of Preferred Areas which will need to be released subsequently.

#### Green waste composting

- In addition to the sites identified as potential Preferred Areas for green waste composting (see Chapter 7), there may be other potentially suitable locations. Sites associated with existing authorised farm building complexes may be acceptable subject to detailed considerations. These include ensuring that the proposals are appropriate in scale and siting, that there is minimum visual intrusion, and that there is ready access to the principal road network to avoid excessive traffic on rural roads. The development of green waste composting facilities at such sites may also contribute to the diversification of the rural economy.
- Policy WLP17 Outside Preferred Areas, proposals for green waste composting will be supported in principle outside built-up areas and settlement boundaries defined in Local Plans where this involves the re-use of authorised permanent buildings which are in keeping with their surroundings or the use of land within or adjacent to farm building complexes, subject to:
  - (i) the proposals being appropriate in scale, form, character and siting to its location in the countryside; and
  - (ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

#### Sewage works

- 8.54 Sewage works could treat waste other than sewage using the existing technology operating at some sites. This could include the anaerobic digestion of separately collected putrescible household and other suitable waste mixed with sewage sludge using sewage sludge digestors, and the treatment of some liquid wastes.
- 8.55 Sewage works are bad neighbour uses, generally located away from other sensitive development. It is appropriate to increase the waste treatment potential of such sites and the Local Planning Authorities should support proposals in appropriate circumstances.
- Policy WLP18 Outside Preferred Areas the Local Planning Authorities will support in principle proposals involving the processing of sewage sludge and other suitable wastes within existing sewage works, subject to:
  - (i) the proposals being appropriate in scale, form, character and siting to its location; and
  - (ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

#### Farm and stable waste

- 8.56 Farms and stables (both the horse-riding industry and leisure) are major producers of waste. This includes surplus straw and also slurries from livestock production which can pollute groundwater and surface water. Much of this waste is disposed of safely in controlled quantities on agricultural land as fertiliser. However, the large volumes generated pose significant disposal problems in some cases.
- 8.57 Farm and stable wastes can be treated to recover resources and energy (e.g. compost, heat and power) and reduce the pollution potential of these wastes. Some methods could also treat other locally generated putrescible wastes. In the light of the above it is appropriate to encourage initiatives to treat farm and stable wastes close to their source provided that the treatment methods do not themselves have unacceptable environmental impacts. It is also recognised that the development of such facilities within rural areas can contribute to the diversification of the rural economy. Policy WLP11 identifies Membury Airfield as a Preferred Area of Search with potential for a waste treatment plant for processing farm and stable waste. Smaller facilities to treat these wastes may also be acceptable outside the preferred areas provided these are appropriate in scale, form, character and siting to a rural location. The development required for such facilities should be small in scale and should utilise existing farm or stable buildings where practicable and be located within existing groupings of buildings.
- Policy WLP19 Outside Preferred Areas, the Local Planning Authorities will support in principle proposals involving the treatment of suitable farm and stable wastes on farms and stables, subject to:
  - the proposals being located within or adjacent to existing groupings of farm buildings;
  - (ii) the proposal being appropriate in scale, form, character and siting to its location; and
  - (iii) the proposal overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

# Other landfill sites for putrescible/polluting waste

- In considering its proposed Preferred Areas for engineered landfilling, the former County Council assessed existing, former and known potential mineral extraction sites. Only those sites which currently have permission for engineered landfill, together with the preferred areas identified for this use in this Plan, are considered to be acceptable for engineered landfill. Applications for engineered landfill in other minerals voids will therefore normally be refused.
- 8.59 However, it is recognised that an additional category of site may possibly provide opportunities for engineered landfill during the Plan period. These are sites for which there is no site specific provision in the Replacement Minerals Local Plan in particular sites for the extraction of minerals other than sharp sand and gravel which may be released in accordance with the policies of the Minerals Local Plan.
- In view of the possible limitations on the availability of the preferred areas identified for landfilling, it is appropriate to ensure that the Waste Local Plan. policies are flexible enough to respond to the above opportunities. Where such opportunities arise it will be necessary for proposals to demonstrate that mineral extraction is acceptable in its own right and complies with the provisions of the Replacement Minerals Local Plan; that infilling of the proposed mineral extraction site is appropriate and necessary in order to achieve satisfactory restoration; that all technical criteria for engineered landfill can be met; and that the requirements of all other relevant policies are met.
- Policy WLP20 Outside the Preferred Areas for engineered landfill set out in Policy WLP11 applications for engineered landfill may be acceptable where the proposal forms part of a planning application for mineral extraction outside the Preferred Areas in the Replacement Minerals Local Plan and which is acceptable under the terms of that Plan, or of subsequent amendments or revisions thereof; provided that:
  - (a) the landfilling of waste is appropriate and necessary to achieve satisfactory restoration of the mineral extraction site;
  - (b) the site satisfies all of the technical requirements for engineered landfill and the proposed infilling forms part of a comprehensive scheme of restoration;
  - (c) the resulting final landform, landscape and after use are sympathetic to and compatible with the land uses, landscape and nature conservation interests of the surrounding area; and
  - (d) the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33, and satisfy the requirements of Policies WLP14 and WLP15 and all other relevant policies of the Plan.

#### Safeguarding sites for waste management

8.61 It is difficult to find suitable sites for waste management. Consequently, suitable sites (including the Preferred Areas identified in this Plan) should be safeguarded for such uses. In addition, it is proposed that those existing permanent authorised sites which are operating in an environmentally acceptable manner and any important new facilities which may be approved pursuant to other policies of the Plan, or identified subsequently, should be safeguarded. Without such safeguarding the success of the strategy could be impaired due to a shortage of suitable sites.

8.62

It is appropriate to include the opportunity to safeguard a further category of site: the sites of acceptable new applications for mineral extraction which fall outside the preferred areas identified in the Replacement Minerals Local Plan (i.e. generally proposals for mineral extraction other than sharp sand and gravel) where these prove potentially suitable for engineered landfill. In such circumstances, as well as being acceptable in terms of the policies of the Replacement Minerals Local Plan, they must also satisfy the requirements of Policy WLP20 of this Plan. The local planning authority could then consider safeguarding the site for engineered landfill. The effect of this would be to resist restoration proposals in any mineral application at the site concerned which do not incorporate an appropriate component of engineered landfill. The sites would only be safeguarded if engineered landfill proposals would be acceptable and appropriate in the context of other policies of the Plan, including whether there is an existing or foreseeable need for further engineered landfill capacity to be provided which cannot be met by the preferred areas identified in this Plan. The safeguarding is intended to relate only to new applications in the above category. Former mineral workings and current permissions (whether at operational sites or at sites not yet started) are precluded.

8.63

In addition to the preferred areas for non-inert waste landfill identified in Policy WLP11, further categories of site which require safeguarding include those sites which have already been accepted for landfill through the grant of permission or a resolution to grant permission, or through their identification as Preferred Areas in the Replacement Minerals Local Plan and which that Plan identifies as requiring fill material to achieve satisfactory restoration. It is important that the landfill component of these permissions etc is safeguarded to ensure that there is sufficient void space available to meet the needs of the county area and to contribute to regional needs.

# Policy WLP21 The Local Planning Authorities will seek to safeguard for appropriate waste management purposes:

# (i) the following existing permanent authorised sites in waste management uses:

Civic Amenity Sites & Household Waste Transfer Stations	. Grid ref
Pinchington Lane, Newbury	SU 478 633
Paices Hill, Aldermaston	SU 588 633
Smallmead, Reading	SU 706 701
Longshot Lane, Bracknell	SU 854 693
Braywick, Maidenhead	SU 894 802
Chalvey, Slough	
Other Sites	. Grid ref
Southern Recovery Services Ltd., Membury Aerodrome	
- waste solvent recycling	SU 314 756
Orcol Fuels Ltd., Lambourn Woodlands - storage of waste oils	. SU 322 759
Cleansing Services Group Ltd., Pinchington Lane, Newbury	
- waste oil recycling	SU 478 633
Boulton Bins Transfer Station, Newbury	
- inert waste transfer station	. SU 479 651
Runways and taxiways, Greenham Common Airbase	
- source of inert waste for recycling	. SU 500 647
Whitehouse Farm, Aldermaston - inert & skip waste recycling	. SU 609 627
Cow Lane, Reading - storage & sale of recycled building materials	. SU 704 738
Planners Farm, Winkfield - waste composting	
Lakeside Road, Colnbrook 'materials recovery facility	
and clinical waste incinerator	. TQ 038 773

Major Sites for Mon-Inert Waste

- (ii) sites where permanent permission is granted for the establishment of waste treatment, recycling, storage and transfer facilities which are considered to be essential to the achievement of the objectives of the Waste Management Plan;
- (iii) new sites approved for mineral extraction in accordance with the provisions of the Replacement Minerals Local Plan (in addition to the Preferred Areas identified in that Plan) where landfilling would form an acceptable and appropriate means of restoring the mineral working and which are suitable in technical and planning terms for engineered landfill;
- (iv) for inert waste landfill, the sites listed in Appendix 8A, except for the sites with planning permission which are judged unlikely to be implemented;
- (v) for non-inert waste landfill, the sites listed in Appendix 8B; and
- (vi) the Preferred Areas identified in this Plan.
- The circumstances in which development proposals on sites outside the identified preferred areas for waste management uses and outside the provisions of Policies WLP16 to 21 may be acceptable are considered in Chapter 10.

#### Policies for other wastes

#### Sewage Sludge

Sewage sludge will continue to be disposed of on agricultural land in the county area in accordance with guidelines set by other agencies. Improved sewage treatment processes arising from the EU Urban Wastewater Directive may lead to a slight increase in the volume of sludge production in the future. The reliance on direct disposal to land for soil improvement may become significantly reduced as a number of sludge utilisation initiatives are currently being actively pursued including composting and anaerobic digestion of sewage sludge and household waste. Reading and Slough Sewage Works are both equipped with sewage sludge digestion and power generating plant exporting energy to the national grid. Policy WLP18 is supportive in principle of proposals within existing sewage treatment works for treating sewage sludge and other suitable wastes.

#### **Dredging waste**

8.66

Dredgings from rivers and waterways in the county area do not generally create a disposal problem. Most of the river and canal dredgings are cast on associated river or canal banks, or spread on agricultural land. Such operations are normally exempted from the need to obtain planning permission<sup>2</sup>. This disposal method is not practical along the banks of the Thames particularly in the built-up eastern part of the county area. Some 50,000 to 100,000 tonnes of dredgings requiring disposal are generated annually from the Thames in the eastern part of the county area. This is currently landfilled at a dedicated site in Surrey which has limited remaining capacity. Dredged waste from the Thames in central Berkshire is generally disposed of to a landfill in Oxfordshire. Similarly, some canal dredgings (around 45,000 tonnes/year, or about 30% of the total volume dredged from the canals in the county area) are unsuitable for disposal on the canal banks or agricultural land, and are disposed at commercially operated landfill sites in the county.

<sup>&</sup>lt;sup>2</sup>Town and Country Planning General Permitted Development Order 1995

- 8.67 In particular cases, where the waste concerned is not being disposed of under permitted development rights or exemptions from the waste management licensing system, then the appropriate disposal route for non-recyclable material i.e. to engineered or non-engineered landfill will depend on the character of the material.
- There is potential for composting river and canal dredgings and aquatic weeds. Where dredgings are not being deposited to fertilise agricultural land, the first priority should be to compost suitable material, and this could be carried out as part of a mixed waste or green waste composting operation. Policy WLP23 also makes provision for temporary facilities associated with dredging projects.
- There are sufficient safeguarded landfill sites and preferred areas in the county area to dispose of any dredgings requiring landfill, where this is unavailable.

#### Radioactive waste

- 8.70 In England and Wales, the Environment Agency is responsible for issuing authorisations for the accumulation and disposal of radioactive waste. Registrations and authorisation certificates set out limitations and conditions relating to the control of radioactive materials and waste.
- 8.71 Many small users (e.g. hospitals, universities, research laboratories, and manufacturing and service industries) are authorised to dispose of 'Very Low Level Waste' (VLLW) in normal refuse. VLLW is defined as waste which can be safely disposed of with ordinary refuse, and maximum concentrations are specified.
- 8.72 Some non-nuclear industries, as well as major hospital and universities, produce 'Low Level Waste' (LLW), which is defined as waste containing radioactive materials other than those acceptable for disposal with ordinary refuse; again, maximum levels are specified. Such wastes may in certain circumstances be disposed of by controlled burial at suitable landfill sites, although authorisations are rare. Disposals are permitted by the Environment Agency only when the waste containment characteristics and performance of the site have been fully assessed, and when the Agency is satisfied that the public will be fully protected. There are no current operational sites in the county area authorised by the Environment Agency for the disposal of LLW, and none are planned.
- A large number of small users are authorised to dispose of low-level combustible solid waste by means of incineration.
- 8.74 None of the radioactive wastes from Burghfield Ordnance Factory or the Atomic Weapons Establishment at Aldermaston is disposed of in sites in the county area.

#### Energy recovery from waste

8.75 Waste management development can potentially enhance renewable energy sources thereby contributing to an increased diversity of energy supply, the conservation of natural resources, and the reduction of harmful greenhouse gas emissions. Whilst waste-to-energy is included in this Plan only as a contingency measure, other waste treatment methods (for example anaerobic digestion) and methane combustion from essential engineered landfill sites also have potential for energy recovery. The local authorities will, in principle, encourage and support the recovery of energy from waste, within the framework of the waste management hierarchy (Policy WLP2) and having regard to the feasibility and environmental acceptability of the available technologies and the need to meet acceptable environmental standards. In particular, proposals for waste management development will be expected to show what consideration has been given to the potential for energy recovery from the waste within the context of the development proposed, and to incorporate schemes for energy recovery where appropriate.

Policy WLP22 Where appropriate, and having regard to Policy WLP2, to available technologies, and to the need to meet acceptable environmental standards, proposals for waste management development should include consideration of the potential for energy recovery from the waste and if appropriate should incorporate schemes for energy recovery.

#### **Environmental Appraisal of Chapter 8**

- 8.76 To secure the wider benefits of a more sustainable waste strategy, it is necessary to release sites for major new waste management facilities, as well as sites for engineered landfill to deal with wastes which cannot be disposed of by other means. However, due to the nature and scale of these facilities, difficult planning and environmental issues and choices are raised.
- The conclusions of the Environmental Appraisal in respect of "Major Waste Management Sites" may be summarised as follows:
- 8.78 The preferred waste management technologies were chosen taking account of, amongst other issues, the waste hierarchy, environmental factors (including environmental capacity and sustainability), the potential for pollution, and responses to the public consultation exercises. Consideration was also given to alternative power generation facilities and energy recovery, in accordance with Government guidance (RPG9).
- In order to implement the preferred strategy (which is aimed at the treatment of waste to recover resources and reduce the volume of waste for disposal to landfill and hence embodies principles of sustainability in line with EU, Government and regional policy guidance), it is necessary to identify sites for major new waste management facilities. This includes engineered landfill. The spatial distribution of such major facilities is an important element in implementing the prevailing waste strategy. To accord with the proximity principle and the concept of sustainable development, major waste management facilities need to be close to the sources of waste and have good access. However, the relationship with adjoining land uses and the need to protect people and the natural environment need to be carefully assessed and balanced as part of the site selection process. The sites identified for each specific use are considered to be the least damaging in environmental terms.
- The objectives of the waste strategy cannot be achieved "overnight". Although the environmental risks associated with putrescible waste landfill are likely to be far greater than the alternative facilities proposed by the strategy, there is a need to identify some engineered landfill capacity in the Plan. Thus, although identifying such landfill sites as Preferred Areas may appear to be fundamentally contrary to the overall strategy (which follows EU, Government and regional guidance, and is embodied in the Berkshire Structure Plan as proposed to be modified), some limited provision is justified. It is also recognised that some engineered landfill will be required for the final disposal of non-recyclable waste, residues of treated waste, and some types of special and difficult waste.
- 8.81 The inclusion of policies relating to the development of major waste management facilities outside Preferred Areas is necessary to incorporate flexibility in the Plan. All relevant environmental issues would be considered when assessing individual planning applications (see Chapter 10).



#### Separation, Sorting and Recycling

- 9.1 Inert waste is composed primarily of material from construction, demolition and improvement works but can nevertheless come from domestic and business sources. It includes soil, brick and concrete as well as clean excavations resulting from site preparation work for development.
- The Berkshire Structure Plan seeks to conserve natural resources by, amongst other measures, re-using building materials and recovering demolition and construction waste. Recent Government guidance, Minerals Planning Guidance Note 6 'Guidelines for Aggregates Provision in England' strongly encourages the recycling of each waste as an important means (along with secondary aggregates) of reducing future demand for primary aggregates. This Guidance is reflected in the policies of the Replacement Minerals Local Plan for Berkshire. Up to 50% of this material is thought to be recyclable. This usually requires processing in the form of crushing and screening to produce a consistent product. The objective should be to maximise the market potential of these materials to compete with primary products.
- Inert waste recycling is already well established in Berkshire due to the efforts of a handful of local operators who generally occupy sites on temporary planning permission (one permanent permission exists). Some 18% of inert waste within Berkshire was recycled in 1993/94. The recycled product (crushed concrete, asphalt, etc) currently competes in the 'lower end' of the aggregates market. It is used mainly as engineering fill material on construction sites but is beginning to be used as a material in road construction. There appears to be scope for its use in concrete and asphalt making.
- 9.4 In order to achieve the Waste Management Plan's target of recycling 40% of inert waste by the end of the Plan period, there is a requirement for a network of additional facilities.

#### **Local facilities**

- 9.5 Chapter 5 addresses the need to minimise the generation of construction and demolition waste by re-using this material as part of the new development. This may require some processing e.g. crushing concrete for demolition waste for re-use as foundations for new buildings. There may also be a need to carry out initial sorting and processing of surplus waste prior to the removal from the site for further treatment. Similar considerations may apply on occasion with materials dredged from rivers and waterways. Short term operations of this nature may not require planning permission.
- 9.6 However, there is often insufficient space or time on such sites to stockpile and adequately process material to an appropriate specification for re-use. Certain locations close to housing and other sensitive development may be unacceptable in planning and environmental terms. Consequently support for such proposals in principle must be weighed against other considerations.

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- Policy WLP23 There will be support in principle for temporary facilities on demolition and construction sites, and on river and waterway dredging projects, for the recovery, separation, and where appropriate, processing of the waste materials generated, subject to:
  - (i) consideration of environmental impacts; and
  - (ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

#### **Central facilities**

- 9.7 As well as temporary facilities, there is a need for more established sites to process, stockpile and distribute material. Such sites would have a fuller range of machinery available to meet different specifications.
- 9.8 Not all of the 1 million plus tonnes of inert waste generated each year will be suitable for processing but it is estimated that a capacity of at least 0.6 million tonnes may be required to meet the target of 40% recycling by 2005/06. Consequently, between four and six sites are required across the county. Each site would occupy an area of 1-3 ha.
- The processing of demolition and construction waste involves the use of large machines to load, unload, crush and screen materials (concrete, metal, brick, asphalt, etc) and large stockpiles of materials. Lorries bring unprocessed material to the site and remove the processed material and some reject materials. Whilst the material is largely inert and non-polluting the process is noisy, dusty and potentially visually intrusive. For practical reasons it is likely to be carried out in the open. Sites therefore need to be located sufficiently far away from housing and other sensitive uses to avoid nuisance. Visual and acoustic screening and dust control is likely to be required. Some ten sites appear to be potentially suitable as Preferred Areas for inert waste recycling. These sites are listed in Policy WLP11.

#### Strategic facilities

- 9.10 There may be a need to establish temporary facilities on landfill sites for the recycling of inert waste and skip waste, such as the recovery of material for use in the restoration of landfill sites or the avoidance of recyclable materials being deposited. However, the local authorities' preference, in the first instance, is for waste to be recycled on permanent sites. Nevertheless, there are certain circumstances in which a landfill location is to be preferred, such as where non-recyclable wastes predominate or where a landfill site is much closer than a permanent facility. In such cases, proposal will need to demonstrate why a landfill location is required, as well as showing that other relevant policies of the Plan are satisfied.
- Policy WLP24 Proposals for temporary inert waste and skip waste recycling facilities on inert waste landfill sites for the duration of the landfill operation will normally be permitted provided that:
  - the recycling relates to waste brought to the site for disposal and is required to separate inert waste from putrescible/polluting waste and recover recyclable materials; and
  - (ii) the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

#### Disposal of the waste remaining after recycling

9.11 The non-recyclable element of inert waste cannot be treated by any other method. However, in some cases it is an essential component of restoring mineral workings to a beneficial after use, and future mineral extraction in the county area will create a need for fill which is likely to exceed supply. It is therefore very important to husband the use of the non-recyclable waste which is available and to ensure that it is used to restore those mineral sites where there is a fill requirement to achieve satisfactory restoration. In addition to the existing planning permissions and sites subject to a resolution to grant planning permission upon completion of a legal agreement, many of the sites identified as preferred areas for sand and gravel extraction in the Replacement Minerals Local Plan require inert fill material for restoration; and other mineral voids may be created requiring fill material as a result of planning permissions being granted for other minerals pursuant to the policies of the Replacement Minerals Local Plan.

Policy WLP25 The disposal of inert waste by landfilling will only be permitted in:

- (i) Preferred Areas for mineral extraction identified in the Replacement Minerals Local Plan and subsequent amendments and revisions thereof where there is a requirement for fill to achieve restoration and where the filling is limited to that which is required to achieve the restoration objectives set out in that Plan; and
- (ii) other mineral extraction sites where the disposal of waste forms an appropriate and necessary part of a scheme to achieve satisfactory restoration of the mineral site;

subject to the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP26, WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

A list of existing and prospective inert waste landfill sites is given in Appendix 8. These existing and prospective sites have been identified because they require some inert fill to restore them to the most appropriate after-use. The use of fill in such cases is important to secure beneficial use of the land. It helps to bring the mineral sites back to a beneficial use. As such, the use of inert waste for this purpose may be thought of as a non-wasteful use of the resource which, if not recycled itself, helps to recycle the use of the land.

#### Controls on landfill permissions to secure inert waste recycling

9.13 However, in line with the objective of maximising inert waste recycling, it is appropriate to seek to restrict the wastes which are landfilled as far as possible to those which cannot be recycled. Sorting and recycling should always take place prior to disposal and where waste is received at landfill sites unsorted it should undergo this process prior to final disposal. Proposals for inert waste disposal will be required to demonstrate how the disposal of recyclable inert wastes will be avoided. This complements the principle that facilities to carry out sorting and recycling on inert waste landfill sites will normally be permitted (Policy WLP24).

Policy WLP26 Planning permission will not normally be granted for the disposal of waste in inert landfill sites except in the following categories:

- (i) inert waste remaining after recycling;
- (ii) nert waste which is incapable of being recycled; and
- (iii) other inert waste which is necessary for operational needs.

#### **Environmental Appraisal of Chapter 9**

- 9.14 Inert waste is a major component of the total waste generated in Berkshire and a high proportion can be recycled. It is, therefore, very important to provide adequate sites for the development of recycling facilities for this waste and encourage the marketing of the recycled products. However, inert waste recycling is a 'bad neighbour' and it is important to provide sites where it can be carried out with minimal adverse impact.
- 9.15 The conclusions of the Environmental Appraisal in respect of 'Sites for Inert Waste' may be summarised as follows:
- 9.16 Policies promoting the separation, sorting and recycling of inert waste contribute to the husbanding of resources, both in terms of landfill capacity and mineral resources, within the environmental capacity of the County and are a positive attempt to put general environmental policy guidance on sustainable development and Policy LD1 of the BSP into practice.
- 9.17 Although facilities for the recycling, separation and processing of waste materials are encouraged they can be "bad neighbours". The need to minimise any potential for local environmental impact is therefore recognised and appropriate site specific mitigation measures may need to be employed.
- Recycling is stressed throughout the Plan and Policy WLP31 seeks to avoid recyclable inert waste being disposed of by landfill. Whilst the policy is radical in its approach, assuming a market for recycled inert waste, it is an essential element of the strategy. Furthermore, major changes in approach and attitudes to recycling are taking place and education is a key element of the strategy.
- In environmental terms, it is important to husband the use of non-recycled inert waste to restore mineral workings thus helping to recycle the use of land. The valuable nature of non recyclable inert waste for restoration of mineral sites is dealt with in the Plan and accords with the basic philosophy of the Plan which relies on the principles of promoting sustainability and takes account of the Minerals Local Plan as required by PPG23.

# assessing planning applications for waste management development

## Is Development Needed?

- This Chapter sets out the detailed considerations which the Planning Authority will take into account in judging the acceptability of individual planning applications for waste management development.
- Given the objective of the Berkshire Structure Plan of limiting the impact of development (BSP Policy LD3), the starting point in considering proposals for waste management is to establish whether the facilities in question are actually necessary and also whether this need outweighs the inevitable impacts of the development. The impacts include the wider impacts associated with new development (loss of undeveloped land, resource implications of new buildings etc.) and the specific impacts attributable to particular proposals during construction and subsequent operation. Consideration is also needed as to whether the development can be avoided by providing the same capacity in some more appropriate form or location. There may also be circumstances where the wider environmental benefits add weight to the need arguments and become overriding in relation to the particular local environmental concerns the proposals generate.
- However, in all circumstances proposals must include adequate safeguards for the protection of the environment and the amenities of local residents. Proposals which would give rise to any unacceptable adverse impacts on living conditions or in terms of pollution risk, danger to public health and safety and other detrimental effects will be refused. The potential for pollution arising from development affecting the current and future use of land is capable of being a material consideration in planning decisions. The Plan does not, however, seek to duplicate controls which are the responsibility of other agencies (for example the Environment Agency and the Health and Safety Executive see Appendix 9).
- Policy WLP27 Planning applications for waste management development will only be permitted if the Local Planning Authorities are satisfied that:
  - (i) having regard to Policy WLP2, there is a need for the development;
  - there is a wider environmental benefit resulting from the development which outweighs any adverse environmental and other effects resulting from it;
  - (iii) the development and its associated traffic would not give rise to any unacceptable environmental impacts; and
  - (iv) satisfactory arrangements are made to secure infrastructure, services and amenities made necessary by the development.
- In judging need, the Local Planning Authorities will also have regard to the extent to which proposals contribute positively to achieving the overall waste management priorities (Policy WLP2). This implies that proposals for development further down the waste management hierarchy must demonstrate a progressively stronger case on need grounds.

- It is also necessary to consider the contribution of individual proposals to the achievement of the strategy in detail. In the context of the flexible approach proposed, this implies a dynamic and evolving situation, where individual proposals are assessed according to their contribution to the emerging pattern of provision. Another consideration is the contribution made to the overall objective of meeting the waste management needs of the county area. This includes the need for interim arrangements (including out-county disposal) during the process of achieving a greater level of self-sufficiency in the longer term.
- The Planning Authority will have regard to the forecasts set by the Waste Management Plan for waste minimisation, reuse, recycling and treatment and the extent to which further facilities are needed to achieve these forecasts at any particular point in time. The annual waste management returns will assist in this judgement.

## Sites for waste management development

- 10.7 The basic approach of this Plan in relation to future facilities for waste management is, so far as practicable, to define in advance the sites which are considered to be appropriate.
- 10.8 However, it is open to any developer or landowner to submit development proposals on any area of land irrespective of its status in a Local Plan, and such an application must be considered on its merits. In many cases these proposals may be unacceptable in planning terms because the need for the development cannot be demonstrated, and/or the proposal has adverse environmental impacts, and/or conflicts with planning policies generally. Nevertheless, having regard to the possibility of such applications, it is helpful for the Plan to give clear guidance on the criteria against which they will be judged.
- Policy WLP28 Development proposals which do not accord with the provisions of Policies WLP11, WLP16 to 21 and WLP24 to 25 and WLP34 will normally be refused. In considering whether to make an exception to this principle in any particular case, the Local Planning Authorities will take account of:
  - (i) whether there is need to develop land outside the Preferred Areas or other areas defined in the above policies in order to meet the need for waste management facilities as defined by the Plan;
  - (ii) whether the need could be more acceptably met elsewhere than on the application site, having particular regard (among other things) to the presumptions against waste management uses in the specific areas indicated in Policy WLP29; and
  - (iii) whether the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.
- Policy WLP29 In all cases outside the Preferred Areas, and notwithstanding the provisions of Policy WLP28, there will be a strong presumption against allowing waste management development, either within or adversely affecting the following:
  - (i) areas designated as Sites of Special Scientific Interest (including proposed and designated Special Protection Areas, Special Areas of Conservation and Ramsar sites), Regionally Important Geological and Geomorphological Sites, or Geological Conservation Areas;

- (ii) statutory nature reserves;
- (iii) Scheduled Ancient Monuments;
- (iv) land owned by or covenanted to the National Trust;
- (v) common land, and town or village greens;
- (vi) major historic parks and gardens;
- (vii) conservation areas;
- (viii) Land protected under the special provisions of the Green Belt (London & Home Counties Act 1938)<sup>1</sup>;
- (ix) the sites and settings of buildings and features of architectural and/or historic interest;
- groundwater protection areas where the proposals would conflict with the Environment Agency's groundwater protection policy;
- (xi) the function of land important to the character, setting or amenities of individual settlements, including land important to the separation of settlements except for:
  - (a) the landfilling of waste where this forms an acceptable and necessary element of permitted mineral extraction and restoration; and
  - (b) temporary waste recycling and transfer facilities located on landfill sites in accordance with Policies WLP15 and WLP24;
- (xii) Metropolitan Green Belt, and land outside built up areas and settlement boundaries, except for the following purposes:
  - (a) the landfilling of wastes where this forms an acceptable and necessary element of permitted mineral extraction and restoration;
  - (b) temporary waste recycling and transfer facilities located on landfill sites in accordance with Policies WLP15 and WLP24;
  - (c) green waste composting in accordance with the requirements of Policy WLP17;
  - (d) the treatment of sewage and other wastes in accordance with the requirements of Policy WLP18; and
  - (e) the treatment of farm and stable waste in accordance with the requirements of Policy WLP19;
- (xiii) North Wessex Downs Area of Outstanding Natural Beauty and Areas of Special Landscape Importance except for the following purposes:

<sup>&</sup>lt;sup>1</sup>This refers only to a very small area of land at Ankerwycke (near Wraysbury), and not to the general area of the Metropolitan Green Belt in the county area.

- (a) the landfilling of wastes where this forms an acceptable and necessary element of the restoration of permitted mineral extraction and restoration;
- (b) temporary waste recycling and transfer facilities located on landfill sites in accordance with Policies WLP15 and WLP24;
- (c) the treatment of sewage and other wastes in accordance with the requirements of Policy WLP18;
- (d) the treatment of farm and stable waste in accordance with the requirements of Policy WLP19;
- (xiv) areas at risk from flooding except in exceptional circumstances where adequate and appropriate flood compensation measures are provided as part of the proposals
- (xv) Wildlife Heritage Sites, Parks and Gardens of County Importance, and non-scheduled archaeological sites meriting preservation in situ where these interests would be harmed by waste management development;
- (xvi) the immediate settings of any waterbodies or other water features and the aquatic environment in general, where the proposed development would result in material adverse impacts.
- Policies WLP28 and WLP29 are therefore complementary to Policies WLP11 to WLP13, WLP16 to WLP25 and WLP34. Together, all these policies provide a clear framework to indicate the planning authorities' likely response in principle to applications throughout the county area.
- It is emphasised that the inclusion of certain exceptions in items (xii) and (xiii) in Policy WLP29 is not intended to represent a weakening of the general strong controls over development that apply in the Green Belt and the AONB. Provisos reflecting these controls are already written into the other policies to which items (xii) and (xiii) refer, for example by requiring the activities to be located within existing buildings, and/or by requiring them to be appropriate in scale, form, character and siting to their location.

#### Assessing the impact of development proposals

- Wherever a planning application is submitted, a wide range of issues will need to be considered to assess the impact of the proposals and hence the issues referred to in Policy WLP27. The following policies therefore set out the criteria which will be used to assess the general environmental and other impacts of proposals for waste management development, and the content required in planning applications. When considering these criteria in the context of individual planning applications, the local planning authorities will have regard (among other things) to prevailing government advice about the weight which should be accorded to the protection of particular areas or interests.
- Policy WLP30 Within the framework provided by Policy WLP27, the merits of waste management development proposals will be assessed having regard to all relevant considerations, and in particular:
  - (i) the likely effects of the traffic and traffic-related impacts which the development would generate;
  - (ii) the need to safeguard health and living conditions;

- (iii) the likely effects of the proposed development on the surrounding population and the environment, including the effect on living and working conditions; the effect on the air and water environment; the amenity and wider environmental implications of any emissions, or any changes in the nature, quality and quantity of watercourses and groundwater, and drainage and flooding impacts;
- (iv) the visual impact of the proposed development; its effect on the landscape; the need for additional on-site and off-site planting, screening, or other landscaping measures, including planting in advance of the development; and the need to safeguard and enhance areas of attractive landscape and local landscape character, individual landscape features (woodlands, hedgerows etc), the character and setting of rivers, canals and streams, and areas of nature conservation value;
- (v) the need to safeguard the character, setting and amenities of individual settlements and to safeguard important open gaps between settlements from development which would cause long-term harm to the function of the land;
- (vi) the need to safeguard and enhance the character and use of sites used for recreation and public rights of way;
- (vii) the need to safeguard and enhance sites of ecological importance and protected species and their habitats, and the need to safeguard sites of geological, archaeological, historic, architectural or scientific importance, and to safeguard those sites comprising best and most versatile agricultural land;
- (viii) the need to safeguard aviation interests (including guarding against bird strike risks and safeguarding airfield protection zones), and to safeguard the interests of public utilities;
- (ix) the likely cumulative effects of the proposed development in combination with other developments taking place, or permitted to take place, in the locality;
- (x) the need to minimise disturbance from waste disposal operations by securing the phased release of sites where appropriate and the orderly progression of working and restoration where landfilling is taking place; and
- (xi) the need to ensure satisfactory restoration, after-care and management of sites for an acceptable after-use.

Policy WLP31 Every application for waste management development must be accompanied by a written statement, drawings and plans which:

- (i) describe the existing conditions of the site and surroundings;
- (ii) set out the detailed development proposals and a reasoned justification for the proposals;
- (iii) analyse the implications and impact of the proposals against relevant factors in Policies WLP27 to WLP30;

- (iv) explain the measures proposed to overcome or accommodate relevant issues and constraints and mitigate any adverse impacts;
- (v) assess the degree to which these measures address the constraints and overcome any such impacts; and
- (vi) set out proposals for monitoring the impact of development during construction and operation and following completion.

Proposals which do not provide sufficient information or fail to meet the environmental standards and planning requirements set out in the relevant policies of this Plan will not be permitted.

- Not all of the issues in Policy WLP30 will necessarily be relevant to every application for waste management. However, key factors in judging the acceptability of proposals will include access, impact on living conditions, emissions to air, protection of water resources, protection against flooding, and landscape impact/visual issues. In the case of landfill, the ability to secure satisfactory restoration, after-care and after-use is a major consideration. The issues to be addressed are summarised in the following paragraphs. When preparing proposals the applicant should discuss the scope of these issues with the Planning Authority.
- Unless the proposed **access** to the site and the surrounding highway network is adequate in terms of strength, capacity, safety and environmental considerations (including the effects of vehicles on living conditions along the haul route), then permission for a proposed development will be refused. For proposals generating a large volume of traffic, the relationship with the principal road network is of critical concern, and haul routes to the main road should avoid settlements or residential frontages close to the carriageway. Where adequate access can be secured through improvements to the local highway network, it will be necessary to consider the acceptability of such improvements in environmental terms. The Planning Authorities will seek to secure any road improvements required at the developer's expense and through appropriate legal agreements.
- The effects of proposals on **living conditions** in the broadest sense, including protection of human health, is an issue of major concern. Proposals should not give rise to unacceptable levels of noise, vibration, smell, dust, fumes or noxious emissions or visual intrusion beyond the site boundary, and should seek to minimise the creation of these nuisances by the best practicable means. The Planning Authorities will expect proposals to demonstrate no unacceptable adverse effects and include appropriate specific measures to control nuisances and emissions. These measures will include the siting of working areas away from sensitive development (buffer zones); enclosure of operations where applicable; control of working practices and processes; control over hours of operation and hours during which lorries may enter and leave the site and control over lorry routeing; and visual and acoustic screening.
- Buffer zones for waste management development will vary according to specific cases, but engineered landfill and some waste management facilities will require a substantial buffer zone to settlements. Buffer zones may also be required to help mitigate impacts on other sensitive uses. The following minimum buffer zones to settlements would normally be expected to apply, although the precise requirements at individual sites will be assessed case-by-case according to the nature and range of the facilities proposed:

Waste management use		Distance from settlements
Engineered landfill	Deposit of household waste and difficult and Special waste	250m
	Deposit of industrial/commercial waste	150m
Inert waste landfill		100m*
Inert waste recycling Waste to energy plant		150m 400m

<sup>\*</sup>or limit of approved mineral restoration using fill material

- It will not always be possible to apply the above buffer zones to isolated dwellings/groups of dwellings. Buffer zone characteristics for other waste management uses will depend upon individual site characteristics and upon proposals demonstrating the extent to which particular mitigation measures are effective in minimising impacts. Decisions on buffer zones with respect to all sites will be made in the light of detailed local circumstances including the relationship of the site to surrounding uses, topography, screening, etc. (On buffer zones, see also paragraph 6.23.)
- 10.17 **Emissions to air** are a very important consideration particularly in relation to WTE. The Waste Management Plan (Chapter 8) includes WTE in the 'mini-hierarchy' of waste treatment options but states that its confirmation as a main (but contingency) element of the strategy is subject to further confirmation from authoritative sources that risk to health need not be a constraint on adoption of this technology. The decision to give WTE no more than a contingency status in the waste strategy will be reflected in the planning authority's response to individual proposals. Guidance to planning authorities on emissions to air is provided in Planning Policy Guidance Note 23 'Planning and Pollution Control'. This advises that the potential for pollution affecting the use of land is capable of being a material consideration in planning decisions.
- Proposals for waste to energy will be required to include a comprehensive risk assessment to demonstrate that there will be no unacceptable impact from emissions from the incineration of waste on the surrounding population and no adverse effects on ecological and other environmental interests, including water quality. As a minimum requirement, proposals must show not only that airborne emissions can be maintained within the standards of emission control required by the Environment Agency, but must also reflect emerging statutory requirements as far as these are known. In accordance with the advice of PPG23, the local authorities will seek close consultation with the Environment Agency to ensure the fullest appreciation and consideration of pollution issues and assessment of pollution risk at the planning application stage; but will not seek to duplicate controls imposed by this and other agencies.
- Landfill gas generated by the decomposition of waste can cause nuisance and safety issues locally and give rise to public health concerns, and contributes significantly to greenhouse gas emissions. Proposals for landfill of putrescible/polluting waste will be required to minimise the discharge of landfill gas to the atmosphere by providing for the earliest practical introduction of gas collection and flaring systems. Proposals should also include landfill gas utilisation measures including schemes for the recovery of energy from landfill gas, unless this can be clearly demonstrated to be impracticable.

- The protection of water resources is particularly significant in relation to waste 10.20 management facilities since the decomposition of putrescible/polluting wastes, coupled with infiltration of water, produces polluting liquids (leachate) which can be noxious, poisonous and polluting if allowed in contact with surface or groundwater. The Environment Agency's policies for the protecting of groundwater seek to exclude putrescible/polluting waste landfill from certain protection zones for individual groundwater sources, and to ensure full engineered containment in sensitive locations elsewhere. There may also be occasions when the engineered containment of inert waste material is required, for example to prevent silt migration in fissured chalk. The local planning authorities will refuse applications for all types of waste management development which would be prejudicial to the protection of groundwater interests and will ensure that elsewhere proposals which are acceptable in principle include necessary measures for the protection of groundwater quality and quantity, and in the case of landfill necessary measures for engineered containment consistent with the policies of the Environment Agency. All proposals for waste management development relating to previously contaminated land must ensure that measures for dealing with contamination do not give rise to unacceptable risks in respect of water quality or other pollution. The protection of groundwater flow also needs to be taken into consideration and in certain landfill situations it will be necessary to employ groundwater relief measures.
- Protection against the **risk of flooding** is important in the context of landfill where proposals often involve some raising of fill levels above those existing. Raising of ground levels in flood plains results in a loss of flood storage capacity and/or impedance of flood flows. Proposals which are prejudicial to flood protection interests will be refused unless, exceptionally, the applicant can demonstrate satisfactory compensatory measures can be achieved and are included as an integral part of the application. Proposals must also demonstrate no adverse impact upon the adjacent and downstream land drainage system.
- The landscape impact of waste management development needs to be carefully considered. The nature of the material and process can give an unsightly appearance to waste management development. Furthermore, major facilities, whilst generally enclosed, are housed in substantial buildings which can be incompatible with local landscape character. Proposals must demonstrate no material adverse impact on the landscape or the landscape setting of sites of natural or heritage importance or other recognised interests. They should include a thorough assessment of landscape and visual impact; detailed survey of the existing landscape; detailed landscape proposals and proposals for the treatment of the external appearance of buildings and structures, with specific attention to measures to mitigate their visual impact; a management scheme referring where appropriate to after-use objectives; and temporary measures to minimise impact during construction and/or operation.
- 10.23 Waste-to-energy plants involve very large buildings with the potential for extensive visual intrusion and overshadowing of nearby areas. Mitigation measures should include careful consideration of detailed siting to take advantage of existing topography, vegetation and other screening, together with attention to height, massing, orientation, design and finish of the building and stack. The opportunity should be taken of using existing buildings and structures, either in the foreground or as a backdrop, to reduce the visual impact of new buildings. For major developments generally there is likely to be a requirement for substantial structural planting on and off site. It is important to recognise this and to incorporate the necessary areas as part of the planning proposals.

- Proposals for landfill with putrescible/polluting waste involve raising of levels above existing to provide adequate drainage. This needs careful consideration to ensure that the visual impact of temporary operations is minimised by judicious screen planting/bunding, etc., and through a phased restoration programme which provides screening of filling operations by previously restored areas. There is a need to ensure the proposed landform is designed to be assimilated as far as possible into the landscape and that the detailed landscaping reinforces and enhances existing landscape features. Recent guidance suggests there is no technical reason to prevent the planting of trees on restored sites filled with putrescible and polluting waste (engineered sites). Proposals will be expected to provide for appropriate planting on the landfill site and additional off-site works as necessary.
- Smaller facilities (including temporary and permanent sites) will also require careful assessment of landscape and visual impacts, including enclosure of visually intrusive operations in buildings as appropriate; the use of screen planting and landscape bunding to reduce visual impacts; and the careful design and siting of buildings, plant and machinery to take advantage of existing landform and screening.
- Where proposals could have direct or indirect impacts on **sites of natural or heritage importance**, i.e. sites designated internationally, nationally or locally for their nature
  conservation, landscape, historic, conservation or archaeological importance, or other
  sites where such interests may be present, proposals must demonstrate no material
  adverse impacts on these interests. To allow their impacts to be assessed, proposals
  must include appropriate survey and evaluation of these interests and where appropriate
  measures for assessing and monitoring the effects of development upon them. Details
  must also be submitted demonstrating how these interests will be protected during
  construction and subsequent operations or where appropriate, proposals for any removal
  and recording of natural and heritage features, together with other suitable compensatory
  mitigation measures. Proposals which provide insufficient information and evaluation
  and monitoring or which would result in material adverse impacts will be refused.
- Site restoration, monitoring and after-care is an essential element of landfill operations to ensure that the site is restored and maintained in a satisfactory condition to support an appropriate after-use. The intended after-use should be identified at the outset and related to the design of the scheme. The Planning Authorities will impose conditions to secure monitoring and restoration and after-use requirements and before granting planning permission will need to be satisfied that the site can be satisfactorily restored and managed for an appropriate after-use. Where engineered landfill of putrescible and polluting waste is involved, the detailed waste disposal operation, including placement and compaction of waste and allowance for settlement, are legitimate restoration concerns since they affect the success of the final restoration in terms of contours, drainage, etc.
- Detailed restoration and aftercare proposals will be required and should incorporate site investigation to identify existing characteristics and resources including landscape, vegetation, drainage and soils. There should be proposals for removal, storage and placement of restoration materials. Proposals should incorporate details of 'surcharged levels' of the proposed landform to provide for settlement of waste and details of the final landform and drainage. The depth of soil on the restored site is often critical to the quality of restoration and also affects the ability to carry out landscape planting, particularly on engineered landfill sites. Where in situ materials are in short supply, it will be necessary for these to be made good by utilising suitable soil-making materials from incoming waste or by importing soils. Full details of the proposed after-use for the site should be provided.

- Where an agricultural after-use is intended, proposals for sites on the best and most versatile land (Grades 1, 2 and 3a of the MAFF Agricultural Land Classification System) must demonstrate schemes to return the land to similar potential. The Planning Authorities will co-operate closely with MAFF or the Forestry Authority in assessing proposals involving agricultural or forestry restoration respectively. A minimum 5 year after-care period will be required in all cases. The Planning Authority may seek specific provision to secure the long-term management of sites to be restored for amenity or nature conservation. There is also a long-term management liability under the waste management licence with regard to pollution monitoring and control. The aftercare and site management requirements need to be closely harmonised with this regime.
- 10.30 It is important to note that the grant of planning permission for a particular waste management development does not remove the need to obtain other consents that may be necessary under other legislation, and neither does it imply that such consents will necessarily be forthcoming.

#### **Environmental Assessment**

- Planning applications for certain categories of waste management development are subject to a process known as Environmental Assessment (EA). EA is intended to ensure that the environmental effects of major developments are taken into account at the earliest possible stage in the planning and decision-making process. An important benefit of EA is that it requires the developer to identify the environmental effects of proposals and to indicate the steps being taken to mitigate them. EA involves submission of an 'Environmental Statement' by the intending developer, at the same time as he submits his planning application for assessment by the Planning Authority.
- The Regulations governing environmental statements identify several types of waste management development for which an EA is always required (Schedule 1 projects); and others for which an EA may be required if the operations would be 'likely to have significant effects on the environment by virtue of factors such as their nature, size or location' (Schedule 2 projects). Additional planning guidance reinforces the likely need for Environmental Statements to accompany Schedule 2 projects which are likely to have significant effects upon important interests, such as nature conservation (PPG9).
- The types of waste management development which will always require an EA (Schedule 1 projects) include the incineration or chemical treatment of special waste and the disposal of this waste to landfill. Other installations where an EA may be required (Schedule 2 projects) include landfill sites and sites for the transfer, treatment and disposal of household, industrial and commercial waste. Government advice (in DoE Circular 15/88) is that the latter may well be candidates for EA where the capacity of the installation is greater than 75,000 tonnes a year. Except in the most sensitive locations, sites taking smaller tonnages of waste and sites accepting only inert waste are unlikely to require an EA.
- In the context of the prevailing Waste Strategy, the local planning authorities consider that an EA will almost certainly be required for the following Schedule 2 projects: major waste treatment plants and putrescible/polluting waste landfills, together with larger transfer and recycling facilities. In considering whether an Environmental Statement is required, and in preparing proposals accompanied by an Environmental Statement, applicants will be expected to carry out a detailed 'scoping' exercise and all necessary consultations with relevant organisations and interests to ensure that relevant issues are covered in the Statement. Where appropriate, an appraisal of the main alternatives considered by the applicant should be submitted.

- Even where it is judged that there is no formal requirement for an EA, proposals may still be judged to have significant environmental effects by virtue of their nature, scale and location and/or their potential impacts on important interests. In such cases the proposals will be required to give detailed consideration to all relevant environmental impacts, and will also be required to satisfy all of the relevant policies of this Plan.
- Policy WLP32 The local planning authorities will require an Environmental Statement to be submitted with a planning application for waste management development where, having regard to the relevant Regulations and the provisions of DoE Circular 15/88 and other relevant government guidance, it appears to them that the proposals are likely to have significant environmental effects. Any decision not to require such a Statement in a particular case will not preclude the authorities, when taking the decision on the overall merits of the application concerned, from judging that the environmental effects of the proposal are sufficient to justify refusing planning permission.

#### **Environmental improvements and wider benefits**

- 10.36 Waste management uses are often 'bad neighbour' uses and it is recognised that there are few, if any, ideal sites for new waste management development. All such development will, therefore, be expected to include appropriate mitigation measures on site and operate to acceptable environmental standards thereby ensuring that any potential for adverse impact on amenity and the environment in general is kept to a minimum.
- It may also be necessary to seek opportunities to carry out environmental improvements and to provide other benefits away from the site where these are closely related to the proposed development. The resultant improvements and benefits should also be fairly and reasonably related in scale and kind to the development. It is important that developers are not required to make improvements and to pay for facilities which are needed solely to resolve existing problems or deficiencies. More detailed guidance on the appropriateness of using planning conditions and planning obligations to secure such improvements and other benefits is contained in Circulars 11/95 and 1/97.
- In accordance with Policy WLP33, the local planning authorities will look to those submitting proposals for waste management development to make provision for environmental improvements or other benefits both on the site and in the locality where it is appropriate to do so. Improvements and benefits may take many different forms. For example, they may include measures to reduce the impact of the development, such as through off-site tree planting. They may include measures to compensate for the loss of a resource as a result of the development, such as through the creation of a new nature reserve or the provision of new footpaths. They may also include measures to improve the infrastructure of an area to enable the development to go ahead, such as through the widening of narrow approach roads to a site or the strengthening of a weak bridge.
- The local planning authorities recognise, however, that waste related uses are often low value' commercial operations and opportunities to seek such benefits may be limited and will depend on the nature and scale of the development proposed.
- In addition to the above, it is recognised that some existing waste management development uses may not be operating to optimal environmental standards. The local planning authorities therefore consider it important to achieve, through development proposals, environmental improvements to these operations.

Policy WLP33 When considering proposals for waste management development, the local planning authorities will take the opportunity to seek environmental improvements and other public benefits both on the site and in the surrounding area where these are directly related to the proposed development.

# **Conditions and planning obligations**

10.41 : In order to ensure that necessary waste management development has the minimum environmental impacts, the Planning Authorities will impose suitable conditions on all planning permissions. These conditions are designed to ensure that the operator complies with all of the details in the approved scheme, and that operations at the site are carried out so as to protect the environment and residential amenity. They will also be used to secure satisfactory restoration and reinstatement of sites following cessation of operations.

10.42 Certain matters cannot be controlled by planning conditions, such as lorry routeing to and from the site and financial contributions for off site works. In many cases these matters are necessary to render the development acceptable in planning terms.

Accordingly, planning obligations will be sought in the form of voluntary legal agreements between the developer and the Planning Authorities. Where the developer is unwilling to enter into appropriate legal agreements, permission will normally be refused.

#### **Enforcement**

The local planning authorities will continue to use their planning enforcement powers to secure the cessation and removal of unacceptable unauthorised waste management activities and compliance with planning permissions for waste management development.

#### **Land Raising**

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#### Is land raising necessary?

- 10.44 The term land raising refers here to:
  - the deposit of waste on land (as distinct from holes in the ground created by mineral workings) resulting in the level of land being raised above existing;
  - (ii) the raising of levels on landfills in mineral voids above those necessary to achieve satisfactory drainage and restoration. [In the case of putrescible and polluting waste landfill it is necessary to raise levels significantly above original ground levels to achieve satisfactory drainage. This is known as 'doming'. The level to which the site is filled and restored also has to take account of the fact that the waste will settle somewhat over time so it is necessary to restore to higher levels than those required to achieve satisfactory final levels (this is known as 'surcharging'). For the avoidance of doubt the doming of landfills in order to achieve satisfactory drainage and any necessary surcharging of levels does not fall within this Plan's definition of land raising.]
  - (iii) the landfilling of proposed mineral voids where there is no justification for mineral extraction in its own right or where waste disposal forms the major element of the scheme.

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- The Berkshire Structure Plan (BSP Policy W6), reflecting EU and regional guidance, is normally opposed to land raising unless it can be clearly demonstrated that there is no reasonably practicable alternative way of meeting the waste disposal needs of the county area. In addition, land raising uses up waste materials which may be required for filling the holes created by mineral extraction in order to restore these sites to a beneficial after-use. Land raising also prolongs the duration of disturbance on mineral sites or extends disturbance into new areas.
- In the case of putrescible and polluting waste the local planning authorities will oppose land raising on sites outside mineral voids. It is considered that there is no need to resort to this method in view of the mineral sites identified as potentially suitable in this Plan for landfilling these wastes.
- Land raising in mineral voids will not normally be permitted. However, there may be certain circumstances where some land raising is appropriate in restoration:terms (e.g. to reflect or marry in with surrounding topography). There may equally be circumstances where the minimum doming necessary to achieve satisfactory drainage proves to be unacceptable due to adverse landscape impact (e.g. due to incompatibility with the surrounding low lying area). The detailed design of a scheme may mitigate its landscape impact e.g. by restoring to several small domes instead of one much higher dome. A key restoration consideration is therefore the relationship of the resultant landform to the surrounding landform. Individual restoration proposals in mineral extraction sites will consequently need to be considered on their merits reflecting the restoration needs of the site in landscape terms and other relevant policy considerations.

#### **Inert Waste**

- The local planning authorities also consider that the circumstances where land raising using inert waste might be acceptable are very limited. It is anticipated that the need for inert fill to restore mineral extraction sites will exceed the supply of inert waste generated in the county area (Chapter 3). Consequently, it is essential that available waste is used to restore mineral voids. Also, given the current agricultural surpluses in the £U and the widespread application of agricultural 'set aside' (involving agricultural land being taken out of production), the local planning authorities consider that the circumstances where tipping as a means of improving agricultural land might be justified will be rare. The disposal of sewage sludge and dredgings on land in accordance with good agricultural practice is not considered to be land raising.
- 10.49 However, there may be circumstances where land raising with inert waste is acceptable. The three most likely are:
  - (i) the use of waste to stabilise polluted, despoiled or derelict land provided that this represents the best practicable means of achieving the reinstatement of the land to a beneficial use and is otherwise acceptable in relation to other policies of the Plan;
  - (ii) use of clean excavated waste material as part of a specific engineering operation to prepare and landscape sites for development; and
  - (iii) the formation, in appropriate cases, of environmental bunds to protect adjoining land uses from the adverse impacts of development (e.g. noise screens alongside motorways).

#### **Major Construction Projects**

- The other situation where land raising may, in limited circumstances, be acceptable is in relation to the disposal of large quantities of surplus spoil generated by major construction projects (particularly new roads) on, adjacent to or near the construction site. This practice can be beneficial in confining disturbance to the immediate vicinity of the development and preventing the traffic impact of lorries which would otherwise be required to haul surplus material away. The material can be used in the scheme for landscaping etc or in restoring land excavated as 'borrow pits' for the project. However, in other circumstances the resulting disturbance to land and the final landform and restoration may be unsatisfactory. The waste will usually be better employed in restoring mineral workings in need of fill material.
- The local planning authorities therefore consider that the prime objective for disposal of such surplus material should be to secure a positive use for it, either within the development or elsewhere. The maximum amount of re-usable material should first be recovered and/or used. The remaining material should be used to restore mineral sites unless there are very significant reasons why this could give rise to excessive environmental disturbance. Only in such cases will land raising of surplus spoil be contemplated.
- Early planning is required by developers (including the Department of Transport and/or their contractors) about the most appropriate locations for disposal. Past practices, which have tended to treat disposal as an afterthought, have resulted in inadequate consideration of the options by developers. In turn, this has on occasion resulted in unacceptable pressure on the planning authority to determine applications which are deficient in content and detail, and to do so extremely speedily purely as a matter of expediency imposed by contractual commitments. Such an approach would be unacceptable to the Local Planning Authorities.
- Policy WLP34 The Local Planning Authorities will not normally permit the disposal of waste by land raising unless:
  - there is no reasonably practicable alternative, including the use of existing waste disposal facilities;
  - (ii) the benefits of the scheme outweigh the environmental impacts and other adverse impacts which the development is likely to cause; and
  - (iii) the proposal overcomes or accommodates all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.
- In conclusion the local planning authorities recognise that there are occasions when land raising may be beneficial for strictly defined purposes. However, it is as a general principle undesirable and proposals for such development will be very rigorously examined to assess the need for the development as well as ensuring that their environmental impacts are acceptable.

# **Environmental Appraisal of Chapter 10**

A key role of the Waste Local Plan is to set out the criteria by which all waste management proposals, both inside and outside Preferred Areas, will be judged. The emphasis throughout is on the need to safeguard living conditions and the environment and reduce adverse impacts to a minimum by ensuring an appropriate form and standard of waste management development.

- The conclusions of the Environmental Appraisal in respect of "Assessing Planning Applications for Waste Management" may be summarised as follows:
- The framework of policies in this Chapter reflect Government policy guidance in PPG12 and PPG23 and the objectives of the EU Waste Framework Directive by setting out the environmental criteria against which all applications for waste management development will be considered.
- The Preferred Areas approach guides future waste management development to the most suitable locations in principle, having regard to the wider policy issues of sustainability. It is not within the scope of the Plan to consider in detail the local environmental issues of each potential waste management project. However, the remaining environmental criteria which require to be further addressed by potential developers in drawing up their detailed proposals are identified and set out for each Preferred Area in Appendix 7 to the Plan. Formal, individual project environmental assessment will be required in appropriate cases.
- Although this Plan adopts the Preferred Areas approach, all planning applications whether for Preferred areas or not must be considered on their merits (PPG1). The policies in this Chapter, therefore, seek to ensure that all necessary and appropriate environmental issues are taken into account and balanced when assessing detailed development proposals for Preferred Areas and other sites. These policies reflect the criteria listed in the site selection process, including the environmental constraints of the county area, and the need to protect the environment and human health in the context of potentially polluting development on the uses of land and amenity of the area. The criteria also reflect relevant government guidance (e.g. PPG2, PPG7, PPG9, PPG12, PPG13, PPG23 and RPG9) and the objectives of the EU Waste Framework Directive.
- There are, however, tensions between different policies' objectives, in particular between the need to protect the natural environment and the need to protect people. The weight given to these policy objectives will vary according to each individual development proposal, and appropriate site specific mitigation measures may assist in overcoming some policy conflicts and tensions.
- 10.60 Considerations of need and the waste management hierarchy are also relevant material considerations. The test of need is fundamental to the implementation of the prevailing waste strategy. Developments further down the hierarchy (i.e. least favourable in environment terms) will be required to demonstrate a progressively stronger case to justify planning permission because the least preferred techniques for dealing with waste require the greatest justification in terms of need. This is an essential element of the waste hierarchy, and reflects EU, Government and regional guidance.
- In line with Government advice (e.g. PPG1 and PPG23), the Plan does not attempt to duplicate other legislation and regulations. In particular, although the potential for pollution arising from a proposed development is a material consideration in the context of its impact on adjoining land uses, the actual regulatory standards of control cannot fall within the remit of this Plan.





#### **Implementation**

- Implementation of the prevailing waste management strategy will depend on successfully achieving the objectives and policies of both the new Waste Management Plan and the Waste Local Plan. In many respects, these two Plans are reverse sides of the same coin. The former's strategy sets the framework within which land use planning policies in the latter are developed, but the implications of the latter are critical in developing the strategy. Accordingly, the implementation (and subsequent monitoring and review) of each Plan will need to pay regard to the other.
- So far as the implementation of the policies of the Waste Local Plan is concerned, these will be implemented principally through the normal development control process. The local planning authorities will be guided by them when making decisions on planning applications for waste management or related development, and in deciding on the conditions which should be attached to any permissions.

#### **Monitoring**

- The monitoring and review of regional waste planning policy is, in the first instance, the responsibility of the South East Regional Planning Conference (SERPLAN), and the preparation of any national guidelines on such matters is the responsibility of central government. The local planning authorities will continue to work with SERPLAN on all matters relevant to regional waste planning.
- The unitary Councils will continue to liaise with other local planning authorities, both inside and outside Berkshire, over matters of common concern related to waste planning. In particular, the Councils will endeavour to ensure that the policies of other local plans would not conflict with or prejudice the implementation of the policies of this Plan, nor lead to the unacceptable sterilisation of land especially suited to use for waste management facilities.
- The local planning authorities will continue to monitor waste management facilities and sites in Berkshire and will take appropriate action (including enforcement action if necessary) to remedy breaches of planning control. Regular meetings will be held with major waste operators in the county to review progress and any problems at individual sites. Such monitoring by the Councils as Waste Planning Authorities will be co-ordinated where possible and appropriate with monitoring by the Environment Agency as Waste Regulation Authority.
- Annual reports will be prepared on the operation of this Plan. These will consider above all the continuing effectiveness and appropriateness of the Plan's policies regarding the implementation of new waste management facilities and their implications for achieving the objective of a changed waste strategy, along with the implications of the grant of any 'windfall' permissions. If any corrective measure is apparently needed by the Waste Planning Authorities to ensure effective implementation of the new strategy, it will be reported to the appropriate authority so that suitable action can be taken and the momentum of policy implementation can be maintained.

#### Review

The Waste Local Plan provides policies covering the period to 2006. It appears desirable that a further review of the Plan should be completed before the end of 2006, in order to maintain a continuous statutory framework for detailed waste planning in the area of Berkshire. That will, however, be a matter for the local authorities to decide, having regard to the prevailing circumstances at the time. However, the work in producing the Waste Management Plan and this Plan has demonstrated how quickly matters related to the environment, and especially those concerning waste, are changing. An earlier review of all or part of the Plan will therefore be carried out if necessary in the light of any material changes in the national or regional policy background, any major changes arising out of review of the Waste Management Plan, or of any other major changes of circumstance.

#### **Environmental Appraisal of Chapter 11**

- The conclusions of the Environmental Appraisal in respect of 'Implementation, Monitoring and Review' may be summarised as follows:
- The monitoring of the Plan in environmental terms is essential to providing a sound environmental base for the review of the Plan. It will provide a check to ensure the environmental objectives of the Plan are achieved and that the predicted outcomes and conclusions of the Environmental Appraisal are robust.