

8 PROVISION FOR FUTURE WASTE MANAGEMENT

Major Waste Management Facilities

WLP 18

Subject to policies and criteria contained elsewhere in the development plan, proposals for major waste management facilities (other than landfill) will be considered favourably at the following preferred sites:

- (a) Dickerson's Site, Cottenham/Landbeach**
- (b) Alconbury Airfield, Alconbury (area of search)**
- (c) Former Dogsthorpe Brickworks, Dogsthorpe, Peterborough**
- (d) Kings Dyke Brickpits, Whittlesey (area of search)**
- (e) Hampton, Peterborough**
- (f) Land off Algore's Way, Wisbech**
- (g) Land East of Hundred Road, March**
- (h) Land off Storey's Bar Road, Fengate, Peterborough**
- (i) All new major developments, including new settlements**
- (j) Anglian Water Site, Cowley Road/Chesterton Sidings Cambridge (area of search)**
- (k) Land including Lancaster Way Business Park, Witchford (area of search)**
- (l) Station Farm, Buckden**
- (m) Red Lodge Recycling and Transfer Station, The Carrops, Red Lodge**
- (n) Cambridge Area (area of search)**

(Sites are not listed in any priority order)

8.18.1 The identification of sites for major waste management facilities is necessary in order to promote the move away from waste disposal by landfill to more sustainable waste management. Inset Maps for the above sites are set out in Appendix 6.

8.18.2 Sites were selected having regard to the following site selection criteria:

- planning policy: including adopted policies in the Structure Plan, district local plans and the Cambridge Aggregates (Minerals) Local Plan
- regional self sufficiency: major waste management facilities will have to make a significant contribution to regional self sufficiency, this will require them to deal with the majority of waste arising in the Plan area
- proximity principle: ensuring proposed sites are in close proximity to the main sources of waste
- transport and access: major waste management sites will generate significant vehicular movements and require a good means of access. Rail and water access are encouraged as alternatives but not to encourage imports of waste, from outside the Plan Area
- compatibility with adjacent development: location of facilities must be compatible with neighbouring users and any adverse impacts controlled
- scope for integrated uses: no one waste management method can deal with all waste streams, and there are benefits in having sites that can accommodate a range of uses

- nature of site: including using previously developed land in preference to green field sites
- potential for energy recovery: including the proximity of potential users to maximise energy recovery and access to the national electricity grid
- site availability: in order to be able to fulfil the Plan's strategy there has to be a realistic chance that the sites will become available during the Plan period
- surface and underground water: minimising the impact of potentially polluting waste management uses (particularly putrescible landfill – see policy WLP2)
- land stability: effects on feasibility of sites and the need for precautionary measures
- remediation of contaminated land: potential benefits of development in cleaning up contamination
- visual intrusion: visual and landscape impact and the opportunities for mitigation measures
- ecology/geology: impact of facilities, particularly any designated sites and implications for sites protected under the Conservation (Natural Habitats etc) Regulations 1994
- archaeology and the historic environment: potential effects on these assets.
- restoration: ability to restore waste management sites to a beneficial after-use when operations cease
- agricultural land: avoiding the best and most versatile agricultural land and developing the lowest quality land first where a choice of sites is available
- other constraints: including dust, odours, vermin and birds, noise, litter, public rights of way, airfield safeguarding zones, etc

8.18.3 Under no circumstances should the granting of planning permission for a Preferred Site be regarded as automatic. Permission will be subject to satisfactory compliance with other relevant Development Plan policies. In this context, a traffic problem has been identified in respect of development at the Kings Dyke Brickpits site, and planning permission will be dependent upon the resolution of difficulties associated with the A605.

8.18.4 Any planning permission for Land East of Hundred Road, March will be dependant upon satisfactory access arrangements being made to the A141, via the March Trading Park (the planning permission for March Trading Park made provision for the potential for such a link to be safeguarded). With regard to the identification of a site within the Anglian Water Site, Cowley Road/Chesterton Sidings, Cambridge, Area of Search, this will take place as part of the master planning of the Cambridge Northern Fringe East. In the event that the identification of an alternative site proves necessary during the plan period, the criteria set out in paragraph 8.18.2 will be used.

8.18.5 There is a need for a further site to serve the Cambridge area, but it has not proved possible to identify a suitable available site. There may be potential to provide a facility as part of major new development. Notwithstanding this, any site proposed to meet this need will be considered against the site selection criteria identified in paragraph 8.18.2. A need for an additional inert waste processing site to meet the needs of the general March/Ely/Chatteris area was identified in the Deposit Plan. With the granting of a planning permission for an inert landfill and waste processing facility at Witcham Meadlands it is considered that this shortfall has been addressed.

8.18.6 The Environment Agency has identified the Storey's Bar Road site as being within the part of Fengate Industrial Estate that also lies within the floodplain of Padholme Drain.

The site and its surroundings are currently at an unacceptable risk of flooding and any planning permission for its development would be dependent upon the outcome of a Strategic Flood Risk Assessment to identify and quantify the flood risks involved. Finally it should be noted that planning permission for a major waste management facility including mixed waste processing, anaerobic digestion, in-vessel composting and inert waste processing has recently been granted at the Dickerson Site. Planning permission has also been given for a waste management site at Algore's Way, Wisbech.

8.18.7 Major waste management facilities are defined as those making a substantial contribution to the long-term management of waste in Cambridgeshire and Peterborough. By definition these are strategic facilities. In the interests of maintaining flexibility it is not considered appropriate to be prescriptive in terms of capacities of major waste management facilities, since this would be determined by the type of facility proposed. However there is an expectation that many of the preferred sites will accommodate integrated facilities and handle the types and volumes of waste arising in the Plan area currently destined for landfill.

8.18.8 This Policy does not specify the types of major waste management facility that would be appropriate on the Preferred Sites. There is a range of options that could be developed, either as a single use or in combination. The most likely types of facility include:

- Materials Recovery Facility (MRF) including mixed waste processors
- Anaerobic Digestion
- Energy from Waste (including incinerators or pyrolysis plants)
- Major Composting (including in vessel and outdoor facilities)
- Major Inert Waste Recycling

This list is not exhaustive and in the context of rapid developments in the waste industry new technologies may emerge during the Plan period. Proposals for new and emerging waste technologies will be treated on their own merits having regard to relevant policies of the Plan. It is also important to recognise that the Preferred Sites will not necessarily be suitable for all types of major waste development and some types of waste facility may be unacceptable. Appendix 6 identifies the uses the WPA considers suitable for each preferred site.

8.18.9 This policy identifies 'major new developments' as sites for major waste management facilities. Developments that would be considered as part of Policy WLP 18 will be strategic in nature, and may include new settlements or the redevelopment of large areas of previously developed land e.g. airfields. The scale and nature of waste arisings, site specific considerations and the proximity and nature of other land uses are factors which will determine the type of waste management facilities that could be provided. New settlements, in particular, may be appropriate for the development of energy from waste facilities via combined heat and power for associated industrial or residential development. The WPA will encourage the local planning authorities to implement such an approach.

8.18.10 New settlements provide a unique opportunity to plan and develop waste management facilities in an integrated way with other land uses. Larger facilities could generate combined heat and power for use locally in homes and businesses. There is, in any event, a requirement to provide facilities to manage waste generated within

the new settlement in accordance with the proximity principle and other sustainable objectives.

8.18.11 It is anticipated that proposals for development of major waste management facilities will require an Environmental Statement. (See Chapter 9 paragraphs 9.36.6 – 9.36.9).

8.18.12 In addition to the provision made by this Policy, further provision is made through policies WLP 21 to WLP 28, where waste development may be permitted subject to meeting the requirements of relevant policies and criteria.

Safeguarding Waste Management Sites

WLP 19

The WPA will seek to ensure that existing and proposed sites for major waste management facilities are protected as far as practicable from development that would prejudice a waste management use.

8.19.1 Due to the nature of waste operations and their particular requirements, for example in terms of hydrology and geology, sites require careful selection and are not easy to find. When suitable sites are identified they therefore require protection from inappropriate development that may prejudice the existing, or allocated, waste management use.

8.19.2 With regard to existing sites, this policy seeks to safeguard permitted waste management operations, which contribute to waste management in the Plan area (site boundaries shown in Appendix 7 reflect existing planning permissions). Identification under this policy should not be taken to imply that additional planning permission would be granted. Further planning proposals will be determined having regard to the policies and criteria contained in the Development Plan.

8.19.3 **Appendix 7** identifies important existing waste development sites in the Plan area that would be considered under this Policy, and have been taken into account in the Background Paper on Controlled Waste Management 1998 – 2011. **Appendix 6** identifies the Preferred Major Waste Management Facility Sites, identified in Policy WLP 18 and Policy WLP 28, which would also be considered under this Policy.

8.19.4 In the event that planning applications are received which may affect existing or proposed waste development sites, local planning authorities will be encouraged to consult the WPA (where applicable).

Household Waste Recycling Centres

WLP 20

Subject to policies and criteria contained elsewhere in the development plan, household waste recycling centres will be considered favourably in the following areas of search, and elsewhere, when this would help to achieve a network of facilities easily accessible to local communities:

St Neots area

Cambridge City area

South Cambridgeshire Area

Ely area

Suitable locations may include preferred sites identified in policy WLP 18, land identified for general industrial uses, and as part of major development proposals.

- 8.20.1 Household Waste Recycling Centres (HWRCs) offer a valuable service to the community and it is important, in order to maximise the opportunity to recycle waste, that these facilities are easily accessible to the local community. Furthermore, if the Government's recycling targets for household waste are to be achieved, then additional Household Waste Recycling Centres will be required to serve existing and new communities during the Plan period.
- 8.20.2 The WPAs are aware that there are parts of the Plan area that are already lacking access to an HWRC. This policy identifies Areas of Search, acknowledging the importance of securing facilities for these communities. Further HWRCs are also likely to be required in the future to meet the needs of a growing population. The WPAs will look to district councils, developers and landowners to support and help facilitate the provision of this important community service.
- 8.20.3 Historically many HWRCs have been located on landfill sites, with planning consents linked to the life of landfill operations. It is anticipated that in the future there will be a move towards permanent facilities, either on existing or alternative sites. However, there may still be occasion to extend existing time limited consents at landfill sites, or propose new ancillary development. In these circumstances Policy WLP 34 Ancillary Waste Development will apply.
- 8.20.4 In considering suitable locations for HWRCs accessibility by local residents will be a key factor. There may be opportunities to integrate HWRCs with major waste management facilities, as sites identified under Policy WLP 18 are developed. On land for general industrial uses, opportunities may include allocations in local plans, planning consents including a B2 use, and land already in a general industrial use. Major developments including new settlements and strategic housing and industrial developments, may also be appropriate locations for new HWRC provision. Other locations will be considered in the light of policies in the Development Plan.
- 8.20.5 Wherever possible the provision of additional HWRCs should complement other waste development proposals such as kerbside collection and bring back schemes.

Inert Waste Recycling

WLP 21

Subject to meeting policies and criteria contained elsewhere in the development plan, the WPA will consider favourably proposals for recycling inert waste and construction and demolition waste. In addition to the preferred sites identified in policies WLP 18 and WLP 28, such facilities may also be permitted:

- (A) On land identified for general industrial uses; or**
- (B) At existing waste transfer stations; or**
- (C) At existing landfill or mineral sites.**

In the case of landfill or mineral sites, the use for recycling should not prejudice approved restoration timescales and any planning permission will be time limited to the life of existing operations.

8.21.1 The Government has set out targets in Mineral Planning Guidance Note 6 (MPG6) 'Guidelines For Aggregates Provision In England', which seek to increase the production and use of secondary and recycled aggregates. Thus, MPG6 requires Cambridgeshire County Council and Peterborough City Council to make provision in their Development Plans for the production of 5 million tonnes of secondary and recycled material over the period to 2006. The principal source of such material is currently the reprocessing of demolition and construction waste.

8.21.2 The aim of recycling inert waste is to recover material that then feeds directly into the aggregate supply, which reduces the need for primary land-won aggregate mineral resources.

8.21.3 Inert waste recycling can be undertaken by static or mobile plant. They are principally open-air facilities where materials are recovered through a combination of screening and/or crushing operations. Facilities will normally include open areas for the storage of unprocessed waste materials and recovered materials. The location of permanent or semi-permanent facilities will need careful consideration given that they can lead to increased heavy goods vehicle movements. In addition noise, dust and visual intrusion of machinery and stockpiles are also important considerations.

8.21.4 On larger redevelopment sites it may be appropriate to use temporary recycling facilities e.g. mobile crushing plant so that inert waste material arising on site can be recycled, and possibly re-used, within the site. Much inert waste is mixed with other waste and therefore may not be welcomed at a permanent inert waste recycling site. Transport and sorting costs may also be prohibitive, resulting in the load being consigned to landfill with the loss of the recyclable materials. In such instances recycling facilities at existing mineral or waste disposal sites would be appropriate, in order to exploit the last opportunity that exists to recover value from waste prior to its disposal. Where they are located at mineral or landfill sites, they should normally be temporary in nature and should not prevent the progressive restoration of a site.

8.21.5 In considering location on land for general industrial, opportunities may include allocations in local plans, planning consents including a B2 use, and land already in a general industrial use.

Waste Transfer Stations

WLP 22

Subject to policies and criteria contained elsewhere in the development plan, waste transfer stations will be considered favourably where this would help achieve a network of such facilities. They will be permitted:

(A) On a preferred site identified in WLP 18 or where they form an integral part of a major waste management facility other than landfill, or

(B) On land identified for general industrial use (B2).

8.22.1 Waste Transfer Stations play an important intermediate role between the collection and final disposal of waste, and help to achieve a more sustainable waste management system.

8.22.2 Transfer facilities collect together relatively small amounts of waste until sufficient quantities are accumulated to merit transportation onwards to the relevant waste treatment or disposal option, they may also segregate waste and carry out limited, small scale recycling activities. Thus they can reduce transport requirements, particularly long distance haulage, and allow a greater proportion of the waste stream to be recycled, treated and/or recovered. In order to promote the efficient collection and recovery of waste the WPA will encourage a network of facilities across the Plan area feeding into major waste management facilities.

8.22.3 There are two types of Waste Transfer Station:

- the general operation dealing with a wide range of wastes including commercial, industrial and demolition wastes;
- the specialist waste transfer station dealing with a single type of waste normally special or hazardous categories i.e. spent chemicals or waste oils.

8.22.4 Waste transfer stations can vary considerably in size, but often have an industrial appearance. Operations in industrial estates that sort and/or bulk up putrescible or other waste that could be windblown, will normally need to be conducted entirely in enclosed buildings. In considering location on land identified for general industrial use, opportunities may include allocations in local plans, planning consents including a B2 use, and land already in a general industrial use.

Non-Inert Materials Recovery Facilities

WLP 23

Subject to policies and criteria contained elsewhere in the development plan, proposals for source separated or co-mingled materials recovery facilities including mixed waste processors will be considered favourably on a preferred site identified in policy WLP 18 and land identified for general industrial uses (B2).

8.23.1 Materials Recovery Facilities (MRFs) operate at different scales, and if strategically located in proximity to large urban populations, can contribute significantly towards reclaiming materials from a number of waste streams.

8.23.2 'Source separated' MRFs principally receive pre-sorted waste (including from kerbside collection schemes). 'Co-mingled' MRFs principally receive unsorted waste. In both cases the waste is sorted and graded to recover waste recyclables, ready to be sold for recycling or re-use, including mechanical sorting as done by mixed waste processors (MWP). Such waste recyclables generally include glass, plastics, aluminium, steel, cardboard and paper.

8.23.3 By reason of the processes carried out MRFs will be located within a building, incorporating measures to address noise, dust, odour etc. No unprocessed waste will be stored, processed or otherwise managed outside the building. Due to their industrial nature MRFs are best located on a preferred major waste management site or general industrial land where with appropriate design they can be successfully integrated with other businesses. In considering location on land identified for general industrial use, opportunities may include allocations in local plans, planning consents including a B2 use, and land already in a general industrial use. It would be inappropriate to allow such facilities in the countryside.

Anaerobic Digestion Facilities

WLP 24

Subject to policies and criteria contained elsewhere in the development plan, the WPA will consider favourably proposals for anaerobic digestion which enable the best practicable use to be made of the by-products i.e. energy recovery and soil improvers.

Such facilities will be permitted on preferred sites identified in policy WLP 18 or on land identified for general industrial uses (B2), or form an integral part of:

- (A) Sewage treatment plants; or**
- (B) Intensive livestock units; or**
- (C) Other waste management facilities; or**
- (D) A district heating scheme.**

- 8.24.1 Anaerobic digestion is a naturally occurring bacterial process and a proven treatment for organic wastes. It has been used as a method of treating waste streams like sewage sludge and animal slurry although it is a relatively new treatment for municipal wastes in the UK. It is, however, a proven technology for the treatment of such waste in Europe and the USA.
- 8.24.2 Anaerobic digestion can only be used for the treatment of organic wastes. In order to facilitate the recovery of the digestate as a soil improver, the organic fraction needs to be segregated from other materials. Segregating wastes prior to digestion would reduce the likelihood of physical and/or chemical contamination of the digestate.
- 8.24.3 Anaerobic digestion has the potential to:
- provide energy in the form of methane gas
 - sell the digestate to markets for use in either landspreading or as a soil conditioner
 - treat waste prior to landfill thus reducing the amount of waste going to landfill and to reduce its putrescible nature thereby reducing the potential for leachate and landfill gas generation
- 8.24.4 Where appropriate, this type of plant may be located and combined with other facilities such as MRFs, energy recovery schemes, sewage treatment works or intensive livestock units. Such combinations would maximise the best practical use of the by-products for energy recovery and soil improvers.
- 8.24.5 In considering location on land identified for general industrial use, opportunities may include allocations in local plans, planning consents including a B2 use, and land already in a general industrial use.

Aerobic/Composting Facilities

WLP 25 – Indoor Composting Facilities

Subject to policies and criteria contained elsewhere in the development plan, the WPA will consider favourably proposals for indoor composting. Such facilities will be permitted where they:

- (A) Form an integral part of a major waste management facility other than a landfill site; or**
- (B) Are located on land identified for general industrial uses (B2); or**
- (C) Entail the re-use of rural buildings.**

Aerobic/Composting Facilities

WLP 26 – Outdoor Composting Facilities

Subject to policies and criteria contained elsewhere in the development plan, the WPA will consider favourably proposals for outdoor composting within the countryside which do not require any new buildings or structures. Such facilities will be permitted:

- (A) As part of a waste management facility; or**
- (B) As part of a proposal for the reclamation of the site or adjoining land which makes beneficial use of the compost; or**
- (C) On despoiled land or existing areas of hardstanding such as disused airfields and farmyards.**

8.26.1 Composting (aerobic degradation) breaks down organic material in warm, well-ventilated conditions. It is a naturally occurring bacterial process and a proven waste treatment for organic material from a number of waste streams.

8.26.2 The end product of composting can be a soil improver, the quality of which is dependent upon the source and level of contamination of the waste treated. During the composting process a potentially polluting leachate is produced which needs to be controlled. Composting can also be a method of pre-treating waste prior to landfill, this has the benefits of first making the waste less putrescible and therefore potentially less polluting and second it reduces the volume and weight of waste reducing the need for landfill voidspace.

8.26.3 Since biodegradable organic matter (excluding paper and card) forms about 20% of collected household waste there is considerable potential to produce more compost. (Over 25% of total HWRC inputs are currently composted) There is also potential for composting elements of commercial and industrial wastes such as food processing wastes. Composting can help achieve a more sustainable waste management system by treating some of the most polluting elements of waste, reducing the demand for landfill and by reducing demand for natural resources of peat (in line with the principles of MPG13).

8.26.4 The introduction of the landfill tax, the Landfill Directive, and other measures could alter the relative cost of composting and anaerobic digestion compared to landfill. Pre-treatment of waste prior to landfill is likely to increase the number and size of composting operations within the Plan area.

8.26.5 Composting schemes vary widely in scale from home composting bins through to high tech in-vessel schemes where temperature and ventilation are carefully controlled to optimise the rate of degradation. Within the UK the majority of commercial operations are based on outdoor windrow methods.

8.26.6 When considering any composting proposals protecting the amenity of neighbouring residential areas will be a principal consideration, particularly in respect of odour, visual intrusion, noise and general disturbance. Owing to the industrial nature of

indoor composting schemes, they are unlikely to be acceptable as free-standing developments in the countryside unless this entails the re-use of existing rural buildings. Countryside is the area outside settlement boundaries and village envelopes defined in district local plans.

8.26.7 In considering the location of indoor composting facilities on 'land identified for general industrial use', opportunities may include allocating in local plans, planning consents including a B2 use, and land already in a general industrial use.

8.26.8 Outdoor composting schemes in the countryside are not normally expected to require built facilities. Where a proposal involves ancillary facilities such as grading and packing plants, these should normally be accommodated by means of a re-use of a rural building. In exceptional circumstances where it can be demonstrated that there is an over-riding need for an ancillary building or extension to hardstanding, and there are no other suitable areas of hardstanding or buildings available for use, planning permission may be granted. In such a case any proposal must be appropriate in scale, design and location such that it would not detract from the character of the countryside.

Energy from Waste

WLP 27

Subject to policies and criteria contained elsewhere in the development plan, proposals for energy from waste will be considered favourably where such facilities are located on preferred sites identified in policy WLP 18. Other sites will be considered favourably on land identified for general industrial uses (B2) where there is a good fit with the selection criteria as set out in this Plan.

Proposals for the thermal treatment of municipal solid waste (MSW) or industrial and commercial waste without energy recovery will not be permitted.

8.27.1 The recovery of energy from waste by incineration is a long established method of managing waste to reduce volume and weight and obtain value before final disposal. It is a proven method capable of handling the large volumes of waste reducing the volume for final disposal by about 90%. Historic plants have a poor reputation in terms of management and control of emissions however modern plants by contrast are highly regulated in terms of design, operation and permitted emissions. Incineration plants are a considerable capital investment and existing plants often require over 200,000 tonnes of waste per annum to be viable. Therefore to be a commercial option an assured long-term volume of waste is required. This is usually in the form of a long-term waste disposal contract with local disposal authorities.

8.27.2 Waste management technology is a fast developing field, and it is likely that new technologies for EfW will become technically and economically viable during the Plan period. One such technology is pyrolysis, which involves the thermal treatment of waste. Such technology has the potential to encompass energy recovery whilst also significantly reducing the volume of waste which requires disposal. It also has the advantage that the residue is virtually inert.

8.27.3 Any proposal for EfW would have to be considered in the context of an overall waste management strategy, as large-scale facilities can restrict other waste management

options. For example, any subsequent recycling scheme that reduced the volume or altered the mix of waste, thereby reducing the calorific content of the EfW feedstock, could significantly affect the efficient operation of an EfW plant.

8.27.4 Any proposals should incorporate adequate measures to minimise any adverse environmental impact on the surrounding area, and will be assessed against other policies in the Waste Local Plan. The key issues, which arise in respect of the siting of an EFW plant, are:

- emission to the atmosphere
- visual impact
- transportation considerations
- connection to a suitable electricity distribution network

Energy from waste can also relate to combined heat and power. In this instance siting would also need to consider proximity to built development, and thus potential domestic and industrial heat users. Site selection criteria are set out in paragraph 8.18.2 of this Plan. When considering location of land identified for general industrial use, opportunity may include allocations in local plans, planning consents including a B2 use, and land already in a general industrial use.

8.27.5 The Environment Agency is charged with the responsibility of preventing or minimising the effects of pollution on the environment and human health. This encompasses the monitoring and regulation of some industrial processes, i.e. those that have polluting potential. The scale of development required to make EfW commercially viable is likely to be such that the Environment Agency will regulate it.

8.27.6 It is acknowledged that for some types of waste, including special and clinical, waste incineration may be the only disposal option available and EfW would not be practical. Such proposals would be judged against Policies WLP 31 and WLP 32 rather than this policy. Notwithstanding this, it is noted that the increasingly high standards demanded for municipal incinerators may mean that in the future new units may also be able to handle special, difficult and clinical wastes.

8.27.7 Secondary fuels, such as waste solvent derived fuels or shredded tyres, can be used to power cement kilns or other suitable combustion processes whilst at the same time destroying waste. This can represent a valuable way of recovering energy, provided that emissions are tightly monitored and controlled so as to protect human health. The scale of development required to make use of secondary liquid fuels in combustion processes, commercially viable is likely to be such that it will be regulated by the Environment Agency.

Putrescible, Hazardous and Inert Landfill

WLP 28

Subject to policies and criteria contained elsewhere in the development plan, proposals for putrescible and/or inert landfill will be considered favourably at the following preferred sites:

(A) Dickersons Site at Cottenham/Landbeach (putrescible)

(B) Great Wilbraham Quarry, Great Wilbraham (inert)

(C) Eyebury Quarry, Eye (putrescible).

Other sites will be considered favourably only if it can be demonstrated that they are required as replacements for preferred sites which are no longer suitable or generally available and if there is a good fit with the selection criteria as set out in this Plan. Priority will then be given to schemes that demonstrate that there are no other practical options to achieving a beneficial afteruse for worked out mineral sites or degraded and derelict land within an acceptable timescale.

Proposals for additional hazardous waste landfill capacity will only be permitted where there is a demonstrated need. Any proposals of a regional scale must accord with an agreed regional waste strategy.

8.28.1 Landfill is currently the predominant means of waste disposal within the Plan area. It can, in some instances, represent the best practicable environmental option for waste management. At present the contribution of waste management options (other than landfill) in the management of waste arisings is limited, and is likely to remain so at least in the early part of the Plan period until viable alternative methods of treatment and safe disposal exist. Thus landfill will continue to be the principal means of waste disposal for the immediate future. Even following the promotion of waste minimisation etc and the mandatory targets of the landfill directive come into effect, there will remain unavoidable waste that will require disposal to landfill.

8.28.2 The identification of sites for landfill facilities is necessary to meet the predicted shortfall of 1.8 million cubic metres of putrescible voidspace over the Plan period. The above sites are shown in **Appendix 6**. Planning permission for 5.5 million cubic metres of putrescible voidspace has recently been granted at the Dickerson's site. A further 700,000 cubic metres of putrescible voidspace has also been recently granted at Eyebury Quarry.

8.28.3 In addition to the other environmental constraints set out in this Plan, there is a need to engineer putrescible landfill sites to contain and control landfill gas and leachate. This has led to fewer larger putrescible landfill sites in recent years. Thus it is appropriate to consider putrescible landfill sites as strategic, rather than local, waste disposal facilities.

8.28.4 Inert sites by contrast do not have to meet the same engineering specifications and can therefore be smaller and located closer to the point of arisings. It is acknowledged that the Landfill Directive will require inert landfills to meet higher engineering standards in future including lining of sites, however these changes will still be less onerous than the engineering specifications for putrescible sites. Given that inert waste is dense material reducing the distance over which this waste has to be transported is fully in accordance with the proximity principle. Whilst there does appear to be sufficient inert landfill space during the Plan period, it is not evenly distributed in the Plan area. In particular, there is a deficit of inert landfill space been identified in the South Cambridgeshire area and additional inert landfill space has been identified to meet this shortfall.

- 8.28.5 Sites identified in Policy WLP 28 have been selected under the same criteria as those factors listed under Policy WLP 18, paragraph 8.18.2. With regard to Great Wilbraham Quarry, a routeing agreement will be sought to minimise the impact of associated traffic movements. In particular such an agreement should prevent lorry movements through Great Wilbraham.
- 8.28.6 Where appropriate, the WPA will give consideration to the establishment of liaison groups, which would normally include representatives from the community, the site owner/operator, the Environment Agency, and the WPA.
- 8.28.7 With the introduction of the Landfill Directive certain current practises including the co-disposal of hazardous waste (including special and difficult waste) will no longer be allowed. This is likely to result in the need to develop dedicated cells within existing landfill sites, for the disposal of these wastes. In many cases this waste would currently be disposed of at existing engineered landfill sites. Accommodating the implications of the Landfill Directive is likely to require amendments to approved working plans. Alternatively it is possible that some sites may become specialist dedicated hazardous waste sites. In view of the relatively small volumes of this material any proposals to develop a hazardous waste landfill site are likely to serve a greater area than the Plan area. Any proposals that are of a regional nature would involve the importation of waste into the Plan area. Thus need for such proposals will have to be demonstrated, as well as accordance with an agreed Regional Waste Strategy. In the absence of an agreed Strategy (which is still in the process of being prepared) the WPA will determine what is acceptable under the principle of regional self-sufficiency and the proximity principle, having regard to Government advice in PPG10 and elsewhere.

Landraising

WLP 29

Landraising will only be permitted in exceptional circumstances where there is a need for a waste disposal facility to accommodate waste arising within the Plan area that cannot be accommodated by any other means or where it forms an essential part of site restoration. Proposals will be considered against other policies and criteria contained elsewhere in the development plan.

- 8.29.1 With regard to landraising, Structure Plan Policy SP11/13 makes it clear that this will only be considered in exceptional circumstances, and then only where such landforms would be appropriate in relation to the adjoining landscape and when a beneficial after-use can be secured.
- 8.29.2 The majority of the Plan area is relatively flat, low lying, open countryside. For this reason landraising is not considered to be generally appropriate. In considering the need for waste management facilities within the Plan area, including landfill, it is considered that adequate provision has been made, and there is no overriding need for additional voidspace that would justify landraising.
- 8.29.3 Much of the Plan area is considered by the Environment Agency to be at risk from flooding. Changes in land levels within areas at risk from flooding can reduce floodwater capacity, which in turn puts other areas at greater risk. Changes in levels

beyond areas directly at risk from flooding can adversely affect drainage regimes and increase flood risk in other areas. In considering any proposals which involves landraising due regard will be had to Policy WLP 16.

- 8.29.4 It is not intended to apply this policy to landfill schemes where an element of doming is required to allow for settlement and achieve drainage contours in line with current best waste management practices.

Nuclear Waste

WLP 30

Proposals for the treatment, storage or disposal of intermediate and high level radioactive and nuclear waste will not be permitted. The WPA will seek to ensure that the reprocessing or disposal of such waste takes place at appropriate national facilities.

- 8.30.1 There is considerable uncertainty about the degree of health, safety and pollution risks associated with nuclear waste disposal sites, and about the ability of current technology to eliminate risks. The relatively soft, sedimentary nature of the geology of the Plan area is not considered suitable to allow the construction of appropriate structures for the long term storage and disposal of intermediate and high level radioactive wastes.
- 8.30.2 Nuclear and radioactive waste is covered by the Radioactive Substances Act 1993. Research establishments and hospitals usually produce low-level radioactive waste, and the Environment Agency regulates the disposal of waste from these premises.
- 8.30.3 It is Government policy to provide for the initial storage of high level nuclear wastes and for the early disposal of low and intermediate level nuclear wastes. 'Nuclear Waste' in this context may be defined as radioactive waste arising from the generation of electricity and from the defence industries. Adequate provision has been made at suitable sites outside the Plan area. This policy does not apply to low level radioactive wastes such as that produced in hospitals, which fall under the special waste regulations. Proposals for the treatment and disposal of this waste would be judged against policies WLP 28 and 31.

Hazardous Waste Facilities

WLP 31

Subject to policies and criteria contained elsewhere in the development plan, proposals for the handling, storage, treatment, processing, or incineration of hazardous waste will be permitted:

- (A) Where they form an integral part of an existing major waste management site (excluding landfill) or a preferred site for a major waste management facility identified in policy WLP 18; or**

(B) On land identified for general industrial uses (B2).

Proposals will only be permitted where there is a demonstrated need. Any proposals of a regional scale must accord with an agreed regional waste strategy.

8.31.1 Due to the nature of the difficult or special wastes and the need to protect the public from any harmful effects associated with noise, smell, fumes, dust, emphasis needs to be placed on the safe treatment of special waste, and reducing the amount that requires disposal.

8.31.2 Special waste defined as being hazardous or dangerous is covered by the Special Waste Regulations 1996. Special Waste includes low-level radioactive wastes including those arising from hospitals and research establishments. It is subject to strict controls in terms of transport, treatment and disposals and such activities are regulated by the Environment Agency.

8.31.3 The Environment Agency also monitors and regulates industrial processes, such as incineration, which has polluting potential through the emissions that are produced.

8.31.4 It is unlikely, given the small volumes of difficult and special waste arising, and the high cost of specialist facilities and economies of scale, that any proposals to serve the Plan area alone would be viable. Any proposals that are of a regional nature would involve the importation of waste into the Plan area. Thus need for such proposals would have to be demonstrated, as well as accordance with an agreed Regional Waste Strategy. In the absence of an agreed Strategy (which is still in the process of being prepared) the WPA will determine what is acceptable under the principle of regional self-sufficiency and the proximity principle, having regard to Government advice in PPG10 and elsewhere.

8.31.5 This policy does not address disposal of special and difficult waste by landfill. Landfill is considered under Policy WLP 28.

Clinical Waste Facilities

WLP 32

Subject to policies and criteria contained elsewhere in the development plan, proposals for the handling, storage, treatment, processing, or incineration of clinical waste will be permitted:

(A) Where they form an integral part of an existing major waste management site (excluding landfill) or a preferred site for a major waste management facility identified in policy WLP 18

(B) Within a medical or research institution which is generating the waste; or

(C) On land identified for general industrial uses (B2).

Proposals will only be permitted where there is a demonstrated need. Any proposals of a regional scale must accord with an agreed regional waste strategy.

- 8.32.1 Clinical waste includes waste from the healthcare sector and some similar waste found in the household waste stream. Segregation of clinical waste is necessary to ensure that the BPEO is achieved for this particular element of the waste stream.
- 8.32.2 With regard to most healthcare clinical waste, the primary waste management route is incineration without energy recovery, carried out to the highest operating standards. Due to the high cost of new facilities or the upgrading of existing facilities it is likely that there will be fewer clinical waste facilities in the foreseeable future. It is also unlikely given the small volumes of clinical waste arising, and the high cost of specialist facilities and economies of scale, that any new proposals to serve the Plan area alone would be viable. Any proposals that are of a regional nature would involve the importation of waste into the Plan area. Thus need for such proposals would have to be demonstrated, as well as accordance with an agreed Regional Waste Strategy. In the absence of an agreed Strategy (which is still in the process of being prepared) the WPA will determine what is acceptable under the principles of regional self-sufficiency and the proximity principle, having regard to Government advice in PPG 10 and elsewhere.
- 8.32.3 The major clinical waste incinerator in Cambridgeshire is at Addenbrooke's Hospital in Cambridge. This incinerator and emissions are regulated by Cambridge City Council as the Environmental Health Authority, and the Environment Agency monitor the storage of waste prior to incineration, and ash disposal afterwards, under the waste licensing regime.
- 8.32.4 This policy does not address disposal of clinical waste by landfill. Landfill is considered under Policy WLP 28.

Sewage and Sewage Sludge

WLP 33

Subject to policies and criteria contained elsewhere in the development plan, proposals for new or extended sewage treatment works will be permitted where there is a demonstrated need for additional or enhanced sewage treatment capacity and may be located in rural areas.

Provision for recycling of sludge to produce beneficial end products including proposals for the co-treatment of sludge with other wastes will be sought where appropriate.

- 8.33.1 The ban on dumping of waste at sea, required by the Urban Waste Water Treatment Directive, took effect in 1998, this has had a significant impact on the way we can dispose of sewage. Continuing population growth and higher standards of sewage treatment will increase demands on other waste management methods, as there will be an increase in the quantities of sludge to be disposed of. This may be through landfill or on land. It is recognised that there is a limit to the quantity of sludge that can be managed in this way.

- 8.33.2 The above is likely to lead to an increase in sewage and sewage sludge treatment works. Due to the nature of these facilities they are frequently located in the countryside, away from residential areas. Government advice in Circular 17/91 indicates that if there is a weighty national or local need for such facilities this may be sufficient to outweigh important planning objections which might otherwise lead to refusal of the development. In the event there are no alternative locations the applicant should enter into early discussions with the WPA in order to consider how to mitigate the impact of the development. Including odour control, access arrangements, visual appearance and landscaping on site storage of any sewage sludge products.
- 8.33.3 The practice of recycling to land (landspreading) needs careful monitoring and control over applications of sludge products to ensure heavy metals, pathogens and nitrogen are within acceptable levels. The Environment Agency has the duty to enforce the Sludge (Use in Agriculture) Regulations 1989. It is through these Regulations that the loadings to soils of specific heavy metals are monitored.
- 8.33.4 When satisfactorily monitored, landspreading represents a sustainable and economical way of recovering value from a variety of organic wastes. These usually comprise agricultural wastes such as manure, slurry and sewage sludge. It can also include food processing wastes, paper manufacturing wastes and non-food waste such as lime and slag.
- 8.33.5 The potential for recycling sewage sludge to land is however limited because of the environmental sensitivity of the East of England Region. Other options for the disposal of sewage and sewage sludge include incineration, pyrolysis, composting with other wastes, anaerobic digestion, or landscaping treatment of derelict or damaged land.
- 8.33.6 Current practices of sewage sludge treatment are being reviewed and recently announced Government policy will require the pre-treatment of all sludge before its use in agriculture. MAFF produced Codes of Good Agricultural Practice for the Protection of Water, Air and Soil, which include guidance on sewage and sewage sludge applications. Guidance can also be found in the Ministry's Code of Practice for Agricultural Use of Sewage Sludge, and the ADAS Safe Sludge Matrix, which provides guidelines on the safe application of sewage sludge to farmland.

Ancillary Waste Development

WLP 34

Proposals for ancillary waste development associated with other waste management facilities or a mineral site will be considered against policies and criteria contained elsewhere in the development plan. If permission is granted a condition will be attached limiting the life of the ancillary development to the life of existing operations

8.34.1 Ancillary development associated with waste disposal facilities may include:

- buildings, plant and equipment required for the recycling, storage or the recovery of resources from waste

- household waste recycling facilities provided at household waste disposal sites for the receipt of household waste delivered by the public
- buildings, plant and equipment required for the administration or servicing of a waste facility
- storage of waste skips and containers at waste disposal facilities in suitable areas set aside for that purpose
- secondary and substitute fuels

Metal Recycling Facilities

WLP 35

Subject to policies and criteria contained elsewhere in the development plan, proposals for the handling, processing, transfer or storage of scrap vehicles or other scrap metal will only be permitted where they form an integral part of a major waste management facility on a site identified in policy WLP 18; or on land identified for general industrial uses (B2).

- 8.35.1 Scrapyards have an important role to play in achieving a sustainable system of waste management. Scrap metals represent the largest volumes of industrial material to be recycled, and currently 75% of waste is re-used or recovered, largely through re-use of parts or recycling of the metal scrap, the rest is landfilled.
- 8.35.2 The main planning issues raised by scrapyards concern their visual impact pollution risks, noise, dust and smell, and vehicular movements.
- 8.35.3 With the introduction of the End of Life Vehicle Directive into UK law in April 2002 tighter environmental standards for scrapping end of life vehicles will be required. One of the immediate implications of this will be a need for additional infrastructure including buildings and additional drained hardstandings on existing sites to accommodate treatment facilities for the containment and removal of fuels, oils, antifreeze, major plastic components and tyres. Recovery of scrap metals can involve fragmentiser plants that utilise a hammer mill to break bulky scrap into smaller pieces which is then sorted into two streams; one metal rich and the other containing plastics, fabric etc. An alternative method may be thermal treatment whereby the scrap is heated, burning off plastics, fabric etc. to leave the recyclable metals. Vehicle dismantling facilities may also strip vehicles down, selling parts on or sending them on to be reconditioned. The combination of these methods, and the design of vehicles to enable easier dismantling, as required by the End of Life Vehicle Directive, mean that metal recycling is likely to become more economically attractive in the future, making a valuable contribution to sustainable waste management.

Mining of Waste

WLP 36

The mining or excavation of waste will only be considered favourably where it is demonstrated that:

- (A) The site is posing an unacceptable risk to human health or safety; or**
- (B) The site is posing an unacceptable risk to the environment; or**
- (C) Removal is required to facilitate a major infrastructure project.**

8.36.1 The mining of waste involves the recovery of materials from an existing landfill site by extracting and processing the deposited waste. Excavation of waste also involves the extraction of waste, but does not encompass the recovery of materials.

8.36.2 The practical value of such operations is doubtful and is often carried out in order to create more capacity from within the landfill site.

8.36.3 Mining or excavation of putrescible and/or inert waste can cause significant amenity problems and particularly in the case of putrescible waste, can also cause the rapid release of leachate, landfill gas, and odours. It can also delay the restoration of former mineral workings and result in contamination of materials. Thus operations need to be strictly controlled, and will only be considered in the exceptional circumstances as outlined in Policy WLP 36.

8.36.4 The removal of waste materials, such as mineral working deposits, deposits of PFA, furnace ash, clinker metallic slags etc are by virtue of the Minerals Act 1981 classed minerals, and working of these materials is subject to the criteria and policies contained in the Cambridgeshire (Aggregates) Minerals Local Plan.