









Bradford Waste Management DPD

Sustainability Appraisal Report Annex C

Preferred Option Policy Assessment Matrices

Prepared for:

Bradford Metropolitan District Council

Prepared by: ENVIRON Exeter, UK

Date: **December 2010**

Project or Issue Number: **64C11620**

Contract/Proposal No: 64C11620

Issue:

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Date: December 2010

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Version	Version Control Record									
Issue	Description of Status	Date	Reviewer Initials	Authors Initials						
1	Draft to Client	12/11/10	JC	EJ						
2	FINAL Draft to Client	14/12/10	JC	EJ						

Key		Significant negative impact	-	Minor negative impact	+	Minor positive impact	++	Significant positive impact	0	Neutral	?	Uncertain
SA Objectives shown in grey are considered to be not applicable to the policy appraised.												

Please note that cumulative effects have been addressed in the main SA report.

Policy Assessments

Preferred Policy	W1: Vision and Waste Object	ctives				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	The policy commits to self sufficiency, waste reduction, protecting the environment and appropriate expansions to new facilities for waste. This should lead to a reduction of the amount of waste that will require treatment.
SA2: Minimise the growth in waste and ncrease the amount of waste which is re-used, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	++	++	++	The policy supports delivery of adequate and appropriate waste facilities and attempts to move Bradford District up the waste hierarchy. It also includes an objective to plan for the use of waste as a raw material and energy source. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.

Preferred Policy	referred Policy W1: Vision and Waste Objectives										
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement					
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector?	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	Measures including self sufficiency, using waste as an energy source, movement up the waste hierarchy and the proximity principle are embedded in the policy and will support climate mitigation, energy efficiency and to a degree adaptation. However, the policy does not include explicit reference to adaptation to climate change or reducing CO ² emissions from waste management activities. Enhancement measures Include explicit reference to how measures of self sufficiency, promotion of waste hierarchy and the proximately principle which are embedded in the policy, also support climate mitigation and to a degree adaptation.					

Preferred Policy	W1: Vision and Waste Object	ctives				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.	++	++	++	The majority of waste is transported by road to distant landfill sites in Wakefield and Skipton. Measures to increase self sufficiency should help reduce levels of diffuse air pollution generated from the movement of this waste. Local pollution and nuisance in Bradford associated with transport and movement of waste is most effectively tackled by reducing total amount of waste. Waste reduction is included in the vision and objectives. There is an objective included in the policy which commits to ensuring facilities are developed in a manner which protects the environment, Handling waste close to source should promote the use of previously used land near to urban locations rather than remote Greenfield sites. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.

Preferred Policy	W1: Vision and Waste Object	ctives				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats?	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates. Please note that an Appropriate Assessment Screening Report has been produced. However, this has not yet been approved by Natural England.	?	?	?	The fulfilment of the policy objectives should help avoid impacts on designated sites or biodiversity more generally. Responsible waste management, self sufficiency, and the proximity principle should all be of benefit in reducing future additional impact. The policy does not include explicit reference to biodiversity but this may be too detailed for waste management objectives. The policy does refer to protecting environmental assets. The HRA screening report does not conclude whether there will be likely significant effects on the European Designated Sites and the screening report has not yet been agreed by Natural England. Mitigation measures The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed. The policy could support improvement of the environment by including the concept of enhancement within the following objective "To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects and enhances the District's environmental assets and safeguards human health"
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	+	+	+	The vision and objectives are unlikely to directly deliver restoration or achievement of BAP targets. However, responsible waste management, self sufficiency, and proximity principle should all be of benefit in reducing future additional impact. The policy does not include explicit reference to biodiversity but this may be too detailed for waste management objectives. The policy does refer to protecting environmental assets. Enhancement measures The policy could support improvement of the environment by including the concept of enhancement within the following objective "To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects and enhances the District's environmental assets and safeguards human health"

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SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA7: To maintain, restore and enhance the character, value and diversity of natural and man-made landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	+	+	+	Measures to for responsible waste management, self sufficiency and locating facilities close to source should help guide develop away from rural sensitive landscapes both inside and outside the district. The policy doesn't refer to landscape protection but does refer to protecting environmental assets. Enhancement measures The policy could support improvement of the environment by including the concept of enhancement within the following objective "To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects and enhances the District's environmental assets and safeguards human health"
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The policy should help to reduce the distance travelled by waste as it aims to reduce transport of waste and promote the location of facilities near to source. The policy does not address allowing residents to segregate waste, although this is probably too detailed for the vision and objectives.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	++	++	++	The policy will be positive with regards to the aim to reduce transport of waste and promotion of the location of facilities near to source. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.
SA10: Encourage a modal shift away from road freight.	• Include actions that would encourage a shift from road freight to rail freight?	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	Modal shift not addressed in the policy. The policy will not work against modal shift but will not encourage it so has been scored as neutral. Enhancement measures Include commitment to modal shift in vision and objectives.

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SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	The policy supports protection of the environment and location of facilities near to source which should help bring forward applications for redundant sites close to settlements. This should increase use of previously developed land. The protection of the built environment is not specifically referred to but the policy does discuss protecting environmental assets. Enhancement measures The policy could support improvement of the environment by including the concept of enhancement within the following objective "To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects and enhances the District's environmental assets and safeguards human health"
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	+	+	+	The drivers of policy should be positive through trying to reduce the range of impacts associated with waste. Enhancement measures The policy could support improvement of the environment by including the concept of enhancement within the following objective "To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects and enhances the District's environmental assets and safeguards human health
SA13: Improve the quality and range of services available within communities and connections to wider networks.	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	++	++	++	The policy seeks to improve the current situation in regards to access to waste facilities whilst planning for the waste needs of the Bradford community. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.
SA14: Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	++	++	++	The main drivers of policy aim to tackle this issue through increasing self sufficiency. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	+	+	+	It is unlikely that public open space, cultural, leisure and recreation land will be required for development as there is a large supply of previously developed land available for waste management facilities. In addition, the policy does refer to protecting environmental assets.

Preferred Policy	W1: Vision and Waste Object	ctives				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	+	+	+	The integration of waste facilities within communities whilst safeguarding human health will be reliant on careful implementation. However, the policy does set out that human health should be protected and this is all that a set of objectives can realistically achieve.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	++	++	++	The policy aims to change the way that waste is managed in the district. By focusing on locating for the management of waste as close as possible to place of production, Bradford District should see a corresponding increase in people employed in the waste sector. As the majority of waste is currently transported out of the district there is little opportunity for this at present. Focusing on issues such as using waste for energy and moving away from landfill increases the chances that these jobs will be more skilled than in the past. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.	++	++	++	The vision and objectives aim to achieve this through the delivery of the plan. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.

Preferred Policy	Preferred Policy W1: Vision and Waste Objectives							
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium Long term	Explanation of assessment and mitigation / enhancement			

Summary of the assessment

This is a positive visioning type policy that commits the plan to self sufficiency, waste reduction, the proximity principle, protecting the environment and appropriate expansions to new facilities. Significant positive impacts have been identified in relation to several SA objectives. These include objectives to minimise the growth in waste, increase the amount which is reused, recycled and recovered, the potential to safeguard and improve air, water and soil, reducing the number of people affected by noise and dust, reducing the transport of waste and adverse effects of this on communities, improving accessibility to waste infrastructure, supporting the development of local jobs in this sector and importantly ensuring adequate waste management capacity.

Minor positive impacts are identified related to the reduction of greenhouse gas emissions caused by waste management, avoiding impacts on protected landscapes, historic assets, ensuring that open space, cultural, leisure and recreation opportunities are not affected by waste management and maximising use of previously developed land.

There are some uncertainties of impacts against objectives which seek to drive modal shift away from road transport, as well as specific appraisal questions which aim to promote biodiversity, Natura 2000 sites and BAP targets, climate change adaptation and also enhance (as well as protect) the environment. Suggestions to further enhance the policy to address these uncertainties have been included below.

Preferred Policy W1 will have no significant negative impacts or minor negative impacts.

Mitigation measures

The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.

Amend policy so bullet three reads "To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects and enhances the District's environmental assets and safeguards human health"

Enhancement measures

Include explicit reference to how measures of self sufficiency, promotion of waste hierarchy and the proximately principle which are embedded in the policy also support climate mitigation and to a degree adaptation. Include commitment to modal shift in vision and objectives.

Preferred Policy W2: 0	Cross Boundary Working					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	There is a commitment to using cross boundary working and sharing information to reduce arisings from all waste streams. Communication should also help with identification and collaborative use of the BAT (best available techniques) as well as identifying the most appropriate sites for using or generating renewable energy. Details on the construction of new waste facilities are not covered by the policy but may result from cross boundary consultation on waste planning applications.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	+	+	+	Cross boundary working could help support development of facilities to recycle waste and development of local markets for waste derived products. Through trade allowances with other authorities, the council is also more likely to meet its quota under LATS. Options for treatment facilities could potentially be enhanced through working with neighbouring authorities. Although the policy has the potential to help achieve the SA objectives, the exact details of the collaboration will not be known until later so the policy cannot be scored as significantly positive.

Preferred Policy W2:	Cross Boundary Working					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	Reducing impacts on and of climate change is not a stated aim or objective of the policy although cross boundary working should help to ensure waste management is more sustainable through information sharing, research on technologies and ensuring collaboration is undertaken on the policy direction in the sub region. Although the policy has the potential to help achieve the SA objectives, the exact details of the collaboration will not be known until later so the policy cannot be scored as significantly positive.

Preferred Policy W2:	Cross Boundary Working					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.

Preferred Policy W2:	Cross Boundary Working					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising llkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0	0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.

Preferred Policy W2:	Cross Boundary Working					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	There are currently exports and imports of waste from surrounding areas to/from Bradford and this is always likely to remain the case. Collaborative working, as promoted by the policy, should help reduce these waste movements to those that are necessary and represent the best management of waste. The policy will not help achieve the second appraisal question (however, this question is not within the remit of the policy).
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	As highlighted above, collaborative working should help reduce waste movements to those that are necessary and represent the best management of waste. This should reduce overall traffic miles. However, the policy cannot be scored as significantly positive because it is not known whether this will reduce traffic miles that affect sensitive areas.
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	?	?	?	Cross boundary working provides a good opportunity to deliver on modal shift. However, this is not stated so the policy has been scored as uncertain. Mitigation measures Include pursuit of modal shift as an aim of cross boundary working as this cannot be achieved in isolation from neighbouring authorities.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	0	0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.

Preferred Policy W2:	Preferred Policy W2: Cross Boundary Working								
SA Objectives	Wil	oraisal Questions. I the selection of the	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA12: Avoid, protect and enhance historic assets.		Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites?	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.		
	•	Preserve, manage or enhance the historic environment character and opportunity areas?							
SA13: Improve the quality and range of services available within communities and connections to wider networks.	-	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.		
SA14: Ensure local communities take more responsibility for their own waste	-	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	+	+	+	As highlighted above, collaborative working should help reduce waste movements to those that are necessary and represent the best management of waste. However, Bradford's own waste management policy will have the most effect on this objective.		
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	•	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	0	0	The policy will have no effect on this objective. Bradford's own waste management policies (rather than any collaboration with others on sub regional policies, for example) will be responsible for achievement of this SA objective.		

Preferred Policy W2:	Cross Boundary Working					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	?	?	?	By working collaboratively with neighbouring local authorities, sharing information and utilising import/ export possibilities the district council opens up more options for waste management as well as potentially better mitigation methodologies. One potential outcome could be the focusing of waste management facilities in one location providing efficiencies but this could also have a potentially larger effect on certain communities. However, this is an uncertain effect. However, other policies in the plan should help mitigate against this impact. Mitigation measures The policy does not require a specific mitigation measure as other development control policies in the plan should mitigate the effects on communities.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	+	+	+	This policy may increase the number of waste sites within the district and/or potentially within neighbouring areas. It is assumed that there would be at least a minor increase in the number of jobs in the sector in the district, unless the policy runs contrary to the main principles of self sufficiency that are in the plan. The policy has not been assessed as significantly positive because the extent and skill level of new jobs generated cannot be predicted.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.	++	++	++	By working collaboratively with neighbouring local authorities, sharing information and utilising import/ export possibilities the district council opens up more options for waste management and delivering on required capacity.

Preferred Policy W2:	Preferred Policy W2: Cross Boundary Working						
	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term Explanation of assessment and mitigation / enhancement		

Summary of the assessment

The policy provides an approach which seeks to minimise waste, plan for local management and follow a criteria based approach to identification of sites. Though this approach the policy does attempt to tackle some of the key waste planning issues highlighted in the SA scoping report.

Significant positive effects have been identified in relation to minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, improving the quality and range of services available within communities and connections to wider networks, ensuring local communities take more responsibility for their own waste, and ensuring the provision of adequate waste management capacity. Minor positive impacts were identified in relation to ensuring the prudent and efficient use of energy and natural resources, reducing the District's impact on climate change, safeguarding air, water and soil resources and reducing the number of people affected by noise and dust from waste management sites, achieving the proximity principle, reducing nuisance caused to communities by waste transport and supporting employment in the waste industry for local people.

No negative effects were identified but neutral impacts were noted in relation to landscape, efficient use of land, historic assets, open space and recreation opportunities, health and quality of life. For these impacts it was considered that the effects are tested as part of the site assessments. Therefore, the scoring here has been listed as neutral. An uncertain effect has been noted in relation to modal shift.

Mitigation measures

Include pursuit of modal shift as an aim of cross boundary working as this cannot be achieved in isolation from neighbouring authorities.

Enhancement measures

No enhancement measures.

Preferred Policy W3: I	referred Policy W3: Bradford's Approach to Future Waste Arisings									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	The policy demonstrates the difficult balance that needs to be struck between the requirement to predict and provide for waste management facilities and the desire in the strategy for demand management to reduce total future waste arisings. The strategy seeks to reduce the total amount of waste requiring treatment but this requires reversing the current trend. Forecasts are for an overall reduction in waste arising of 81,590 across the district between 2008 and 2026, a 5% improvement (See table 4, p17 of the Waste DPD). Much greater gains are expected through re-use and recycling, both which should reduce the degree of residual treatment required. Re-use of construction and demolition waste (in-situ) is strongly promoted in this policy and one can assume this will be applied in the construction of new waste management. The policy has not been scored as significantly positive as it will not positively answer all the appraisal questions.				
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	++	++	++	The policy supports the development of Bradford's own waste management facilities, moving away from the unsustainable current situation of a net exporter. The focus on providing adequate facilities should help the district meet its recovery and recycling targets and meet its quota under the LATS and well as encouraging use and markets for products. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.				

Preferred Policy W3:	Preferred Policy W3: Bradford's Approach to Future Waste Arisings									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	Transport of CDEW and Agricultural Waste is first to be avoided through promotion of treatment in situ. This should be significantly positive as this is the largest waste stream in the District. Re-use or recycling should have a positive impact on climate emissions and provides a number of efficiencies including reduction in use of new resources, reduction in production and transport costs. Forecasts in reductions of total waste (although minor) should support carbon reduction commitments. The policy also encourages energy production from waste (which can be considered a renewable form of energy). The policy has not been scored as significantly positive as it will not help the district adapt to climate change. However, this policy is perhaps not the correct location for action of this type.				

Preferred Policy W3:	Bradford's Approach to Futu	ure Waste Arisings				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	The push for self sufficiency and locating facilities close to source should reduce pollution associated with lengthy HGV journeys. Levels of development on previously developed land have been tested as part of the site assessments and the conclusions for each individual site can be seen at the end of this document.

Preferred Policy W3: Bradford's Approach to Future Waste Arisings								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising llkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0/?	0/?	0/?	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will lead to direct or indirect adverse effects on designated sites. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral. There is an uncertainty related to the effects of the sites on Natura 2000 sites. At the issues and options stage of the assessment certain sites were highlighted as having a potential impact on Natura 2000 sites. None of these sites have been chosen as preferred sites. However, the HRA screening report does not conclude whether there will be likely significant effects on the European Designated Sites and the screening report has not yet been agreed by Natural England. Mitigation measures The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.		
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	As additional waste management facilities are built in the District, there is the potential for sites to help reach BAP targets and ensure biodiversity is a priority in site restoration. However, this is best addressed in other policies in the document so this has been scored as neutral for this policy.		
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will lead to effects on landscape. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments. Therefore, the scoring here has been listed as neutral.		

Preferred Policy W3: I	Bradford's Approach to Fut	ure Waste Arisings				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The promotion of policies to support the development of waste management facilities in Bradford should significantly reduce the burden Bradford places on other areas and net export total of 270,260 tonnes. This will reduce mileage travelled by waste. The policy will not help encourage residents to segregate waste. However, this is best addressed in other policies in the document.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	In situ waste reuse and recovery, rather than transport to landfill, should help reduce traffic flows. Effects on local changes to traffic flows from new and expanded waste facilities has been assessed through the site assessments.
SA10: Encourage a modal shift away from road freight.	• Include actions that would encourage a shift from road freight to rail freight?	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	As additional waste management facilities are built in the District, there is the potential to encourage alternative transport modes. However, this is best addressed in other policies in the document so this has been scored as neutral for this policy.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will impact upon the built environment. New sites can also help to increase the amount of previously developed land that is used for waste management. However, the effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral.

Preferred Policy W3:	Bradford's Approach to Fut	ure Waste Arisings				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will impact upon heritage. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral.
SA13: Improve the quality and range of services available within communities and connections to wider networks.	 Improve the accessibility of waste management and treatment services to centres of population? 	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	++	++	++	Appropriate waste management facilities within the District will be sought for MSW. This together with the site location criteria should result in improved accessibility.
SA14: Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	++	++	++	The policy aims to ensure that adequate treatment facilities are available to ensure Bradford takes responsibility for its own waste.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will impact upon open space and recreation areas. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral.

Preferred Policy W3:	Bradford's Approach to Fut	ure Waste Arisings				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	0	0	0	There is the potential to increase the impact on people affected by waste management facilities due to requirement to provide new facilities close to source. The outcome on both depends on site planning through criteria based site location and implementation of development management policies. This has been tested through the assessment of development management policies so has been scored as neutral here.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	++	++	++	Accommodating for waste and providing a variety of appropriate waste management facilities higher up the waste hierarchy should positively contribute to this objective.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.		++	++	This policy should achieve the SA objectives in full so has been scored as significantly positive.

Preferred Policy W3: I	referred Policy W3: Bradford's Approach to Future Waste Arisings					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term Explanation of assessment and mitigation / enhancement	

Summary of the assessment

The policy supports the vision and objectives in relation to self sufficiency, proximity principle and moving up the waste hierarchy. As a result the policy has many associated benefits in respect to economic, social and environmental objectives. In particular, potential economic gains should be particularly positive.

Significant positive impacts are identified for minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, improving the accessibility of waste management and treatment services, reducing the amount of waste that is treated outside of the District, ensuring the provision of adequate waste management capacity as well as supporting employment in the waste industry for local people. Minor positive impacts are noted in relation to the potential to mitigate against climate change, reducing the amount of pollution and nuisance caused by waste management and transport and increasing proximity of waste management infrastructure to current and future centres of population.

Neutral impacts were identified against objectives to conserve, enhance designated sites, species and habitats, maintain and restore landscapes, improve the quality of the built environment, protect and enhance historic assets and make efficient use of land, avoid impacts on open space and recreation opportunities and reducing the impact of the waste industry on people's quality of life. It is considered that the impacts on these be tested as part of the site assessment criteria and development control policies. Encouraging a modal shift away from road freight was also considered as neutral. This is best addressed in other policies in the document so this has been scored as neutral for this policy.

No negative effects have been identified for this policy. An uncertain effect was recorded in relation to effects on Natura 2000 sites.

Mitigation measures

The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.

Enhancement measures

No enhancement measures.

Preferred Policy W4:	Waste Management Sites in	Bradford District				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	The policy follows the thrust of Policy W1 and Policy W2 in providing an approach which seeks to minimise waste and plan for local management both of which should reduce energy use and should have other environmental benefits include reduction in emissions, reducing water use etc. However, the policy seems to contain contradictions as despite the commitment to minimising the production of waste it states "to manage Bradford's forecast increases in waste arisings" sites will be needed. This should be changed to "To effectively plan and manage Bradford's forecast in waste arisings that will need to be dealt with within the district," Enhancement measures For the sake of clarity, change the beginning of the policy to "To effectively plan and manage Bradford's forecast in waste arisings that will need to be dealt with within the district,"
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	++	++	++	This policy should help plan for and accommodate waste management sites and meet the recovery and recycling targets. The promotion of the re-use and recycling options of the waste hierarchy should potentially help encourage the use of and markets for waste derived products

Preferred Policy W4:	eferred Policy W4: Waste Management Sites in Bradford District								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector?	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	The reduction, re-use or recycling aspects of the waste hierarchy should have a positive impact on climate emissions and provides a number of efficiencies including reduction in use of new resources, reduction in production and transport costs. A commitment to accommodating waste arisings close to source will contribute to reducing GHG emissions from waste transport. The policy has not been scored as significantly positive as it will not help the district adapt to climate change. However, this policy is perhaps not the correct location for action of this type.			

Preferred Policy W4: Waste Management Sites in Bradford District								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	The push for self sufficiency and locating facilities close to source should reduce pollution associated with lengthy HGV journeys. Levels of development on previously developed land have been tested as part of the site assessments.		

Preferred Policy W4:	Waste Management Sites in	Bradford District				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0/?	0/?	0/?	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will lead to direct or indirect adverse effects on designated sites. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral. There is an uncertainty related to the effects of the sites on Natura 2000 sites. At the issues and options stage of the assessment certain sites were highlighted as having a potential impact on Natura 2000 sites. None of these sites have been chosen as preferred sites. However, the HRA screening report does not conclude whether there will be likely significant effects on the European Designated Sites and the screening report has not yet been agreed by Natural England. Mitigation measures The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	As additional waste management facilities are built in the District, there is the potential for sites to help reach BAP targets and ensure biodiversity is a priority in site restoration. However, this is best addressed in other policies in the document so this has been scored as neutral for this policy.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will lead to effects on landscape. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral.

Preferred Policy W4: \	Waste Management Sites in	Bradford District				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The promotion of policies to support the development of waste management facilities in Bradford should significantly reduce the burden Bradford places on other areas and net export total of 270,260 tonnes. This will reduce mileage travelled by waste. The policy will not help encourage residents to segregate waste. However, this is best addressed in other policies in the document.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	In situ waste reuse and recovery, rather than transport to landfill, should help reduce traffic flows.
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	As additional waste management facilities are built in the District, there is the potential to encourage alternative transport modes. However, this is best addressed in other policies in the document so this has been scored as neutral for this policy.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will impact upon the built environment. New sites can also help to increase the amount of previously developed land that is used for waste management. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral.

Preferred Policy W4:	Waste Management Sites in	Bradford District				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will impact upon heritage. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral.
SA13: Improve the quality and range of services available within communities and connections to wider networks.	 Improve the accessibility of waste management and treatment services to centres of population? 	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	++	++	++	Appropriate waste management facilities within the District will be sought for MSW. This together with the site location criteria should result in improved accessibility.
SA14: Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	++	++	++	The policy aims to ensure that adequate treatment facilities are available to ensure Bradford takes responsibility for its own waste.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	0	0	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will impact upon open space and recreation areas. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral.

Preferred Policy W4: \	Waste Management Sites in	Bradford District				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities?	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	0	0	0	There is the potential to increase the impact on people affected by waste management facilities due to requirement to provide new facilities close to source. The outcome on both depends on site planning through criteria based site location and implementation of development management policies. This has been tested through the assessment of development management policies (WDM1 to WMD5) so has been scored as neutral here.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	+	+	+	Accommodating for waste and providing a variety of appropriate waste management facilities higher up the waste hierarchy should positively contribute to this objective.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.	++	++	++	This policy should achieve the SA objectives in full so has been scored as significantly positive.

Preferred Policy W4: \	Preferred Policy W4: Waste Management Sites in Bradford District						
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement	

Summary of the assessment

The policy provides an approach which seeks to minimise waste, plan for local management and follow a criteria based approach to identification of sites. Though this approach the policy does attempt to tackle some of the key waste planning issues highlighted in the SA scoping report.

Significant positive effects have been identified in relation to minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, improving the quality and range of services available within communities and connections to wider networks, ensuring local communities take more responsibility for their own waste, and ensuring the provision of adequate waste management capacity. Minor positive impacts were identified in relation to ensuring the prudent and efficient use of energy and natural resources, reducing the District's impact on climate change, safeguarding air, water and soil resources and reducing the number of people affected by noise and dust from waste management sites, achieving the proximity principle, reducing nuisance caused to communities by waste transport and supporting employment in the waste industry for local people.

No negative effects were identified but neutral impacts were noted in relation to landscape, modal shift, efficient use of land, historic assets, open space and recreation opportunities, health and quality of life. For these impacts it was considered that the effects are tested as part of the site assessments. Therefore, the scoring here has been listed as neutral. An uncertain effect has been noted in relation to effects on Natura 2000 sites.

Mitigation measures

The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.

Enhancement measures

For the sake of clarity, change the beginning of the policy to "To effectively plan and manage Bradford's forecast in waste arisings that will need to be dealt with within the district,..."

Preferred Policy W5:	Location of Waste Managen	nent Facilities and Sites				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	A mix of waste sites will help the district meet its waste management needs by allowin waste operators the flexibility to develop necessary waste facilities. This should lead to a reduction in the amount of waste that ultimately needs to be treated and landfilled. The policy will not have an impact on the use of sustainable materials or the impact or the water environment. These issues are dealt with in other policies.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	+	+	+	The policy will help ensure an adequate mix of different waste sites and different types of facilities. This will help to achieve the first three of the SA questions. It will not directly help to encourage the use of and markets for waste derived products but it should help to put in place technologies that can create these products.

referred Policy W5: Location of Waste Management Facilities and Sites									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	The policy should help to ensure that the most sustainable hierarchy of waste technologies is put in place in Bradford. This should encourage re-use, recycling and energy and this should have a positive impact on climate emissions. Climate change adaptation is not addressed by the policy and neither is renewable energy. However, renewable energy is addressed as part of BREEAM requirements (see Policy WDM2).			
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	sector? Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	The policy should be positive for this SA objective. For municipal solid waste sites and commercial and industrial waste sites a number of sites have been allocated within the plan. These sites have been allocated according to a number of Site Assessment Criteria. These criteria include the consideration of proximity to the road network, land status (previously developed land, agricultural land etc) and proximity to sensitive uses. For other types of waste management, sites will be assessed at the planning application stage against Policy WMD2 which assesses similar issues. The policy has not been scored as significantly positive, however, as not all of the sites assessed have been assessed as significantly positive. Please note that an assessment of each site is included at the end of this document and this includes mitigation measures for individual sites.			

Preferred Policy W5:	Location of Waste Managen	nent Facilities and Sites				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0/?	0/?	0/?	As additional waste management facilities are built in the District to meet commitments to self sufficiency there is the potential that these actions will lead to direct or indirect adverse effects on designated sites. The effects on the SA criterion of future waste management sites have been tested as part of the site assessments and the conclusions to these site assessments can be seen at the end of this appendix. Because the effects of the sites are addressed elsewhere the scoring here has been listed as neutral. There is an uncertainty related to the effects of the sites on Natura 2000 sites. At the issues and options stage of the assessment certain sites were highlighted as having a potential impact on Natura 2000 sites. None of these sites have been chosen as preferred sites. However, the HRA screening report does not conclude whether there will be likely significant effects on the European Designated Sites and the screening report has not yet been agreed by Natural England. Mitigation measures The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	As additional waste management facilities are built in the District, there is the potential for sites to help reach BAP targets and ensure biodiversity is a priority in site restoration. However, this is best addressed in other policies in the document so this has been scored as neutral for this policy.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	+	+	+	The policy should be positive for this SA objective. For municipal solid waste sites and commercial and industrial waste sites a number of sites have been allocated within the plan. These sites have been allocated according to a number of Site Assessment Criteria. These criteria include the impact on the landscape and visual impact. For other types of waste management, sites will be assessed at the planning applicatio stage against Policy WMD2 which assesses similar issues. The policy has not been scored as significantly positive, however, as not all of the sites assessed have been assessed as significantly positive. Please note that an assessment of each site is included at the end of this document and this includes mitigation measures for individual sites.

Preferred Policy W5:	Location of Waste Manager	ment Facilities and Sites				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The development of a mix of waste management facilities should ensure that waste can be treated as close to possible as source and in as sustainable a way as possible. The policy will not help encourage residents to segregate waste. However, this would not be expected within this policy. This is addressed in Policy WMD4.
SA9: Reduce nuisance caused to communities by waste transport.	 Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance? 	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	Transport to smaller recovery facilities rather than all waste being transported to landfill, should help reduce traffic flows.
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	+	+	+	There is mixed performance for this objective. Out of the sites assessed for municipal solid waste sites and commercial and industrial waste sites some of the sites perform well and others less well. It is not feasible for all sites to be connected to the rail network. However, it is likely that some will be and the SA objective will be partially met. In terms of other waste sites they will be decided in line with Policy WDM2.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	The policy should be positive for this SA objective. For municipal solid waste sites and commercial and industrial waste sites a number of sites have been allocated within the plan. These sites have been allocated according to a number of Site Assessment Criteria. These criteria include land status (previously developed land, agricultural land etc) and cultural and heritage issues. For other types of waste management, sites will be assessed at the planning application stage against Policy WMD2 which assesses similar issues. The policy has not been scored as significantly positive, however, as not all of the sites assessed have been assessed as significantly positive (and some have been assessed as negative). Please note that an assessment of each site is included at the end of this document and this includes mitigation measures for individual sites.
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	+	+	+	The policy should be positive for this SA objective. For municipal solid waste sites and commercial and industrial waste sites a number of sites have been allocated within the plan. These sites have been allocated according to a number of Site Assessment Criteria. These criteria include land status (previously developed land, agricultural land etc) and cultural and heritage issues. For other types of waste management, sites will be assessed at the planning application stage against Policy WMD2 which assesses similar issues. The policy has not been scored as significantly positive, however, as not all of the sites assessed have been assessed as significantly positive. Please note that an assessment of each site is included at the end of this document and this includes mitigation measures for individual sites.

Preferred Policy W5:	Location of	Waste Managem	ent Facilities and Sites				
SA Objectives		Questions. election of the	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA13: Improve the quality and range of services available within communities and connections to wider networks.	manag	sibility of waste gement and lent services to s of	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	++	++	++	By developing a range of different waste management facilities this should improve the quality and range of services available within communities. The policy will fully achieve the SA objective.
SA14: Ensure local communities take more responsibility for their own waste	of was	te the amount ste that is doutside of the t?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	++	++	++	By developing a range of different waste management facilities this should reduce the chance that waste will need to be treated outside the district. The policy will fully achieve the SA objective.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	space, leisure opport affecte	e that open , cultural, e and recreation tunities are not ed by waste gement?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	+	+	+	There is mixed performance for this objective. Out of the sites assessed for municipal solid waste sites and commercial and industrial waste sites some of the sites perform well and others less well. In terms of other waste sites they will be decided in line with Policy WDM2. If some sites are chosen that perform well, it is likely that some will be and the SA objective will be partially met.
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	the nu directly waste (living proxim an acc whose be miti	e a change in mber of people y affected by management in close nity to a site or cess route) impact cannot igated? e a cumulative ton certain unities?	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	0	0	0	Some of the sites have the potential to cause a cumulative impact on certain communities due to their proximity. For example, sites 71-74 and site 1 and site 29 are adjacent to each other. However, all of these sites are in largely industrial areas and on land that has been of an industrial nature. Therefore, the effect is neutral as the sites will not cause an increase in the number of people affected by waste management or cause a cumulative impact on certain communities.
SA17: Support employment in the waste industry for local people.	change local p employ	e actions that e the number of people directly yed in skilled the waste ry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	++	++	++	Developing a range of different types and sizes of waste management facilities should help to support employment for local people. The policy will fully achieve the SA objective.

Preferred Policy W5:	referred Policy W5: Location of Waste Management Facilities and Sites									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.		++	++	The policy will ensure the provision of adequate waste management capacity through promoting a range of sizes and types of facility. The policy will fully achieve the SA objective.				

Summary of the assessment

The policy will not have any significant negative effects or minor negative effects. The policy will have significant positive effects on improving the accessibility of waste management and treatment services to centres of population, reducing the amount of waste that is treated outside of the District, supporting employment in the waste industry for local people and ensuring the provision of adequate waste management capacity. This is because the policy aims to provide for a mix of different waste management facilities and sizes and this should help Bradford to become more self-sufficient in the management of its own waste.

The policy will also have an uncertain effect on avoiding impacts on effects on Natura 2000 sites.

The rest of the SA objectives have been scored as minor positive. This includes a number of environmental and social criteria where sites will be generally assessed against sustainability criteria before development is allowed to go ahead.

Mitigation measures

The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.

Enhancement measures

No enhancement measures.

Preferred Policy W6: I	MSW and C&I Waste Site As	Sessinent				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	0	0	0	No effect.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	+	+	+	The selection of sites will help ensure an adequate mix of different waste sites and different types of facilities. This will help to achieve the first three of the SA questions It will not directly help to encourage the use of and markets for waste derived product but it should help to put in place technologies that can create these products.

Preferred Policy W6:	MSW and C&I Waste Site As	ssessment				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO_2 emissions per capita in Bradford Metropolitan District in 2007 were 6 t CO_2 , compared with 7.3 t CO_2 in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	0	0	0	No effect
	renewables and energy efficiency within the waste sector?					
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: • Manningham Lane / Queens Rd junction; • Mayo Ave / Manchester Rd junction; • Thornton Rd (nr junction with Princes Way and Godwin St); and • Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: • The becks in the south of the district; • The streams around Bradford; • The River Worth; • The River Aire; and • The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	The initial site assessment criteria include the proximity to the road network and the long list site assessment criteria include previously developed land or greenfield land. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.

Preferred Policy W6:	MSW and C&I Waste Site As	ssessment				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	?/0	?/0	?/0	The initial site assessment criteria include whether a site will affect SACs, SSSIs, LNRs landscape and wildlife habitats. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document. There is an uncertainty related to the effects of the sites on Natura 2000 sites. At the issues and options stage of the assessment certain sites were highlighted as having a potential impact on Natura 2000 sites. None of these sites have been chosen as preferred sites. However, the HRA screening report does not conclude whether there will be likely significant effects on the European Designated Sites and the screening report has not yet been agreed by Natural England. Mitigation measures The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	+	+	+	The initial site assessment criteria include whether a site will affect SACs, SSSIs, LNRs landscape and wildlife habitats. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	+	+	+	The long list site assessment criteria include visual and landscape impact and the site assessment criteria also include consideration of whether mitigation could fully address any potential negative impact. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.

	Appraisal Questions.		Short	Medium	Long	Explanation of assessment and mitigation / enhancement
SA Objectives	Will the selection of the site?	Baseline information	term	term	term	
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The long list site assessment criteria include their location in relation to current / future waste arisings. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	The long list site assessment criteria include access to the strategic route network. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	+	+	+	The long list site assessment criteria include the extent to which non road access is in place. This includes rail, river and canal access. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	The initial site assessment criteria include SAM's, Historic Parks and Gardens, Listed Buildings, Archaeological Sites and Conservation Areas. The long list site assessment criteria include previously developed land or greenfield land. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	+	+	+	The initial site assessment criteria include SAM's, Historic Parks and Gardens, Listed Buildings, Archaeological Sites and Conservation Areas. The long list site assessment criteria include potential impact on existing adjacent cultural or heritage provision or character including recognised designations. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.

•	Т	and C&I Waste Site As praisal Questions.		Short	Medium	Long	Explanation of assessment and mitigation / enhancement
SA Objectives	Wi	If the selection of the e?	Baseline information	term	term	term	explanation of assessment and mitigation / enhancement
SA13: Improve the quality and range of services available within communities and connections to wider networks.	•	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	++	++	++	By developing a range of different waste management facilities this should improve the quality and range of services available within communities. The policy will fully achieve the SA objective.
SA14: Ensure local communities take more responsibility for their own waste	•	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	++	++	++	By developing a range of different waste management facilities this should reduce the chance that waste will need to be treated outside the district. The policy will fully achiev the SA objective.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	-	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	+	+	+	The initial site assessment criteria include removing sites that affect recreational open space, playing fields, allotments, village green space and land reserved for community use. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can onl be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life		Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment.	+	+	+	The long list site assessment criteria include site proximity to sensitive uses – this includes schools, housing and health facilities. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
		communities?	Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.				
SA17: Support employment in the waste industry for local people.	-	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region.	++	++	++	Developing a range of different types and sizes of waste management facilities should help to support employment for local people. The policy will fully achieve the SA objective.
			However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.				

Preferred Policy W6: I	Preferred Policy W6: MSW and C&I Waste Site Assessment									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority	**	++	++	The policy will ensure the provision of adequate waste management capacity through promoting a range of sizes and types of facility. The policy will fully achieve the SA objective.				
		of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.								

Summary of the assessment

The policy will not have any significant negative effects or minor negative effects. The policy will have significant positive effects on improving the accessibility of waste management and treatment services to centres of population, reducing the amount of waste that is treated outside of the District, supporting employment in the waste industry for local people and ensuring the provision of adequate waste management capacity. This is because the policy aims to provide for a mix of different waste management sites and sizes and this should help Bradford to become more self-sufficient in the management of its own waste.

An uncertain effect was recorded in relation to effects on Natura 2000 sites. The rest of the SA objectives have been scored as minor positive. This is due to the inclusion of a wide range of environmental and social criteria in the criteria that have driven the selection of sites.

Mitigation measures

The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.

Enhancement measures

No enhancement measures.

Preferred Policy W7: S	Sites for Construction, Dem	olition and Excavation Waste				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	There is a potential conflict here with the objective to reduce the generation of CDEW however, the policy recognises this and includes caveats that test whether the CDEW waste cannot be reduced or processed at source. Providing appropriate facilities will allow for CDEW to be recycled and recovered rather than being landfilled. Ensuring that new facilities are sustainable in terms of their water use and resource use is not addressed in the policy. However, these issues are addressed as part of Policy WDM2 through requirements to meet BREEAM excellent.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	++	++	++	Provision of new and expanded CDEW sites (where there is an identified need) will allow the Council to meet all of these objectives in terms of recycling and re-use.

Preferred Policy W7:	referred Policy W7: Sites for Construction, Demolition and Excavation Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector?	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	The policy requires a test for identified need demonstrating that the CDEW waste cannot be reduced or processed on site at source. This first step should reduce the amount of waste that needs to be transported and managed and the climate emissions related to this. Climate change adaptation and flood risk are not included as site criteria within Appendix 1 and although Policy WDM2 refers to minimising effects on flood plains, future proofing the new facilities against impacts of climate change needs to be explicitly dealt with when assessing site proposals. This is dealt with in the assessment of Policy WDM2. Policy WDM2 also addresses BREEAM requirements (which address renewable energy).				

Preferred Policy W7:	Sites for Construction, Dem	olition and Excavation Waste		1		
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects.

Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats?	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	?	?	?	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects. There is an uncertainty related to the effects of the sites on Natura 2000 sites. At the issues and options stage of the assessment certain sites were highlighted as having a potential impact on Natura 2000 sites. None of these sites have been chosen as preferred sites. However, the HRA screening report does not conclude whether there will be likely significant effects on the European Designated Sites and the screening report has not yet been agreed by Natural England. Mitigation measures The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.		
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	As additional waste management facilities are built in the District, there is the potential for sites to help reach BAP targets and ensure biodiversity is a priority in site restoration. However, this is best addressed in other policies in the document so this has been scored as neutral for this policy.		
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects.		

Preferred Policy W7: \$	Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid waste transport and would reduce mileage travelled per tonne of waste. In addition site selection criteria require consideration of site proximity and accessibility. The policy will not help encourage residents to segregate waste. However, this is best addressed in other policies in the document.				
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid waste transport. Effects on local changes to traffic flows from new and expanded waste facilities will be assessed through the site assessments.				
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	As additional waste management facilities are built in the District, there is the potential to encourage alternative transport modes. However, this is best addressed in other policies in the document so this has been scored as neutral for this policy.				
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects and will also address development on previously developed land.				

Preferred Policy W7:	Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste									
SA Objectives	Wil	oraisal Questions. I the selection of the	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA12: Avoid, protect and enhance historic assets.		Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects.			
		environment character and opportunity areas?								
SA13: Improve the quality and range of services available within communities and connections to wider networks.	-	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	0	This is not relevant to the assessment of this policy as the policy deals with the management of construction waste.			
SA14: Ensure local communities take more responsibility for their own waste	-	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	++	++	++	This enables the waste generated from small construction sites (where onsite use or recovery not possible) to be managed within the District as a supposed to the current situation which see the majority of CDEW waste tipped in landfills in Neighbouring authorities. The policy has been scored as significantly positive as it will help to achieve the SA objective and answers all the appraisal questions positively.			
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	•	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects.			

Preferred Policy W7:	Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects.				
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	+	+	+	Identification and delivery of waste management facilities within Bradford to deal with waste rather than exporting the majority should provide more jobs in the District in this sector. The skill level of the jobs will depend on how successful the strategy and other measures are in developing uses, markets and delivering technologically innovative sources.				
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.		++	++	This policy should achieve the SA objectives in full and therefore, has been scored as significantly positive.				

Preferred Policy W7: \$	Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste							
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term		Long term Explanation of assessment and mitigation / enhancement			

Summary of the assessment

This is a positive policy which helps deliver on the District Council's commitment to self sufficiency in managing its own waste. The requirement that the application demonstrate that CDEW cannot be reduced or processed at source should ensure a balance with the Council's commitment of moving up the waste hierarchy.

Significant positive impacts are identified in relation to ensuring the provision of adequate waste management capacity, allowing the Council to meet all of their objectives in terms of recycling and re-use, and reducing the amount of waste that is treated outside of

Neutral impacts are identified for the potential for sites to help reach BAP targets and ensure biodiversity is a priority in site restoration as well as encourage a shift from road freight to rail freight. It is considered that this is best addressed in other policies in the document so this has been scored as neutral for this policy. Neutral impacts are also recorded for improving the quality and range of services available within communities as this policy deals with the management of construction waste.

No negative impacts have been recorded. The rest of the SA objectives have been scored as minor positive. An uncertain effect was recorded in relation to effects on Natura 2000 sites.

Mitigation measures

The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.

Enhancement measures

No enhancement measures.

Preferred Policy: W8 A	Preferred Policy: W8 Agricultural Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management?	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	The presumption for treatment at source and then the criterion based approach for the locating and development of new facilities should avoid harm to the environment. Ensuring that new facilities are sustainable in terms of their water use and resource use is not addressed in the policy. However, these issues are addressed as part of Policy WDM2 through requiring facilities to be built which meet BREEAM excellent.				
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	+	+	+	The policy aims to ensure that adequate treatment facilities are in place, preferably on site where waste can be processed recovered or recycled. Provision of new and expanded sites (where there is an identified need) will allow the Council to meet all of these objectives in terms of recycling and re-use.				

Preferred Policy: W8	eferred Policy: W8 Agricultural Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	Dealing with waste at source, a priority of this policy, should significantly reduce any future increase in emissions related to transport of agricultural waste. The policy does not promote the possible use of agriculture waste for promoting renewable energy. Enhancement mitigation: If possible, the policy should address the use of agricultural waste as a fuel for renewable energy.				

Preferred Policy: W8 A	Agricultural Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.	++	++	++	The presumption for treatment at source and then the criterion based approach for the location and development of new facilities should avoid harm to the environment (including on pollution). Agricultural waste and exemptions including moving waste, rules and regulations relating to manures and slurries is tightly controlled by Defra. The treatment of waste on site (which is promoted through this policy) should help improve agricultural land quality.

Preferred Policy: W8 Agricultural Waste								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats?	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	+	+	+	The presumption for treatment at source and then the criterion based approach for the locating and development of new facilities should help avoid adversely affecting designation sites or valued biodiversity features. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects.		
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	The policy encourages treatment at source on farms. This is unlikely to prompt biodiversity enhancement measures or negatively affect them. There are a raft of existing measures and controls for improving the ecological impact of farming.		
SA7: To maintain, restore and enhance the character, value and diversity of natural and man-made landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	+	+	+	The presumption for treatment at source and then the criterion based approach for the locating and development of new facilities should avoid adversely affecting sensitive areas or creating negative visual impacts. Uncontrolled burning or tipping of waste on farms became illegal in 2006 so many potentially unsightly and illegal waste stores have been removed in the last few years. Site restoration of existing or derelict waste facilities is covered under the waste development management policies, particularly WDM3.		

Preferred Policy: W8 A	Preferred Policy: W8 Agricultural Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The policy requires that the need for additional facilities is demonstrated which should minimise the additional transport of agricultural waste. In addition site selection criteria require consideration of site proximity and accessibility. The policy will not help encourage residents to segregate waste. However, this is best addressed in other policies in the document.				
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	0	0	0	The presumption for treatment at source and then the criterion based approach for the locating and development of new facilities should avoid increase any nuisance related to this type of waste. However, this is unlikely to affect congested areas and in addition, agricultural waste arisings only likely to comprise 2.4% of total in 2026. Therefore, the policy has been scored as neutral.				
SA10: Encourage a modal shift away from road freight.	Include actions that would encourage a shift from road freight to rail freight?	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	Unlikely to be cost efficient or possible to encourage modal shift due to rural source of waste. Agricultural waste arisings only likely to comprise 2.4% of total in 2026. Therefore, the policy has been scored as neutral.				
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	The policy requires that the need for additional facilities is demonstrated which should minimise effects on the built environment. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects and will also address development on previously developed land.				

Preferred Policy: W8 A	gricultural Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	+	+	+	Reducing the amount of waste generated and on-site use and recovery would avoid the potential negative effects of developing new or expended waste management sites. The policy requires that the need for additional facilities is demonstrated which should minimise effects on heritage. In addition site selection criteria and Waste Management Development policies should minimise any residual adverse effects.
SA13: Improve the quality and range of services available within communities and connections to wider networks.	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	0	As this policy is specific to agricultural waste it is not applicable to this SA objective.
SA14: Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	++	++	++	This policy should allow for the development of the necessary capacity in order to avoid the waste being transported long distances outside of the district for disposal.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	+	+	+	The policy requires that the need for additional facilities is demonstrated which should minimise effects of open space and recreation facilities. In addition Waste Management Development policies should minimise any residual adverse effects.

Preferred Policy: W8 A	Agricultural Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	+	+	+	The policy requires that the need for additional facilities is demonstrated which should minimise additional nuisance to communities. In addition Waste Management Development policies should minimise any residual adverse effects.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	+	+	+	The policy should support the creation of jobs in the sector if new or expanded waste management facilities are needed. It is not possible to predict how skilled these jobs are likely to be.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.		++	++	This policy should allow for the development of the necessary capacity when necessary in order to avoid the waste being transported long distances outside of the district for disposal.

Preferred Policy: W8 A	Preferred Policy: W8 Agricultural Waste							
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		

Summary of the assessment

Encouraging onsite treatment reduces the energy and emissions associated with transport, and the need for new facilities.

The policy has significant positive impacts in terms of safeguarding and improving air, water and soil resources, allowing for the development of the necessary waste management capacity, and reducing the amount of waste that is treated outside of the district.

Minor positive impacts are identified in relation to ensuring the prudent and efficient use of energy and natural resources, increasing the amount of waste which is re-used, recycled and recovered, reducing emissions related to transport of agricultural waste, and minimising adverse effects on biodiversity, landscape, historic assets, open space, people and the built environment. It should also support creation of local jobs in this sector. The criteria in Appendix 1 and the Waste Development Management policies should avoid potential adverse effects upon people and the environment through the location and siting of new agricultural waste facilities.

Neutral scores have been identified for a number of objectives not directly related to the management of agricultural waste including improving the quality and range of services available within communities, encouraging a modal shift away from road freight, and reducing the nuisance caused to communities by waste transport.

Mitigation measures

No mitigation measures.

Enhancement measures

If possible, the policy should address the use of agricultural waste as a fuel for renewable energy.

Preferred Policy: W9:	Hazardous Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	A target has been outlined that seeks to ensure that the production of hazardous waste does not increase. This should ensure that there is not an increase in the amount of waste that needs to be treated.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	+	+	+	There is zero growth in hazardous waste expected. However, in the longer term a site may be needed in the sub region to deal with this type of waste. The policy puts the council in a good position to deal with an application for hazardous waste in a sustainable way. The policy will positively answer some of the appraisal question so has been scored as slight positive.

Preferred Policy: W9:	Hazardous Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector?	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	0	0	?	The policy maintains the status quo (especially in the short term). The quantity treated and distances transported are likely to stay the same in the short to medium term. In the long term if additional sites are needed then the distance transported could rise or fall. However, this should be controlled through Policy WDM2.

Preferred Policy: W9:	Hazardous Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.	0	0	0	Level of pollution and nuisance associated with Hazardous waste should stay the same. The criteria should successfully guide any new applications for development to PDL and away from valuable land or sensitive areas.

Preferred Policy: W9:	Preferred Policy: W9: Hazardous Waste								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0	0	0	If there is zero growth in this sector as expected and the area of search extends to neighbouring authorities then the need for need facilities in sensitive areas is unlikely.			
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	The policy maintains status quo and will be little impact on this SA objective. Policy MWD2 should avoid adversely affecting protected species and habitats if new facilities are needed in the longer term.			
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	0	0	The policy maintains status quo and will be little impact on this SA objective. The criteria for protecting the environment when new facilities are considered should protect the landscape.			

Preferred Policy: W9:	Hazardous Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	0	0	0	Not relevant to domestic municipal waste. The maintenance of the status quo will not change mileage travelled per tonne of waste.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	0	0	0	The maintenance of the status quo will not cause a change to traffic flows.
SA10: Encourage a modal shift away from road freight.	• Include actions that would encourage a shift from road freight to rail freight?	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	The maintenance of the status quo will not cause a change to transport of waste by alternative means.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	There is zero growth in this sector as expected and the area of search extends to neighbouring authorities then unlikely that there will be adverse impacts on the built environment. The use of PDL if new facilities are needed is high up the list of required criteria.

Preferred Policy: W9:	Preferred Policy: W9: Hazardous Waste								
SA Objectives	Wil	praisal Questions. I the selection of the	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA12: Avoid, protect and enhance historic assets.		Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites?	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	0	0	There is a strict set of criteria that must be met for new and expended hazardous waste management sites. If there is zero growth in this sector as expected and the area of search extends to neighbouring authorities then the need for need facilities in sensitive areas is unlikely.		
	•	Preserve, manage or enhance the historic environment character and opportunity areas?							
SA13: Improve the quality and range of services available within communities and connections to wider networks.	-	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	0	Not relevant for hazardous waste		
SA14: Ensure local communities take more responsibility for their own waste	-	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	0	0	0	Hazardous waste is currently treated outside the district and in the future if new facilities are needed these are likely to be sub regional facilities. This may mean that hazardous waste will always be treated outside of the district. However, this is likely to be the mos sustainable approach for such specialist waste treatment. Therefore, the policy has been scored as neutral.		
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	-	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	0	0	There is a strict set of criteria that must be met for new and expanded hazardous waste management sites. If there is zero growth in this sector as expected and the area of search extends to neighbouring authorities then it is unlikely that this policy will result in adverse effects on recreation opportunities in Bradford		

Preferred Policy: W9:	Hazardous Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	+	+	+	There is a strict set of criteria that must be met for new and expanded hazardous waste management sites. If there is zero growth in this sector as expected and the area of search extends to neighbouring authorities then it is unlikely that this policy will result in an increase in communities affected.
SA17: Support employment in the waste industry for local people.	 Include actions that change the number of local people directly employed in skilled jobs in the waste industry? 	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	?	?	?	Hazardous waste is currently treated outside the district and in the future if new facilities are needed these are likely to be sub regional facilities. This may mean that hazardous waste may always be treated outside of the district. This makes the potential for job creation difficult to predict. However, this is difficult to mitigate unless the council takes the opinion that Bradford will be the location in the sub region that specifically manages hazardous waste (which will cause other impacts).
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.	++	++	++	The policy allows for consideration of, and delivery of new facilities if needed in the longer term. This will ensure that the hazardous waste needs of businesses in the district will be met.

Preferred Policy: W	Preferred Policy: W9: Hazardous Waste							
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		

Summary of the assessment

The policy essentially maintains the status quo but acknowledges that there may be a need to identify additional sites in the future and provides criteria to guide the decisions on these. Policy W9 will have no significant or slight negative impacts.

Significant positive impacts have been identified in relation to ensuring the provision of adequate waste management capacity. The policy allows for consideration of, and delivery of new facilities if needed in the longer term. Minor positive impacts are identified in relation to making efficient use of land, in relation to the objective to increase the amount of waste which is re-used, recycled and recovered and specifically with regard to the question regarding provision of sustainable treatment facilities as the policy puts the council in a good position to deal with an application for hazardous waste in a sustainable way.

The situation is uncertain regarding local skilled job creation. Hazardous waste is currently treated outside the district and in the future if new facilities are needed these are likely to be sub regional facilities. This may mean that hazardous waste will always be treated outside of the district. This makes the potential for job creation difficult to predict. However, this is difficult to mitigate unless the council takes the opinion that Bradford will be the location in the sub region that specifically manages hazardous waste (which will cause other impacts).

Neutral impacts are identified for the remaining SA objectives. As the policy maintains the status quo, there will be little impact on SA objectives related to these topics. The criteria for protecting the environment when new facilities are considered should protect these assets.

Mitigation measures

No mitigation measures.

Enhancement measures

No enhancement measures

Preferred Policy: W10	: Sites for Residual Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management?	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	0	0	+	The policy places an emphasis on the continued need to reduce residual waste which may be achieved in the long term in part through the implementation of this strategy. Recycling of MSW and C&I waste appears to be the main method of reducing the residual waste.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	0			The policy provides for the identification of new or expanded capacity through a manage and monitor approach. However, the policy appears to focus mainly on landfill sites as opposed to other technologies to deal with residual waste. Mitigation measures The second paragraph should be altered so that it's applicable to all modes of residual waste management. These are mentioned earlier in the supporting text and include gasification, EfW or autoclaving.

Preferred Policy: W1	referred Policy: W10: Sites for Residual Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	0			The policy supports residual waste reduction and does state that proposals for landfill will only be permitted where the residual waste cannot be handled in a more sustainable manner. This should reduce the potential for emissions of greenhouse gas by helping to move waste up the waste hierarchy. However, the policy appears to focus mainly on landfill sites as opposed to other alternative technologies to deal with residual waste. Mitigation measures The second paragraph should be altered so that it's applicable to all modes of residual waste management. These are mentioned earlier in the supporting text and include gasification, EfW or autoclaving.				

Preferred Policy: W10	: Sites for Residual Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		0	+	The policy seeks to achieve these objectives by first reducing residual waste and then employing strict criteria to ensure adversely environmental and social effects are minimised.

Preferred Policy: W10	: Sites for Residual Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0/?	0/?	0/?	Detailed testing criteria should ensure adverse effects on sensitive sites are minimised. In addition, the criteria for new or extended landfill waste development requires that the development leads to an improvement in the quality of the environment. The policy has put in place all the criteria that would be needed to promote sustainability. There is an uncertainty related to the effects of the sites on Natura 2000 sites. At the issues and options stage of the assessment certain sites were highlighted as having a potential impact on Natura 2000 sites. None of these sites have been chosen as preferred sites. However, the HRA screening report does not conclude whether there will be likely significant effects on the European Designated Sites and the screening report has not yet been agreed by Natural England. Mitigation measures The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	+	Detailed testing criteria should ensure adverse effects on sensitive sites are minimised. In addition, the criteria for new or extended landfill waste development requires that the development leads to an improvement in the quality of the environment. This may have benefits for BAP species and habitats although this is not spelled out explicitly. This is better addressed as part of Policy WDM2. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	0	+	Detailed testing criteria should ensure adverse effects on sensitive sites are minimised. In addition, the criteria for new or extended landfill waste development requires that the development leads to an improvement in the quality of the environment. The policy has put in place all the criteria that would be needed to promote sustainability. However, the detailed effects on the SA criterion of future waste management sites have been tested as part of the site assessments. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.

Preferred Policy: W10	: Sites for Residual Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	0	0	+	The self sufficiency aim is supported by the Highways Agency and should reduce the number of HGVs travelling long distances on the Strategic Road network. The emphasis on reducing waste and ultimately residual waste arisings should contribute in the future to fewer vehicle miles per tonne. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	0	0	+	The self sufficiency aim is supported by the Highways Agency and should reduce the number of HGVs travelling long distances on the Strategic Road network. The emphasis on reducing waste and ultimately residual waste arisings should contribute in the future to less transport of waste. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA10: Encourage a modal shift away from road freight.	• Include actions that would encourage a shift from road freight to rail freight?	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	+	Site Assessment Criteria includes a test against site accessibility and against the extent to which non-road (rail, river, canal) access is in place so this may lead to sites which use alternative freight modes.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	0	0	+	Detailed testing criteria should ensure adverse effects on sensitive sites are minimised. In addition, the criteria for new or extended landfill waste development requires that the development leads to an improvement in the quality of the environment. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.

Preferred Policy: W10: Sites for Residual Waste								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	0	+	Detailed testing criteria should ensure adverse effects on sensitive sites are minimised. In addition, the criteria for new or extend landfill waste development requires that the development leads to an improvement in the quality of the environment. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.		
SA13: Improve the quality and range of services available within communities and connections to wider networks.	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	++	Movement of residual waste facilities to locations within the district will help to achieve this objective.		
SA14: Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	0	0	++	The policy focuses moving the treatment of residual waste within Bradford. Therefore, this should reduce the amount of waste that is treated outside of the district and will be positive for the SA objective.		
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	0	+	Detailed testing criteria should ensure no adverse effects on recreation opportunities as new residual waste facilities are developed in the long term. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.		

Preferred Policy: W10	: Sites for Residual Waste					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities?	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	0	0	+	Detailed testing criteria should ensure no adverse effects on local communities as new capacity is provided in the long term in Bradford. The policy puts in place the required criteria to ensure the SA objective is achieved. However, an assessment of the full achievement of the SA objective can only be undertaken on a site by site basis. Please see site assessment schedules which are included at the end of this document.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	0	0	+	The policy focuses to on ensuring sufficient supply of landfill waste facilities within Bradford District. In the long term this should help increase number of local jobs in this sector. However, the skill level of jobs in this sector (landfill) is likely to be low (so the policy has not been scored as significant).
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.	0	0	++	The policy plans for adequate capacity within Bradford in relation to residual waste.

Preferred Policy: W10	Preferred Policy: W10: Sites for Residual Waste							
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term		Long term	Explanation of assessment and mitigation / enhancement		

Summary of the assessment

Policy W10 is an essential policy as it outlines methods to handle residual waste, which continues to support provision of higher levels of waste treatment within the Bradford's waste hierarchy. The additional criteria, which require environmental improvement and restoration of sites, should contribute to a better environmental outcome related to residual waste.

Significant positive impacts are identified in relation to improving the accessibility of waste management and treatment services, reducing the amount of waste that is treated outside of the District and ensuring the provision of adequate waste management capacity. Minor positive impacts are noted for the emphasis on the continued need to reduce residual waste, protection of air, water and soil resources, biodiversity, landscape, historic assets, public open space, the promotion of the proximity principle and the reduction of the nuisance to communities from waste transport and waste management and encouraging modal shift,. In the long term this should help increase number of local jobs in this sector so the appropriate objectives have also been scored as minor positive.

Minor negative impacts have been identified in relation to objectives which put in place adequate and sustainable treatment facilities and reduce the potential for greenhouse gas emissions caused by waste management. The supporting text to the policy recognises that residual waste is capable of being managed by advanced treatment technologies (for example through gasification, EfW or autoclaving) rather than landfilling however this is not currently reflected in the policy. The policy will also have an uncertain effect on avoiding impacts on effects on Natura 2000 sites.

Mitigation measures

The policy focuses on dealing with residual waste through landfill. Alterative technologies for treating residual waste need to be better supported early on in the policy. The text should first prompt an exploration of these before accepting the landfill option to managing residual waste.

The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.

Enhancement measures

No enhancement measures.

Preferred Policy: WDM	referred Policy: WDM1: Unallocated Sites									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	0	0	0	This policy makes provision if needed for waste management proposals on unallocated sites. The appraisal questions aren't directly applicable, although the first criteria is that the site comes forward in accordance with the waste hierarchy and that there is a need in the local area. So the policy is not in conflict with this objective.				
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	0	+	+	Any unallocated site must come forward in accordance with the waste hierarchy and demonstrate that there is a need in the local area. Therefore, if sites come forward they should help to meet the appraisal objective and most of the appraisal questions (it is uncertain if it they will help to achieve appraisal question 4).				

Preferred Policy: WD	referred Policy: WDM1: Unallocated Sites									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	0	+	+	The need to demonstrate a site's contribution to the waste hierarchy and the site assessment criteria should help ensure that sites are in the most sustainable location and also are using the most suitable technology. This will help to reduce emissions associated with the waste management. Climate change adaptation and flood risk are not included as site criteria within Appendix 1 and although Policy WDM2 refers to minimising effects on flood plains, future proofing the new facilities against impacts of climate change needs to be explicitly dealt with when assessing site proposals. This is dealt with in the assessment of Policy WDM2. Policy WDM2 also addresses BREEAM requirements (which address renewable energy).				

Preferred Policy: WDI	M1: Unallocated Sites					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	This is difficult to assess due to the unknown location of unallocated sites. However, given the tests that are required against site assessment criteria, sites should not progress that adversely affect people through pollution and nuisance and areas valued for their environmental importance. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.

Preferred Policy: WD	M1: Unallocated Sites					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	+	+	+	This is difficult to assess due to the unknown location of unallocated sites. However, given the tests that are required against site assessment criteria, sites should not progress that adversely affect (through siting or waste transport) areas valued for their environmental importance. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	+	+	This is difficult to assess due to the unknown location of unallocated sites. However, given the tests that are required against site assessment criteria, sites should not progress that adversely affect BAP habitats or key areas for protected species. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	+	+	This is difficult to assess due to the unknown location of unallocated sites. However, given the tests that are required against site assessment criteria, sites should not progress that adversely affect (through siting or waste transport) areas valued for their environmental importance. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.

Preferred Policy: WDM	M1: Unallocated Sites					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	0	+	+	This is difficult to assess due to the unknown location of unallocated sites. However, Site Assessment Criteria includes a test against site accessibly and location in relation to source of waste so the outcome should be positive in relation to this objective. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	0	+	+	This is difficult to assess due to the unknown location of unallocated sites. However, given the tests that are required against site assessment criteria, sites should not progress that adversely affect (through siting or waste transport) communities or areas valued for their environmental importance. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	+	+	The Site Assessment Criteria include a test against site accessibly and against the extent to which non-road (rail, river, canal) access is in place so this should be policy should be positive against this SA objective. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	0	+	+	Testing against the Site Assessment Criteria should ensure adverse effects on the quality of the built environment are minimised. The sequential test incorporates the consideration of previously developed land so the policy will also be positive in this regard. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.

Preferred Policy: WDI	Preferred Policy: WDM1: Unallocated Sites								
SA Objectives	Wil	praisal Questions. I the selection of the e?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA12: Avoid, protect and enhance historic assets.		Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites?	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	+	+	Testing against the Site Assessment Criteria should ensure adverse effects on historic assets are minimised. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.		
	•	Preserve, manage or enhance the historic environment character and opportunity areas?							
SA13: Improve the quality and range of services available within communities and connections to wider networks.	-	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	++	++	Site accessibility is one of the site assessment criteria that will be considered if there is a need for unallocated sites so the SA objective will be met in full by this policy.		
SA14: Ensure local communities take more responsibility for their own waste	-	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	0	++	++	The policy will provide further flexibility in the provision of waste management facilities in the district if there is a need in the local area. The SA objective will be met in full by this policy.		
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	-	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	+	+	Testing against the Site Assessment Criteria should ensure no adverse effects on local communities as new capacity is provided in the long term in Bradford. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.		

Preferred Policy: WDI	M1: Unallocated Sites					
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities?	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	0	+	+	Testing against the Site Assessment Criteria should ensure no adverse effects on local communities as new capacity is provided in the long term in Bradford. Because the locations of sites are not known, however, it is not possible to state that the policy will be significantly positive.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	0	+	+	This policy should help to provide for more local jobs by allowing for further flexibility in the provision of waste management facilities in the district if there is a need in the local area. It is not possible to predict how skilled these jobs will be.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.	0	++	++	Making provision for the assessment of unallocated sites provides the flexibility to meet capacity if allocated sites are lost or existing facilities are lost. The SA objective will be met in full by this policy.

Preferred Policy: WD	Preferred Policy: WDM1: Unallocated Sites							
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		

Summary of the assessment

The criteria included in the policy intend to ensure that the main drivers of delivering Bradford's waste hierarchy, the proximity principle and self-sufficiency are achieved. The site assessment criteria used to analyse any unallocated sites should avoid adversely affecting people through noise, nuisance dust and traffic and avoid creating other environmental impacts on biodiversity and sensitive areas. Hence minor positive impacts are identified for objectives that protect biodiversity, jobs, landscape, historic assets and public open space, seek to minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, seek to mitigate against climate change, safeguard and improve air, water and soil resources, encourage a modal shift away from road freight and reduce nuisance caused to communities by waste transport.

Significant positive impacts are identified for objectives that seek to improve the accessibility of waste management and treatment services to centres of population, reduce the amount of waste that is treated outside of the District, and ensure the provision of adequate waste management capacity. The policy will provide further flexibility in the provision of waste management facilities in the district if there is a need in the local area and so will positively support the achievement of these objectives.

There are no negative impacts identified.

Neutral impacts are identified in relation to the prudent and efficient use of energy and natural resources and the promotion of renewable energy. The appraisal questions aren't directly applicable and not in conflict with this objective.

Mitigation measures

No mitigation measures.

Enhancement measures:

No enhancement measures

Preferred Policy: WDN	M2: Assessing all application	ns for New, Expanded and Residual Waste Management Facilities				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	This is a development control type policy that acts as criteria to be considered under the main strategic objectives. As a result, the policy does not focus on minimising production of waste or waste that requires treatment. These appraisal questions are no directly relevant. However, it includes suitable criteria to minimise adverse impacts on water resources and requires that new, expanded and residual waste management facilities meet BREEAM excellent standards. BREEAM looks at sustainable methods of construction including minimising use of water.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	0	0	0	This is a development control policy that should help guide the development of sustainable treatment facilities that minimise adverse effects. However, the policy itsel will not help to minimise growth in waste so the policy has been scored as neutral.

	Appraisal Questions.					
SA Objectives	Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	Requirement for BREEAM standard Excellent will help to reduce CO ² emissions associated with new and existing facilities. It should also help encourage the development of renewables and energy efficiency within facilities (as the BREEAM scheme addresses these issues). The policy requires assessment of the facilities on the environment but not of the environment on the facilities. Although Policy WDM2 refers to minimising effects on flood plains, future proofing the new facilities against impacts of climate change needs to be explicitly dealt with when assessing site proposals. Because the policy mill help to meet achieve one of the appraisal questions but not the other it has been scored as minor positive. Enhancement measures Future climate proofing should be a requirement to reduce the vulnerability of waste management facilities.

		ns for New, Expanded and Residual Waste Management Facilities	I	l	I	
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The River Worth; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	This policy fully supports the first appraisal question through ensuring that human health effects are assessed for each waste management development. The second appraisal question has been assessed through the site appraisal process.

Preferred Policy: WDI	Preferred Policy: WDM2: Assessing all applications for New, Expanded and Residual Waste Management Facilities									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.				Protection of designated sites is accounted for in the policy. However, the policy refers to the minimisation of effects. Government guidance (in the form of PPS9) stresses the importance of enhancing biodiversity. The policy would be much stronger if this emphasis was changed. The policy does not address the effects of sites on habitat loss or fragmentation. Mitigation measures The emphasis of the policy should be changed from minimisation of harm to enhancement of biodiversity. It would be useful if the policy addressed the effects of sites on habitat loss or fragmentation.				
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	-	-		The policy requires that adverse environmental effects are minimised. This may go some way to ensuring that actions do not compromise BAP targets. However, this is not explicit in the policy. If the policy is changed to introduce the concept of enhancement (see above) it would also be useful to add a reference to helping to reach targets outlined in BAPs. The policy also does not address restoration to biodiversity. However, this may be better addressed in the landfill policy (policy WDM5). Mitigation measures The emphasis of the policy should be changed from minimisation of harm to enhancement of biodiversity (including of a long term nature through restoration) and this should include reference to development helping to meet targets outlined in BAPs.				

Preferred Policy: WDM	referred Policy: WDM2: Assessing all applications for New, Expanded and Residual Waste Management Facilities									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	-	-	-	The policy is clear that minimising adverse effects on the landscape is required. However, as with biodiversity it is felt that the policy should be focused on enhancement where possible. Mitigation measures Opportunities for landscape enhancement (including of a long term nature through restoration) should be sought to avoid cumulative negative effects.				
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	This policy supports the criteria set out in appendix 1 which requires that sites should be assessed against their location in relation to current / future waste arisings.				
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	The requirement to reduce the need to travel and assessment of accessibility is included in the site assessment criteria. There is also a requirement to demonstrate that adverse effects are minimised in terms of environmental and social effects. This will mean that there is a greater likelihood that nuisance caused by waste management sites can be reduced.				
SA10: Encourage a modal shift away from road freight.	• Include actions that would encourage a shift from road freight to rail freight?	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	?	?	?	It is not possible to assess whether the policy will lead to the achievement of the SA objective. This is difficult to achieve as transport by road is the principal means currently and sites with easy and cheap access to the rail and waterways network will be relatively rare. Mitigation measures More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.				

Preferred Policy: WDM	M2: Assessing all application	ns for New, Expanded and Residual Waste Management Facilities				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	The main strategic policies (and the sites assessment criteria) require a focus on PDL. The requirement to demonstrate that a facilities' design, setting and external appearance is of a scale, mass form and character appropriate to its location and landscape setting should mean that there is a greater likelihood that the SA objectives are met.
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	+	+	+	The policy requires that environmental effects are minimised. There is also the requirement to demonstrate that a facilities' design, setting and external appearance is of a scale, mass form and character appropriate to its location and landscape setting. This should mean that there is a greater likelihood that the SA objectives are met.
SA13: Improve the quality and range of services available within communities and connections to wider networks.	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	0	The requirement to reduce the need to travel and assessment of accessibility is included in the strategic policies and in the site assessment criteria in Appendix 1.
SA14: Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	0	0	0	Other policies (and the site allocations) will help to meet this SA objective.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	?	?	?	The policy requires that human health effects and environmental effects are minimised. It is assumed that this addresses impacts on open space. However, it would be better if this was made clearer in the policy. There is also the requirement to demonstrate that a facilities' design, setting and external appearance is of a scale, mass form and character appropriate to its location and landscape setting. Mitigation measures Make it clearer in the policy that areas of open space / recreation are protected within policy.

Preferred Policy: WDI	referred Policy: WDM2: Assessing all applications for New, Expanded and Residual Waste Management Facilities								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	+	+	+	The policy requires that social and economic effects are minimised. This includes health, noise, vibrations, dust, odour, air, water and light pollution. The requirement to consider whether "it is appropriate to setting" should result in the testing of the potential cumulative effect of any new facilities and this should mean that there is a greater likelihood that the SA objectives are met.			
SA17: Support employment in the waste industry for local people.	• Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	0	0	0	No effect.			
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.		0	0	No effect.			

Preferred Policy: WDN	Preferred Policy: WDM2: Assessing all applications for New, Expanded and Residual Waste Management Facilities								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term Explanation of assessment and mitigation / enhancement				

Summary of the assessment

This is a development control policy which includes the necessary criteria to meet the requirements of national legislation and most SA objectives. The policy will not have any significant negative or significant positive effects. Minor negative impacts are included for biodiversity and landscape. In terms of biodiversity, protection of designated sites is accounted for in the policy but Government guidance (in the form of PPS9) stresses the importance of enhancing biodiversity. The policy would be much stronger if this emphasis was changed. The policy does not address the effects of sites on habitat loss or fragmentation. For landscape the policy is clear that minimising adverse effects on the landscape is required. However, as with biodiversity it is felt that the policy should be focused on enhancement where possible. Minor positive impacts are recorded for climate mitigation, reducing the amount of pollution and nuisance caused by waste management, and increasing proximity of waste management infrastructure to current and future centres of population. Neutral impacts are identified for objectives related to ensuring adequate waste management capacity, supporting job creation, improving accessibility, minimising the growth in waste and increasing waste treatment in the district.

There is uncertainty regarding outcomes for open space and the effects on modal shift.

Mitigation measures

The emphasis of the policy should be changed from minimisation of harm to enhancement of biodiversity. It would be useful if the policy addressed the effects of sites on habitat loss or fragmentation.

The emphasis of the policy should be changed from minimisation of harm to enhancement of biodiversity (including of a long term nature through restoration) and this should include reference to development helping to meet targets outlined in BAPs.

Opportunities for landscape enhancement (including of a long term nature through restoration) should be sought to avoid cumulative negative effects.

More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.

Make it clearer in the policy that areas of open space / recreation are protected within policy.

Enhancement measures

Climate change adaptation - The policy requires assessment of the facilities on the environment on the facilities. Future climate proofing could be a requirement to reduce the vulnerability of waste management facilities.

Preferred Policy: WDM	referred Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	0	0	0	No effect.				
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	++	++	++	The policy safeguards existing waste management facilities. A strict set of criteria must be met to justify the loss of a site and this will help to meet the SA objective.				

Preferred Policy: WD	eferred Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector?	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	0	0	0	No effect.			

Preferred Policy: WD	eferred Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.	0	0	0	No effect.			

Preferred Policy: WDI	M3: Applications resulting in	n the loss of a proposed or existing waste management facility				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0	0	0	No effect.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	No effect.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	0	0	No effect.

Preferred Policy: WDM	Preferred Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility								
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	0	0	0	No effect.			
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	0	0	0	No effect.			
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	No effect.			
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	0	0	0	No effect.			

Preferred Policy: WDI	referred Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility								
SA Objectives	Wil	praisal Questions. Il the selection of the e?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement		
SA12: Avoid, protect and enhance historic assets.		Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites?	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	0	0	No effect.		
	•	Preserve, manage or enhance the historic environment character and opportunity areas?							
SA13: Improve the quality and range of services available within communities and connections to wider networks.		Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	0	No effect.		
SA14: Ensure local communities take more responsibility for their own waste	-	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	+	+	+	It is important that there is a net gain of sites. Safeguarding of existing sites is important to achieve this.		
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	-	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	0	0	No effect.		

Preferred Policy: WDI	M3: Applications resulting in	n the loss of a proposed or existing waste management facility				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	0	0	0	No effect.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	+	+	+	It is important that there is a net gain of sites. Safeguarding of existing sites is important to achieve this.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.		+	+	It is important that there is a net gain of sites. Safeguarding of existing sites is important to achieve this.

Preferred Policy: WDM	Preferred Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility							
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term Explanation of assessment and mitigation / enhancement			

Summary of the assessment

A neutral impact has been identified for the majority of objectives as the policy is considered to have no effect. This is because the policy is very focused and relates only to the proposed loss of waste management sites. It is unlikely to have any direct impacts on environmental designations and sensitivities.

Significant positive impacts were identified in relation to minimising the growth in waste and increase the amount of waste which is re-used, recycled and recovered. Whilst minor positive impacts were identified in relation to ensuring local communities take more responsibility for their own waste, supporting employment in the waste industry for local people and ensuring the provision of adequate waste management capacity. These positive scores all relate to the point that the strict criteria should appropriately safeguard sites and help ensure that there is an increase in capacity of waste management facilities in the district where and when needed.

Mitigation measures

No mitigation measures.

Enhancement measures

No enhancement measures.

Preferred Policy: WDN	//4: Waste Management with	nin Development				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management? 	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	++	++	++	The policy requires re-use and recycling of construction materials for new development and will lead to a reduction in the total amount of waste that will require treatment from construction and demolition and promotes water efficient design.
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	++	++	++	The policy should help to achieve target recovery and recycling rates for CDEW and as a result contribute to a reduction in total amounts going to landfill.

Preferred Policy: WD	referred Policy: WDM4: Waste Management within Development									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	Climate mitigation through reduction of CO ² emitted and encouragement of energy efficient design and on-site generation is included in the policy. The policy does not address climate change adaptation of new development but it would not be expected to.				

Preferred Policy: WD	eferred Policy: WDM4: Waste Management within Development									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement				
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		?	?	It is uncertain whether the on-site use and recovery of CDEW will reduce nuisance especially for local people close to the development. Minimisation of transport of the waste would reduce nuisance and pollution but the implementation of specific on-site waste arrangements is needed to ensure no adverse effects. Mitigation measures It will be important that measures are put in place (as part of planning application procedures) to ensure that the on-site use and recovery of CDEW does not cause undue nuisance.				

Preferred Policy: WDI	M4: Waste Management witl	hin Development				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats?	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.	0	0	0	No effect.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	0	0	0	No effect.
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	0	0	0	No effect.

Preferred Policy: WDN	M4: Waste Management with	nin Development				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The policy will help residents of new development to segregate their waste. The policy states that the appropriate management arrangements are in place for waste arisings generated by the development.
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	0	0	0	No effect.
SA10: Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	0	0	0	No effect.
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	0	0	0	No effect.

Preferred Policy: WDM4: Waste Management within Development										
SA Objectives	Wil	praisal Questions. I the selection of the	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement			
SA12: Avoid, protect and enhance historic assets.		Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites?	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	0	0	0	No effect.			
	•	Preserve, manage or enhance the historic environment character and opportunity areas?								
SA13: Improve the quality and range of services available within communities and connections to wider networks.	-	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	0	0	0	No effect.			
SA14: Ensure local communities take more responsibility for their own waste	•	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	0	0	0	No effect.			
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	•	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	0	0	0	No effect.			

Preferred Policy: WDI	M4: Waste Management with	nin Development				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England. Unemployment levels vary widely across the district, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment. Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the district. Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the district fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.	0	0	0	No effect.
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	+	+	+	As standards and requirements for designs are strengthened expertise will be required to help deliver on water efficiency, on-site generation and recovery or recycling of materials.
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW. Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford. Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence. Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The former RSS identified that there may be a need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.		+	+	Rather than increase provision this should reduce the waste that requires off-site disposal or processing and therefore the need for additional capacity in the District.

Preferred Policy: WDN	Preferred Policy: WDM4: Waste Management within Development									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term Explanation of assessment and mitigation / enhancement					

Summary of the assessment

Significant positive impacts are recorded for ensuring the prudent and efficient use of energy and natural resources and the promotion of renewable energy as the policy requires re-use and recycling of construction materials for new development, and will lead to a reduction in total amount of waste that will require treatment from construction and demolition and promotes water efficient design. Significant positive effects are also recorded for minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered as the policy should help to achieve target recovery and recycling rates for CDEW and as a result contribute to a reduction in total amounts going to landfill.

Minor positive effect are identified for climate mitigation, allowing residents in new developments to segregate their waste, supporting employment in the waste industry for local people, and ensuring the provision of adequate waste management capacity.

There is uncertainty regarding the assessment against the objective to safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites as it is uncertain whether the on-site use and recovery of CDEW will reduce nuisance especially for local people close to the development. Minimisation of transport of the waste would reduce nuisance and pollution but the implementation of specific on-site waste arrangements is needed to ensure no adverse effects.

The remainder of the objectives have been scored as neutral as it is considered that this policy will have no effect on these objectives. This is because the policy is a very focused policy relating to the provision of waste management facilities within development. It is unlikely to have any direct impacts on environmental designations and sensitivities.

Mitigation measures

It will be important that measures are put in place (as part of planning application procedures) to ensure that the on-site use and recovery of CDEW does not cause undue nuisance.

Enhancement measures

No enhancement measures

Preferred Policy: WDN	Preferred Policy: WDM5: Landfill Development for Residual Waste										
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement					
SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? Lead to a reduction of the amount of waste that will require treatment? Minimise any adverse impacts on water resources at all stages of waste management?	Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target. Sandstone is the principal mineral extracted in Bradford district, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the district.	+	+	+	Ensuring that sites are permitted in accordance with the waste hierarchy will ensure that waste only reaches landfill where there is no other (more sustainable) option. Requirement for BREEAM excellent standards on all facilities should improve the environmental construction standards whilst making efficient use of water in those facilities. The criteria also require that adverse effects on floodplains, groundwater and water quality are minimised.					
SA2: Minimise the growth in waste and increase the amount of waste which is reused, recycled and recovered.	 Put in place adequate and sustainable treatment facilities? Help the District to meet its recovery and recycling targets? Help the authority meet its quota under the LATS? Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 	Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. The volume of waste produced is currently growing at approx 3% per annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6.	+	+	+	Provision of landfill sites is necessary in a sustainable hierarchy of waste management as waste that cannot be treated in any other way would need to be landfilled. The criteria included in the policy ensure that landfill is at the appropriate place in the hierarchy.					

Preferred Policy: WDI	Preferred Policy: WDM5: Landfill Development for Residual Waste											
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement						
SA3: Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the district. The CO ₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO ₂ , compared with 7.3 tCO ₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.	+	+	+	The requirement for BREEAM standards and energy efficiency should reduce the CO ² emissions associated with the running of the facilities. Mention is given to the need to maximise opportunities to recover energy which could relate to the combustion of biogas. However, the policy could go further in encouraging climate adaptation. Vulnerability to climate change, risks from extreme weather events, flooding hotter summers, etc. should be taken into account in the design and sitting of these facilities. Enhancement measures The policy could go further in encouraging climate adaptation. Vulnerability to climate change, risks from extreme weather events, flooding hotter summers, etc. should be taken into account in the design and sitting of these facilities.						

Preferred Policy: WD	Preferred Policy: WDM5: Landfill Development for Residual Waste										
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement					
SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?	Air Quality: With regard to air quality, the pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are 4 AQMAs within Bradford, at: Manningham Lane / Queens Rd junction; Mayo Ave / Manchester Rd junction; Thornton Rd (nr junction with Princes Way and Godwin St); and Shipley Airedale Rd and Church Bank. Water: The main river systems comprise: The becks in the south of the district; The streams around Bradford; The River Worth; The River Wharfe. Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the district). The Aire catchment tends to have better water quality. Soil: The soil in Bradford district is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.		+	+	The policy should provide for development of sites that do not adversely affect people and/or exacerbate existing nuisance problems through the detailed criteria landfill sites must meet. The second appraisal question has been assessed as part of the site assessments.					

Preferred Policy: WDI	M5: Landfill Development fo	r Residual Waste				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	Northern and western parts of the district are considered to be of international nature conservation value, namely Rombald's Moor (comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population. In addition, Bradford has: Four SSSIs; Twenty-one Sites of Ecological or Geological Important (SEGIs); Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations. The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI). Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.				The policy contains criteria to that the applicant should demonstrate that adverse effects are minimised on designated protected sites. However, the policy does not address habitat loss or fragmentation. Mitigation measures The policy should address the effects of sites on habitat loss or fragmentation.
SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status: Upland oak woodland; River corridors; In bye pasture; Hedgerows; Otter; Water vole; Pipistrelle; Brown hare; Crayfish; Grayling; White letter hairstreak butterfly; Green hairstreak butterfly; Blue butterflies; Twite; Yellowhammer; Lapwing; Lesser twayblade; and Marsh fern.	+	+	+	The policy requires that adverse environmental effects are minimised. This may go some way to ensuring that actions do not compromise BAP targets. If the mitigation measure suggested as part of policy WDM2 is followed then the effect of this policy will be positive. The policy also does not address restoration to biodiversity specifically although this is mentioned in the supporting text. Mitigation measures The emphasis of MDM2 should be changed from minimisation of harm to enhancement of biodiversity (including of a long term nature through restoration) and this should include reference to development helping to meet targets outlined in BAPs.

Preferred Policy: WDM5: Landfill Development for Residual Waste											
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement					
SA7: To maintain, restore and enhance the character, value and diversity of natural and manmade landscapes.	Protect, restore and enhance the landscape?	The character of the district's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the district. Much of the district's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt. These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford district, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley.	+	+	+	Effects on landscape depend on siting and control of impacts of the waste facility. Criteria are included within the policy to minimise effects on visual and landscape amenity.					
SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 	Around one third of the district is built up. The urban areas of the district comprise Bradford/Shipley/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements. Household waste recycling centres are currently well spread across the settlements in the district. However there are only two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.	+	+	+	The policy requires that the applicant demonstrates that adverse effects are minimised on transport accessibility, capacity and the need to travel.					
SA9: Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?	Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606.	+	+	+	The policy requires that the applicant demonstrates that adverse effects are minimised on transport accessibility, capacity and the need to travel.					
SA10: Encourage a modal shift away from road freight.	• Include actions that would encourage a shift from road freight to rail freight?	Rail access to the district is good, with direct passenger services down the Aire Valley to Leeds and from Ilkley to Leeds. Direct passenger rail links are also available to Manchester and York.	?	?	?	It is not possible to assess whether the policy will lead to the achievement of this SA objective. This is difficult to achieve as transport by road is the principal means currently and sites with easy and cheap access to the rail and waterways network will be relatively rare. If the mitigation measure in WMD2 is included in that policy this will help mitigate the effects of this policy. Mitigation measures More emphasis should be given in Policy WM2 to supporting sites where non-road transport is a possibility.					

Preferred Policy: WDI	M5: Landfill Development fo	r Residual Waste				
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement
SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 	Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses. According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.	+	+	+	A sequential approach is included which requires a focus first on existing sites and then PDL.
SA12: Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	The district has: Fifty-six designated Conservation Areas; Ten historic parks and gardens; Two hundred and two Scheduled Ancient Monuments; One historic battlefield, at Adwalton Moor; and One World Heritage Site at Saltaire.	+	+	+	The specific site criteria require demonstrating that areas of historic importance are protected.
SA13: Improve the quality and range of services available within communities and connections to wider networks.	Improve the accessibility of waste management and treatment services to centres of population?	Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs.	+	+	+	The sequential test criteria should help ensure sites are located in convenient and sustainable locations.
SA14: Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?	The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the district and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the district.	0	0	0	Considered on its own the policy might be seen as encouraging the same approach of managing waste through landfilling. However, the plan is clear through the other policies (and this is reaffirmed in the policy) that Bradford is looking for a step change to move the management of waste up the waste hierarchy.
SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	The district has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports.	+	+	+	Effects on open space and recreation opportunities depend on siting and control of impacts of the waste facility. Criteria are included within the policy to minimise environmental, social or economic effects

Preferred Policy: WDI	Preferred Policy: WDM5: Landfill Development for Residual Waste										
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term	Explanation of assessment and mitigation / enhancement					
SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 	Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in	+	+	+	Effects on people depend on siting and control of impacts of the waste facility. Criteria are included within the policy to minimise environmental, social or economic effects.					
SA17: Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?	Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region. However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March 2010.	+	+	+	New or expanded landfill sites in the district will create more jobs related to this sector. There will also be the need for jobs in restoration and aftercare. By allowing the area of need to extend to the Bradford sub region larger or more facilities may be sited within Bradford District.					
SA18: Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision or waste management capability?	The preferred forecast projections for each waste stream are as follows: Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW.		++	++	The policy allows for proposals for new or expanded landfill developments (under certain criteria) and therefore looks to continue to provide for sufficient residual waste capacity in the future					

Preferred Policy: WDN	Preferred Policy: WDM5: Landfill Development for Residual Waste									
SA Objectives	Appraisal Questions. Will the selection of the site?	Baseline information	Short term	Medium term	Long term Explanation of assessment and mitigation / enhancement					

Summary of the assessment

It is necessary to have such a policy to make adequate provision for residual waste disposal in the future in the District. The criteria included within the policy have resulted in a positive minor impact for the assessment on the majority of objectives including the prudent and efficient use of energy and natural resources and the promotion of renewable energy, climate change mitigation, effects on soil, water, air, landscape, use of PDL, historic assets, open space, quality of life and support of local employment. There are also significant positive impacts in relation to provision of adequate facilities into the future.

Uncertainties remain for the achievement of modal shift from road to rail. It is not possible to assess whether the policy will lead to the achievement of the SA objective. This is difficult to achieve as transport by road is the principal means currently and sites with easy and cheap access to the rail and waterways network will be relatively rare. Therefore it needs to be strongly promoted.

A negative impact has been identified with regard to biodiversity as the policy does not address habitat loss or fragmentation.

Mitigation measures

It would be useful if the policy addressed the effects of sites on habitat loss or fragmentation.

The emphasis of WDM2 should be changed from minimisation of harm to enhancement of biodiversity (including of a long term nature through restoration) and this should include reference to development helping to meet targets outlined in BAPs. More emphasis should be given in Policy WMD4 to supporting sites where non-road transport is a possibility.

Enhancement measures

The policy could go further in encouraging climate adaptation. Vulnerability to climate change, risks from extreme weather events, flooding hotter summers, etc. should be taken into account in the design and sitting of these facilities.

Site Assessments

Please note that where a SA objective to the sites assessment, the cell has been greyed out. Mitigation measures are presented at the end of each matrix.

SA Objectives	Appraisal Questions. Will the selection of the site?	Site	1	Site	11	Site 2	29	Site	56
Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	 Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities? 								
	 Lead to a reduction of the amount of waste that will require treatment? 								
	Minimise any adverse impacts on water resources at all stages of waste management?								
Minimise the growth in waste and increase the amount of waste which is re-used,	Put in place adequate and sustainable treatment facilities?Help the District to meet its recovery and recycling								
recycled and recovered.	targets? Help the authority meet its quota under the LATS?								
	 Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 								
Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 		The site is located close to a stream and has the potential to experience flooding issues. The Environment Agency flood mapping shows that the site is located in Flood Zone 3. Depending on the choice of waste management technology, fuel may be produced for use elsewhere (e.g. pyrolysis oil, electricity from gasification).	+	The site is 2.35ha in size and can incorporate most waste management technologies, and there may be potential recipients nearby of heat and electricity generated by the selected waste management technology. Some of these technologies may produce fuels for use elsewhere (e.g. pyrolysis oil, electricity from gasification).		The site is located close to a stream and has the potential to experience flooding issues. The Environment Agency flood mapping shows that the site is located in Flood Zone 3.	O	There are no surface water features in close proximity to the site, and therefore there is very low flood risk. The nearest surface water features are 2 reservoirs, situated c.700m east and c.700m southeast of the site.

SA Objectives	Appraisal Questions. Will the selection of the site?	Site	1	Site '	11	Site	29	Site 5	56
Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	 Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)? 	•	The entire site is PDL, situated immediately south of Clayton Beck. The nearest AQMA is c.1.2km east of the site. No signs of contamination on site.	++	The entire site is PDL and designated as an employment site. It is currently vacant and unused. There are no signs of contamination on site. There is no AQMA within 500m of the site. The nearest surface water feature is located c.200m south of the site.	0	The site is vacant, brownfield land and there is no sign of contamination on site. It is unlikely that the change in use of the site would result in an adverse effect on soils. There are no groundwater source protection zones within this area, and the nearest surface water feature is Clayton Beck, directly north of the site. Therefore, any development of the site would need to be undertaken in consultation with the EA and in compliance with their Pollution Prevention Guidelines. Should the use of this site change to incorporate a waste management facility, the site is likely to produce dust and noise, plus emissions of NO _x and CO ₂ to the air. It may be possible to minimise the impact on air quality through assessment and mitigation. Stack emissions would be controlled through environmental permitting under the Environmental Permitting (England and Wales) Regulations 2007. The nearest AQMA is c.1.5km east of the site.	0	The site is undeveloped, greenfield land and there is no sign of contamination on site. It is unlikely that the change in use of the site would result in an adverse effect on soils. There are no groundwater source protection zones within this area and no surface water features within 500m of the site. Therefore, development of the site would be unlikely to affect water resources. Should the use of this site change to incorporate a waste management facility, the site is likely to produce dust and noise, plus emissions of NO _x and CO ₂ to the air. It may be possible to minimise the impact on air quality through assessment and mitigation. Stack emissions would be controlled through environmental permitting under the Environmental Permitting (England and Wales) Regulations 2007. There is no AQMA is the area.
To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	?	The site is not designated for nature conservation, and there are no designated sites within 1km of the site. No detail of habitats on site is given.	?	The site is not designated for nature conservation, and there are no designated sites within 1km of the site. No detail of habitats on site is given.	?	The site is not designated for nature conservation, and there are no designated sites within 1km of the site. No detail of habitats on site is given.		There are no nature conservation designations on the site. The nearest designated site is a Bradford Wildlife Area located c.500m to the south. Development of the site, therefore, may pose potential risks to these sites with regard to air quality. No detail of habitats on site is given.
Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	?	The site is an urban, brownfield site, in proximity to a watercourse. There may be opportunity for biodiversity enhancement through development of the site.	?	There may be opportunity for biodiversity enhancement through development of the site.	?	It is unlikely that the redevelopment of this site will contribute to the achievement of BAP targets, unless, through ecological assessment, it was identified that the site contains BAP resources which could be enhanced through the development.	?	It is unlikely that the redevelopment of this site will contribute to the achievement of BAP targets, unless, through ecological assessment, it was identified that the site contains BAP resources which could be enhanced through the development.

SA Objectives	Ap	praisal Questions. Will the selection of the site?	Site '	1	Site 1	11	Site 2	29	Site	56
To maintain, restore and enhance the character, value and diversity of natural and man-made landscapes.	•	Protect, restore and enhance the landscape?	++	Low visibility due to its position at the bottom of a valley	+	No potential landscape and visual impact is noted as significant.	++	The site is in an urban area and would have low visibility due to its position at the bottom of a valley.	-	The site is on the edge of a suburban area, within a mixed residential and industrial area. It is not within the Green Belt. The redevelopment of the site (which may require a chimney) may result in adverse visual effects from neighbouring uses.
Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.		Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems?								
Reduce nuisance caused to communities by waste transport.	-	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?								
Encourage a modal shift away from road freight.	•	Include actions that would encourage a shift from road freight to rail freight?	-	There is no railway line within 2km of the site.	++	The eastern boundary of the site is formed by a railway line, and rail freight facilities are situated c.200m north of the site. Therefore, there is potential for the use of rail freight.	-	There is no railway line within 2km of the site.	-	There is no railway line within 2km of the site.
Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.		Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible?	++	The entire site is PDL. There are no Listed Buildings within 250m of the site.	++	The entire site is PDL. There are no Listed Buildings within 250m of the site.	+	There are no Listed Buildings within 250m of the site.	•	There is one Listed Building c.200m north of the site. North Bierley Cemetery is located directly north-east of the site. The redevelopment of the site may adversely affect the quality of the surrounding built environment but it may be possible to mitigate some of the potential adverse effects.
Avoid, protect and enhance historic assets.	- -	Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas?	+	There are no sites of archaeological or cultural heritage importance in the vicinity of the site. The nearest site is a Conservation Area located c.800m north of the site.	+	There are no sites of archaeological or cultural heritage importance on the site. The nearest site is Bowling Park, a Historic Park and Garden, located approx. 300m east of the site.	O	There are no sites of archaeological or cultural heritage importance in the vicinity of the site. The nearest site is a Historic Park and Garden located c.800m west of the site.	+	There are no sites of archaeological or cultural heritage importance on or within 500m of the site.
Improve the quality and range of services available within communities and connections to wider networks.	-	Improve the accessibility of waste management and treatment services to centres of population?								

SA Objectives	Appraisal Questions. Will the selection of the site?	Site	1	Site	11	Site	29	Site	56
Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?								
Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	-	There are no known cultural, leisure and recreation opportunities on the site. Directly to the north is a local cycle route and directly east is protected recreation open space.	0	The site is not designated open space and the redevelopment of the site will not affect any open space or protected leisure uses. Bowling Park, a Historic Park and Garden, is located approx. 300m east of the site.	-	There are no known cultural, leisure and recreation opportunities on the site. Directly to the north is a local cycle route and directly east is protected recreation open space. A protected playing fields is located c.200m to the north.	-	The site is not designated open space, however, designated urban greenspace is situated directly east of the site, with a protected playing fields located approx. 200m south. A local cycle route passes the north-eastern corner of the site.
Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 								
Support employment in the waste industry for local people.	Include actions that change the number of local people directly employed in skilled jobs in the waste industry?								
Ensure the provision of adequate waste management capacity.	 Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability? 								

SA Objectives	Appraisal Questions. Will the selection of the site Site 1	Site 11	Site 29	Site 56	
	?				

Summary

Site 1: Will have a significant negative effect on climate change vulnerability. The Environment Agency flood mapping shows the site to be located in an area of flood risk equivalent to Flood Zone 3. The site will have significant positive effects on landscape (due to its low visibility) and efficient use of land (the site is previously developed land). The effect on the rest of the SA objectives will be minor negative, minor positive or uncertain. The site is close to some sensitive receptors (a stream, and a cycle path) and there is no railway nearby. The site will therefore not encourage a shift from road freight. The site overall is scored as amber.

Site 11: Will have no significant negative effects. The site will have significant positive effects on efficient use of land (the site is previously developed land, modal shift (as the site can be accessible by rail). The effect on the rest of the SA objectives will be minor positive, uncertain or neutral. There is a railway and rail freight facility within 200m and no nature conservation or heritage designations in the site surrounds. However, there is residential land uses in the vicinity of the site. The site overall is scored as amber.

Site 29: Will have a significant negative effect on climate change vulnerability as the site is in Flood Zone 3. The site will have significant positive, neutral or uncertain. This site is close to some sensitive receptors (a stream, and a cycle path) and there is no railway nearby. The site will therefore not encourage a shift from road freight. The site overall is scored as amber.

Site 56: Will have no significant negative or significant positive effects. However, the site does have a large number of minor negative effects. This site is suburban and Greenfield, therefore development of the site will result in the loss of soil resources. It is located in a mixed residential and industrial suburban area and there is no railway in the site surrounds. The site will therefore not encourage a shift from road freight. The site overall is scored as amber.

Site mitigation measures

All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.

Site 1: Before site development takes place the following effects will need to be investigated and mitigated: flooding issues (as the site is located in Flood Zone 3), the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets), traffic effects (as there is no rail access to the site), effects on the local cycle route and protected recreation area that are near to the site.

Site 11: Before site development takes place the following effects will need to be investigated and mitigated: the potential on the site for habitat fragmentation and habitat enhancement (including helping to achieve BAP targets).

Site 29: Before site development takes place the following effects will need to be investigated and mitigated: flooding issues (as the site is located in Flood Zone 3), the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets), traffic effects (as there is no rail access to the site), effects on the local cycle route and protected playing fields that are near to the site.

Site 56: Before site development takes place the following effects will need to be investigated and mitigated: effects on air quality that may affect the Wildlife Area located c.500m to the south, effects on the residential area near to the site, visual effects of the chimney, traffic effects (as there is no rail access to the site), effects on the cultural heritage (including the listed building north of the site) and North Bierley Cemetery, effects on the local cycle route and protected green space and protected playing field that are near to the site and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets).

SA Objectives	Appraisal Questions. Will the selection of the site?	Site	57	Sites	71-74	Site	92	Site	102
Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.	Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities?								
	Lead to a reduction of the amount of waste that will require treatment?								
	Minimise any adverse impacts on water resources at all stages of waste management?								
Minimise the growth in waste and increase the amount of	 Put in place adequate and sustainable treatment facilities? 								
waste which is re-used, recycled and recovered.	 Help the District to meet its recovery and recycling targets? 								
	Help the authority meet its quota under the LATS?								
	 Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials). 								
Reduce the District's impact on climate change and vulnerability to its effects.	 Reduce the potential for greenhouse gas emissions caused by waste management and reduce vulnerability of waste management facilities to the effects of climate change (including increased flooding)? Encourage the development of renewables and energy efficiency within the waste sector? 	0	There are no surface water features in close proximity to the site, and therefore there is very low flood risk.		The sites are located on the south side of the village of Silsden, in close proximity to the Leeds and Liverpool Canal, to the north. A tributary of the River Aire runs along the sites' western boundary, flowing southwards. The Environment Agency flood mapping shows that sites 72, 73 and 74 are located in Flood Zone 3.	0	The site is located on the east side of Bradford and there are no surface water features within 500m of the site, and therefore there is very low flood risk. The Environment Agency flood mapping does not show any flood risk to the site.	?	The potential use of the site is unknown and therefore potential to release greenhouse gases. According to the Environment Agency flood maps available on their website, this site falls within an area at risk from flooding but which benefits from flood defences. This site should not drain into the River Aire which is adjacent to the site in order to avoid exacerbating flooding issue on the River Aire.

SA Objectives	Appraisal Questions. Will the selection of the site?	Site 57	Sites 71-74	Site 92	Site 102
Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	 Change the amount of pollution and nuisance caused by waste management? Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)? 	O The site is vacant, brownfiel land and there is no sign of contamination on site. It is unlikely that the change in u of the site would result in an adverse effect on soils. There are no groundwater source protection zones with this area and no surface was features within 500m of the site. Therefore, any development of the site wou need to be undertaken in consultation with the EA and compliance with their Pollutin Prevention Guidelines. Should the use of this site change to incorporate a was management facility, the site likely to produce dust and noise, plus emissions of NO and CO ₂ to the air. It may be possible to minimise the impact on air quality through assessment and mitigation. Stack emissions would be controlled through environmental permitting un the Environmental Permitting (England and Wales) Regulations 2007. There is a AQMA is the area.	unlikely that the change in use of the site would result in an adverse effect on soils. There are no groundwater source protection zones within this area, and there are no surface water features in close proximity to the site. The site is large enough to accommodate the full range of waste management technologies. Should the use of this site change to incorporate a waste management facility, the site is likely to produce dust and noise, plus emissions of NO _x and CO ₂ to the air. It may be possible to minimise the impact on air quality through assessment and mitigation. Stack emissions would be controlled through environmental permitting under the Environmental Permitting (England and Wales) Regulations 2007. There are no AQMAs in the Silsden area.		The site is adjacent to the River Aire which has relatively good quality and therefore could pose a risk to water quality through construction and potentially in operation. The site should not drain into the River Aire. There are not AQMA within the Keighley area. The site is PDL and therefore it is unlikely that the change in use of the site would result in an adverse effect on soils. There are no groundwater source protection zones within this area.
To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.	 Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, RIGS or other designated sites? Include actions that will cause habitat loss or fragmentation or restoration, expansion or enhancement of wildlife networks or habitats? 	There are no nature conservation designations o the site. The nearest designated site a Bradford Wildlife Area located immediately south o the site. Development of the site, therefore, may pose potential risks to these sites with regard to air quality. No detail of habitats on site given.	landscape or wildlife interest, directly north-east of the site, which follows the line of the Leeds and Liverpool Canal. Development of the site, therefore, may pose potential risks to this site with regard to air quality	? There are no nature conservation designations on or within 1km of the site. No detail of habitats on site is given.	There are no nature conservation designations on the site and the site is currently in use as a household waste recycling centre. Keighley does not lie within close proximity to any internationally designated sites. There is a Bradford Wildlife Area across the river from this site, approximately 100m from the site on the other side of the River Aire. Whether the redevelopment of this site could affect the wildlife site may need to be assessed and mitigation put in place, particularly during construction. The redevelopment of the site is unlikely to result in enhancement of wildlife networks or habitats. It is also unlikely that the redevelopment of the site would result in the fragmentation of habitats.

SA Objectives	Appraisal Questions. Will the selection of the site?	Site	57	Sites	s 71-74	Site	92	Site	102
Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	 Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? 	?	It is unlikely that the redevelopment of this site will contribute to the achievement of BAP targets, unless, through ecological assessment, it was identified that the site contains BAP resources which could be enhanced through the development.	?	It is unlikely that the redevelopment of this site will contribute to the achievement of BAP targets, unless, through ecological assessment, it was identified that the site contains BAP resources which could be enhanced through the development.	?	It is unlikely that the redevelopment of this site will contribute to the achievement of BAP targets, unless, through ecological assessment, it was identified that the site contains BAP resources which could be enhanced through the development. It may have a negative effect if pipistrelle bats are found to be roosting in the existing buildings on site, and if these will require demolition, a full bat survey should be carried out prior to their demolition.	?	It is unlikely that the redevelopment of this site will contribute to the achievement of BAP targets, unless, through ecological assessment, it was identified that the site contains BAP resources which could be enhanced through the development. Being located on the banks of the River Aire, there could be potential for the site to be enhanced for BAP species such as otter and for the BAP habitat River Corridors.
To maintain, restore and enhance the character, value and diversity of natural and man-made landscapes.	Protect, restore and enhance the landscape?	+	The site is in a suburban, industrial area. It is not within the Green Belt. The redevelopment of the site is unlikely to affect the existing landscape character of the area or result in visual effects on neighbouring uses.	-	The site is in an urban industrial and residential area. It is not within the Green Belt. However the large size of the site and the likely scale of development would likely have an adverse visual impact on the residential uses o the north. The redevelopment of the site is unlikely to affect the existing landscape character of the area or result in visual effects on neighbouring uses.	•	The site is within an urban environment and currently in use as a council depot. It is considered unlikely that the redevelopment of the site would result in a landscape impact. Some mitigation for visual impact may be required for localised receptors.	?	The site is currently in use as a council depot and is located within an existing employment area. The redevelopment of the site for a different waste management use is unlikely to affect the existing landscape character of the area or result in visual effects on neighbouring uses, however, this may depend on the type of waste management site the site were changed to. There are also some sensitive sites across the river from this site, including a Conservation Area
Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development.	 Include actions that change mileage travelled per tonne of waste? Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems? 								
Reduce nuisance caused to communities by waste transport.	Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance?								

SA Objectives	Appraisal Questions. Will the selection of the site?	Site	57	Sites	371-74	Site	92	Site '	102
Encourage a modal shift away from road freight.	 Include actions that would encourage a shift from road freight to rail freight? 	-	There is a railway line located c.1.5km north of the site, therefore, there is limited potential for the use of rail freight.	+	There is a railway line and rail freight facility located c.1km south of the site. Therefore, there is some potential for the use of rail freight.	0	There is a railway line located 300m north of the site, therefore, there is limited potential for the use of rail freight.		The site is not near to a railway line, although a railway line does pass through Keighley.
Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	 Reduce the impact of waste management on the quality of the built environment? Maximise use of previously developed land where possible? 		There are three Listed Buildings c.250m south-west and c.250m north-west of the site. The redevelopment of the site may adversely affect the quality of the surrounding built environment but it may be possible to mitigate some of the potential adverse effects.		There are many Listed Buildings in central Silsden. The nearest to the site is c.200m north. The redevelopment of the site may adversely affect the quality of the surrounding built environment but it may be possible to mitigate some of the potential adverse effects.	-	There are two Listed Buildings c.500m west of the site. The redevelopment of the site may adversely affect the quality of the surrounding built environment but it may be possible to mitigate some of the potential adverse effects.	?	The site is PDL and the surrounding uses are mainly employment uses. The use of the site for a different waste management use is not likely to have an impact on the local built environment. However, this may depend on the proposed use of the site and landscape and visual assessment and appropriate mitigation may be required.
Avoid, protect and enhance historic assets.	 Preserve and where relevant enhance sites of built and archaeological heritage and their settings? Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? 	•	There are no sites of archaeological or cultural heritage importance on or within 500m of the site. The nearest site is Bowling Park, a Historic Park and Garden, located approx. 700m south-east of the site.		There are no sites of archaeological or cultural heritage importance on the site, however, a Conservation Area is located directly north of the site. A new chimney on this site may adversely affect the setting of the Conservation Area. Assessment and mitigation would be required.	+	There are no sites of archaeological or cultural heritage importance on or within 500m of the site.	?	A listed building lies approx. 300m to the south of the site and there is a Conservation Area across the river from the site. The redevelopment of the site may adversely affect the setting of the Conservation Area, although it is unknown which type of waste technology would be proposed on this site. Assessment and mitigation would be required with regard to the Conservation Area and, potentially, the Listed Buildings.
Improve the quality and range of services available within communities and connections to wider networks.	Improve the accessibility of waste management and treatment services to centres of population?								
Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?								

SA Objectives	Appraisal Questions. Will the selection of the site?	Site	57	Sites	s 71-74	Site	92	Site 1	102
Avoid impacts on open space, cultural, leisure and recreation opportunities	Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?	-	The site is not designated open space, however, an area designated for new open space provision is situated directly south of the site, with a protected playing fields located beyond it.	0	The site is not designated open space, however, a protected playing fields is situated c. 150m south-west of the site. A local cycle route runs along the northern site boundary.	0	The site is not designated open space, however, a protected playing fields is situated c. 300m south of the site. A local cycle route runs along the southern site boundary.	+	No constraints
Reduce the impact of the waste industry on people's safety and security, health and quality of life	 Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? 								
Support employment in the waste industry for local people.	• Include actions that change the number of local people directly employed in skilled jobs in the waste industry?								
Ensure the provision of adequate waste management capacity.	Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?								

SA Objectives	Appraisal Questions. Will the selection of the site	Site 57	Sites 71-74	Site 92	Site 102
	?				

Summary

Site 57: The site has no significant negative or significant positive effects. There are no nature conservation designations on the site. The effect on the rest of the SA objectives will be minor negative, minor positive, neutral or uncertain. This site is brownfield and is close to some sensitive receptors - a Bradford Wildlife Area lies immediately north-east and, depending on the type of waste management technology selected, development of the site could have adverse air quality impacts on this wildlife site. The site overall is scored as amber.

Sites 71-74: These sites have been grouped together in the site assessment. The site will have a significant negative effect on climate change vulnerability. The sites are located predominantly in Environment Agency Flood Zone 3. Site 71 is outside of a flood zone but is approximately 20m from flood zone 2 and flood risk could potentially be an issue in the future with climate change. The site will have no significant positive effects. The rest of the effects are neutral, uncertain, minor positive or minor negative. The size of the site and, therefore, the likely scale of development would be likely to have a significant adverse effect on residential uses to the north, in Silsden. Also, a Conservation Area lies directly north of the site and development of the site would be likely to affect its setting. The site overall is scored as amber.

Site 92: The site has no significant negative or significant positive effect. The rest of the effects are neutral, uncertain, minor negative or minor positive. The only negative effect identified is due to two listed buildings that are c.500m west of the site. The site overall is scored as green.

Site 102: The site has two significant negative effects and no significant positive effects. The significant negative effects are related to location near to a residential area and the River Aire; and the lack of rail access. Runoff with need to be controlled on this site as it is next to a washlands area and the River Aire and the site should not increase flood risk elsewhere in the catchment. The site is within an area at risk from flooding but benefits from flood defences. Run-off will also need to be controlled to avoid water pollution in the river. The other effects are minor negative, uncertain or minor positive. There is a Bradford Wildlife Area across the river from this site, approximately 100m away on the other side of the River Aire. Whether the redevelopment of this site could affect the wildlife site may need to be assessed and mitigation put in place, particularly during construction. The site is not near to a railway line and therefore will not help to shift any freight from roads. The site overall is scored as amber.

Site mitigation measures

All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.

Site 57: Before site development takes place the following effects in particular will need to be investigated and mitigated: effects on air quality that may affect the Wildlife Area located immediately south of the site, traffic effects (as the site does not have rail access), effects on the two listed buildings south-west and north-west of the site. The effect on the surrounding built environment, the effect on the area designated for new open space provision which is situated directly south of the site and the protected playing fields located beyond it, and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets).

Sites 71-74: Before site development takes place the following effects in particular will need to be investigated and mitigated: effects on air quality that may affect the Wildlife Area located directly north-east of the site, which follows the line of the Leeds and Liverpool Canal, effects on nearby residential areas (including adverse visual impacts), the effects on the quality of the surrounding built environment (including the effect of the chimney on the Conservation Area located directly to the north of the site, and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets).

Site 92: Before site development takes place the following effects in particular will need to be investigated and mitigated: effects on the two Listed Buildings west of the site, the effect on the quality of the surrounding built environment and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets).

Site 102: Before site development takes place the following effects in particular will need to be investigated and mitigated: The effect on the River Aire, the effects on the residential area to the south east of the site, the effect on the Wildlife Area across the river from this site, traffic effects (as the site is not near to a railway line), effects on the Listed Building which is to the south of the site and effects on the nearby Conservation Area, and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets).