





Bradford Waste Management DPD Publication Draft
Sustainability Appraisal Report

Prepared for:
Bradford Metropolitan District Council

Prepared by:
**ENVIRON
UK**

Date:
March 2013

Project or Issue Number:
64C11620

Contract No:	64C11620
Issue:	2
Author (signature):	Emma Jones 
Project Manager/Director (signature):	Jo Curran 
Date:	March 2013

This report has been prepared by ENVIRON with all reasonable skill, care and diligence, and taking account of the Services and the Terms agreed between ENVIRON and the Client. This report is confidential to the client, and ENVIRON accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by ENVIRON beforehand. Any such party relies upon the report at their own risk.

ENVIRON disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the Services.

Version Control Record				
Issue	Description of Status	Date	Reviewer Initials	Author Initials
A	First Draft	08/02/2013	JC	EJ
B	Second Draft	21/02/13	JC	EJ
1	Report to GVA	28/02/2013	JC	EJ
2	Report to BMDC	12/03/2013	JC	EJ

Contents

1	Introduction	1
1.1	Background	1
1.2	Habitat Regulations Assessment	1
1.3	Structure of this Report	2
2	Bradford Waste Management DPD Publication Draft	4
2.1	Introduction	4
2.2	The content of the plan	4
2.3	The vision and objectives of the plan	4
3	Methodology of the SA	6
3.1	Introduction	6
3.2	Stage A: Scoping	7
3.3	Stage B: Options assessment	7
3.4	Stage B: Assessment of the draft plan (Preferred Approach)	7
3.5	Stage C and Stage D (Preferred Approach)	9
3.6	Stage C and Stage D (additional proposed sites)	9
3.7	Stage C and Stage D (the Publication Draft) – this stage	10
3.8	Stage E: Monitoring	10
3.9	When the SA was carried out	10
3.10	Who was consulted on the SA, when and how	11
4	Relationship with Other Plans and Programmes and the Sustainability Baseline	12
4.1	Relationship with other plans and programmes	12
4.2	Sustainability baseline and issues	13
4.3	The Sustainability Appraisal Framework	13
5	Options Assessment and the Reasons for Selecting Alternative Policy Approaches	28
5.1	Introduction	28
5.2	Selecting the policy options	28
5.3	Assessing the sustainability effects of the policy options	30
5.4	The reasons for selecting the policy approaches	30
6	Options Assessment and the Reasons for Selecting Alternative Sites	37
6.1	Developing the site options	37
6.2	Step 1: Identifying the sites	37
6.3	Assessing the sustainability effects of the site options	38
6.4	The reasons for selecting the sites	42
7	Results of the Appraisal	47
7.1	Introduction	47
7.2	Significant effects identified	47
7.3	Cumulative assessment	63
8	Monitoring	67

1 Introduction

1.1 Background

A Sustainability Appraisal (SA) of the Bradford Waste Management Development Plan Document (DPD) Publication Draft has been undertaken in accordance with the requirements of the SEA Regulations (*Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004*) and applicable government guidance.

The SA is being carried out by consultants from ENVIRON UK, who are experienced in appraisal of spatial planning documents.

This SA report updates the published assessment that was carried out at the last stage of the DPD development in 2010 (the Preferred Approach report).

1.2 Habitat Regulations Assessment

A Habitats Regulations Assessment (HRA) of the Bradford Waste Management DPD has been undertaken. The Bradford Waste Management DPD Preferred Approach (January 2010) and the Revised Chapter 5 (October 2011) were screened for Likely Significant Effects (LSEs) and assessed as part of the HRA during 2012. The reports relating to the assessment can be accessed here: [\[URL to be provided by Bradford Council\]](#)

The Bradford Waste Management DPD Publication Draft (2013) has been subsequently screened for LSEs in February 2013 and a HRA Addendum report prepared which can be accessed here: [\[URL to be provided by Bradford Council\]](#)

The HRA has concluded that an adverse effect could occur on the component site of the South Pennine Moors SPA/SAC (locally called Rombald's Moor) in connection with the inclusion of 'Site 78 – Aire Valley Road, Worth Village, Keighley' within Policy W6: Proposed Waste Site Allocations. This site is identified within Policy W6 as being suitable for waste management facilities and the supporting text identifies it as a potential location for a 'Pyrolysis and Gasification Facility'. The supporting text, which provides details about this site, does not refer to the HRA or AA and the potential for combustion processes on this site to lead to an adverse effect on nearby European designated sites, which was identified following an air quality assessment, the findings of which are presented within *Bradford Metropolitan District Council Waste Management DPD Habitats Regulations Assessment (ENVIRON UK Ltd, November 2012)*.

It has therefore been concluded in the HRA that Site 78 may not be suitable for a waste management use which uses combustion processes and it has been recommended that the plan is amended to reflect that this use should not be identified as being suitable for Site 78.

Alternative sites within the Plan Area should instead be identified for waste management use using combustion process, if it is necessary to provide such a facility within the District.

As the Bradford Waste Management DPD Publication draft is currently worded, it cannot be concluded that an adverse effect on European designated sites will not occur as a result of the plan.

1.3 Structure of this Report

The sustainability appraisal process meets the requirements of the Planning and Compulsory Purchase Act 2004 and the SEA Regulations (Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004). This SA Report includes the required elements of an Environmental Report as required by the SEA Regulations. Table 1.1 signposts the relevant sections of the SA Report that represent the required contents of the Environmental Report.

Table 1.1: Contents of the SA Report	
SEA Regulations – requirement for an Environmental Report	Where covered in the SA Report
Preparation of an Environmental Report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated.	The whole report does this
An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes.	The contents and main objectives of the plan are presented in Section 2. The plan's relationship to other plans and programmes is addressed in Section 4.
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme and the environmental characteristics of areas likely to be significantly affected.	Section 4
Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	Section 4
The environmental protection objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.	Section 4
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects).	Sections 5, 6 and 7 (the definition of significance is addressed in section 3.4)
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.	Section 7
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Sections 5, 6 and 3. Difficulties are addressed in section 3.4.1

SEA Regulations – requirement for an Environmental Report	Where covered in the SA Report
A description of measures envisaged concerning monitoring in accordance with Article 10.	Section 8
A non-technical summary of the information provided under the above headings.	See separate Non-Technical Summary
The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Art. 5.2).	The whole report does this.
<p>Consultation</p> <p>Authorities with environmental responsibility and the public shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying Environmental Report before the adoption of the plan or programme (Art. 6.1, 6.2).</p>	The public and environmental authorities were given 10 weeks to comment on the Preferred Approach Waste Management DPD and SA Report. This is an amended version of that SA report which assesses the publication draft of the plan. This will be consulted on for a further 6 weeks.

This chapter provides an introduction to the plan and related SA process. The rest of this report is structured as follows:

Section 2 describes the content and main objectives of the Waste Management DPD;

Section 3 outlines the methodology used in the SA;

Section 4 describes the plan's relationship with other plans, programmes and environmental / sustainability objectives and the sustainability baseline;

Sections 5 and 6 set out the results of the appraisal of options (policy options and site options respectively) considered in the development of the Waste Management DPD;

Section 7 sets out the results of the appraisal of the changes to the Waste Management DPD (including mitigation measures);

Section 8 outlines initial proposals for monitoring the sustainability effects of the options; and

Section 9 outlines the next steps in the planning process.

2 Bradford Waste Management DPD Publication Draft

2.1 Introduction

Bradford Metropolitan District Council's planning policies relating to waste management are currently contained within the Replacement Unitary Development Plan (2005) (RUDP). Under the requirements imposed by the Planning and Compulsory Purchase Act (2004) local authorities are required to replace UDP's with a Local Plan. The Local Plan for Bradford will comprise a series of detailed Development Plan Documents to guide development within the District; including waste facilities.

The Council have previously consulted on the waste management policies to be included within the Local Plan Core Strategy, which will set out the strategic policies for the District over the plan period. This included the testing of issues and options and identification of a preferred Core Strategy policy approach to the scale of waste arisings, the nature of waste arisings, and associated spatial dynamics (including cross-boundary considerations).

The purpose of the Waste Management DPD is to expand on the Core Strategy relating specifically to waste management.

2.2 The content of the plan

The Waste Management DPD is an important tool in ensuring that the District has sufficient and appropriate waste infrastructure to deliver established aspirations for self-sufficiency in waste management where appropriate. It outlines the Council's strategy for the effective management of waste arisings generated within the District over the plan period including:

- Mechanisms for identifying land suitable for waste management facilities in the District over the plan period, including identification of sufficient land relative to forecast waste arisings;
- Policies and guidance to be used by the Council when determining planning applications for waste management-related developments; and
- Sub-regional waste management considerations based on consultation with neighbouring authorities in accordance with the Duty to Co-operate.

2.3 The vision and objectives of the plan

The vision of the plan is outlined as follows:

Bradford needs to take responsibility for the waste it generates, undertaking a step-change in the way it manages its waste, through more sustainable waste management, moving the management of waste up the waste hierarchy of: prevention; preparing for re-use; recycling; other recovery and only disposing of waste as a last resort. We aspire to manage the waste we generate at the nearest appropriate facilities, and will put in place the necessary structures and systems to enable this to happen including the promotion of a range of technologies and cross-boundary working where appropriate.

The vision is supported by five waste management objectives, which have been developed giving clear regard to the requirements of European and established national policy guidance and best practice including the Government Review on Waste, PPS10 and the policy embedded within the Yorkshire and Humber Plan (RSS) which remains the most current and relevant regional position on waste management. The five waste management objectives for Bradford District, which should be read collectively, are:

- **Objective 1:** To be more self-sufficient in managing our own waste where appropriate, through maximising opportunities for waste reduction and increasing the amounts of waste we re-use, recycle, compost and recover meeting national and regional targets over the period to 2026, but also working with appropriate waste authorities who may manage Bradford Waste arisings within their District, therefore ensuring the best environmental solution to waste management;
- **Objective 2:** To minimise the amount of residual waste sent on to landfill sites within and outside Bradford District as appropriate and to support the movement of waste up the waste hierarchy;
- **Objective 3:** To ensure that expansions to existing facilities and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects the District's environmental assets and safeguards human health;
- **Objective 4:** To support the use of waste as a raw material / energy source for local industry and communities both existing and new. Bradford Council supports the production of waste derived fuels; and
- **Objective 5:** To work in collaboration with appropriate local authorities and waste industry operators to ensure that sub-regional waste (and if necessary beyond the sub-region) issues are effectively considered and planned for in accordance with the duty to co-operate. Cross boundary issues including the movement of waste and locating of facilities near to source must be managed and planned for collectively where possible.

3 Methodology of the SA

3.1 Introduction

The purpose of the SA is to advise Bradford Metropolitan District Council of the sustainability effects of the Waste Management DPD Publication Draft.

The SA has a number of set stages which are defined in Table 3.1.

Table 3.1: SA Stages	
SA Stage	Purpose of the SA Stage
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope	
Identifying other relevant policies, plans and programmes and sustainability objectives. Collecting baseline information. Identifying sustainability issues and problems. Developing the SA framework. Producing Scoping Report and consulting on the scope of the SA.	To document how the plan is affected by outside factors and suggest ideas for how any constraints can be addressed. To provide an evidence base for sustainability issues, effects prediction and monitoring. To help focus the SA and streamline the subsequent stages, including baseline information analysis, setting of the SA Framework, prediction of effects and monitoring. To provide a means by which the sustainability of the plan can be appraised. To consult with statutory bodies with social, environmental, or economic responsibilities to ensure the appraisal covers the key sustainability issues.
Stage B: Developing and refining options and assessing effects	
Developing and testing the DPD options. Testing the draft plan.	To assist in the development and refinement of the options, by identifying potential sustainability effects of options. To assess the significant effects of the draft plan.
Stage C: Preparing the SA Report	
Preparing the Environmental Report	To present the predicted environmental effects of the plan or programme, including alternatives, in a form suitable for public consultation and use by decision-makers.
Stage D: Stage D: Consultation on the preferred options and SA Report	
Consulting the public and environmental bodies on the draft plan and the SA Report Assessing significant changes Making decisions and providing information (SA adoption statement)	To give consultees an opportunity to express their opinions on the findings of the SA Report and to use it as a reference point when commenting on the plan. At the Publication Draft Stage (this stage): To ensure that the sustainability implications of any significant changes to the draft plan are assessed and taken into account. After the plan is adopted: To provide information on how the SA Report and consultees' opinions were taken into account in deciding the final form of the plan to be adopted.
Stage E: Monitoring the significant effects	
Developing aims and methods for monitoring Responding to adverse effects	To track the effects of the plan to show whether they are as predicted and to help identify unforeseen adverse effects To prepare appropriate responses where adverse effects are

	identified as part of the monitoring.
--	---------------------------------------

3.2 Stage A: Scoping

A Scoping Report was first published in July 2007 and a full consultation exercise was undertaken at this time. The Scoping Report included an SA Framework based on the Framework developed for the SA of the LDF Core Strategy DPD which has been revised so that the objectives and appraisal questions within it are relevant to the appraisal of a waste management plan.

A second Scoping Report was prepared in December 2008 following the consultation on the original version which took into account the responses from consultees. The SA Framework was changed in response to consultation comments and the second Scoping Report was also subject to another round of consultation.

The revised SA framework that was published within the second Scoping Report has been used to test the plan options, preferred policies and this Publication Draft of the Plan. The revised SA Framework is presented in Section 4.3.

3.3 Stage B: Options assessment

The purpose of the SA is to appraise the social, environmental and economic effects of strategies and policies from the outset of the plan preparation process. The SA is a tool used in ensuring that decisions are made that meet the requirements of sustainable development. The integration of sustainability into the plan starts formally at the stage of issues and options. In keeping with SA guidance, the effects of the strategic options were assessed in broad terms with the aim of assisting in the selection of the preferred approach.

The alternative options for the DPD were set out in a document called the Bradford Waste Management DPD Issues and Options Paper, which was published in November 2009. This document included both site and policy options and both of these elements were subject to SA. Further work was undertaken on alternative site assessment in 2011. For further details please see Section 5 of this report.

3.4 Stage B: Assessment of the draft plan (Preferred Approach)

The purpose of this stage of the SA is to appraise the social, environmental and economic effects of the plan. The SA is a tool used in ensuring that decisions are made that meet the requirements of sustainable development. In order to adhere to the SEA regulations where relevant (and possible to assess) the following types of effects have been identified - short, medium and long term effects, permanent and temporary effects, positive and negative effects and secondary, cumulative and synergistic effects.

The plan was assessed using appraisal matrices. Mitigation and recommendations were included within the appraisal matrices. The following policies were assessed:

- Preferred Policy W1: Vision and Waste Objectives;
- Preferred Policy W2: Cross Boundary Working;
- Preferred Policy W3: Bradford's Approach to Future Waste Arisings;
- Preferred Policy W4: Waste Management Sites in Bradford District;
- Preferred Policy W5: Location of Waste Management Facilities and Sites;
- Preferred Policy W6: MSW and C&I Waste Site Assessment;
- Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste;

- Preferred Policy W8: Agricultural Waste;
- Preferred Policy W9: Hazardous Waste;
- Preferred Policy W10: Sites for Residual Waste;
- Preferred Policy WDM1: Unallocated Sites;
- Preferred Policy WDM 2: Assessing All Applications for New, Expanded and Residual Waste Management;
- Preferred Policy WDM3: Applications Resulting in the Loss of a Proposed or Existing Waste Management Facility;
- Preferred Policy WDM4: Waste Management within Development; and
- Preferred Policy WDM5: Landfill Development for Residual Waste.

Each preferred site was also assessed.

3.4.1 Assumptions made and difficulties encountered

The purpose of this work is to assess the sustainability implications of any significant changes to the draft plan. SA relies on expert judgement, which is guided by knowledge of the likely impacts of the plan, the baseline data available and responses and information provided by consultees and other stakeholders. The assessment has been carried out and reported using an expert, judgement-led qualitative assessment. A 'precautionary approach' is taken, especially with qualitative judgements.

The SEA Regulations state that effects assessment should include assessment of secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects. At this strategic level the information is often not available to assess to this level of detail. However, where information is available on the likelihood of different types of impacts this has been included in the results.

3.4.2 Defining significance

The SEA Regulations require that only those impacts regarded as significant are to be identified, assessed, mitigated and monitored. However, in practice, especially at a strategic level, significance can be difficult to define. The approach that has been taken in defining significance is as follows:

- The careful definition of the SA framework to ensure that it focuses on only those issues that have been determined to be potentially significant in the District and Sub Region; and
- When determining how likely the plan is to support the achievement of the SA objectives (and therefore be a significant effect) the following factors have been considered:
 - Characteristics of the effects; and
 - The sensitivity of the receptors involved.

In order to make the assignment of significance clearer to readers we have employed a key set out in Table 3.2.

Score	Description	Symbol
Significant positive impact	The option / plan achieves all of the applicable SEA questions and has a positive effect with relation to characteristics of the effect and the sensitivity of the receptors	++
Minor positive impact	The option / plan achieves some of the SEA questions and has a positive effect with relation to characteristics of the effect and the sensitivity of the receptors	+
Neutral	The option / plan does not have an effect on the achievement of the SEA Objective or SEA questions	0
Minor negative impact	The option / plan conflicts with some of the SEA questions and has a negative effect with relation to characteristics of the effect and the sensitivity of the receptors	-
Significant negative impact	The option / plan conflicts with all of the applicable SEA questions and has a negative effect with relation to characteristics of the effect and the sensitivity of the receptors. In addition the future baseline indicates a worsening trend in the absence of intervention	--
Uncertain	It is unclear whether there is the potential for a negative or positive effect on the SEA Objective	?

3.5 Stage C and Stage D (Preferred Approach)

An SA report was published in 2010 and was consulted on at the beginning of 2011. It outlined the significant effects on the environment, social and economic factors of the Preferred Approach Waste Management DPD. It outlined the reasons for selecting the options dealt with and the measures envisaged to prevent, reduce and as fully as possible offset any significant effects of implementing the Preferred Approach Waste Management DPD.

The SA Report was published for consultation alongside the Preferred Approach Waste Management DPD to demonstrate the significant sustainability effects of each of the options considered in developing the draft plan and the effects of the Preferred Approach Waste Management DPD itself. The purpose of the consultation was to provide the statutory environmental bodies and other interested parties the opportunity to express their opinion on the SA Report. It also enables them to use the information within the SA Report to guide their deliberations on the Preferred Approach Waste Management DPD. The SA team have been informed that no consultation comments were received on the SA report.

3.6 Stage C and Stage D (additional proposed sites)

In January 2011, the Council published the Waste Management DPD: Preferred Approach for public consultation, for a period of 10 weeks. The Council received over 300 formal representations on the document and a significant number of comments were related to the proposed shortlisted sites. The Council took account of the comments on the site assessment methodology and proposed a number of changes. It then re-assessed all the sites again including the new sites put to the Council as part of the preferred approach consultation.

This resulted in an amended short list of sites retaining some sites previously proposed, but also proposing some alternate sites. The addition of new alternative sites was considered to be a significant change and these sites were therefore subject to further SA. A number of new alternative sites were subject to SA and the results were published in a report entitled *Bradford Local Development Framework Waste Development Plan Document. Sustainability Appraisal: Supplement to the SA Report* (October, 2011).

3.7 Stage C and Stage D (the Publication Draft) – this stage

The purpose of this SA report is to ensure that the sustainability implications of changes to the plan are assessed and taken into account. Each policy change has been analysed and appraisal matrices have been updated. Annex C shows these updated appraisal matrices. The appraisal matrices show the assessment that was carried out at the previous plan stage (Preferred Approach Waste DPD) and the implications to the SA of any changes that have been made to each policy. Mitigation and enhancement measures that are still outstanding are also included in the matrices.

3.8 Stage E: Monitoring

Please see Section 8 for further details on monitoring.

3.9 When the SA was carried out

The SA has been carried out in parallel with work on the Waste Management DPD. ENVIRON UK Ltd consultants have undertaken the SA from the start of the SA process, in close contact with the plan authors. The following tasks have been undertaken to date as a part of the SA:

- Scoping: Scoping Report (original (May 2007) and revised (December 2008) versions) The most recent Scoping Report (2008) is available via:
http://www.bradford.gov.uk/NR/rdonlyres/E3C13595-293E-422E-B0E3-E39E8DE58143/0/WasteDPD_Dec08.pdf;
- Review of first draft site selection criteria and provision of recommendations to the plan authors for amendment of the criteria (2009);
- Assessment of policy options presented in the Issues and Options document dated November 2009: internal report to the plan authors on the methodology and findings of the SA of options produced in May 2010. I think we need to make this report public and put it on the internet. It was an internal report so is not on the net as the moment.
- Review of 56 short listed potential waste management sites provided to the plan authors to inform their site selection process;
- Assessment of the sites and policies presented within the Preferred Approach Waste Management Plan DPD: SA Report prepared in June and July 2010 available via:
http://www.bradford.gov.uk/bmdc/the_environment/planning_service/local_development_framework/Preferred_Approach_January_April_2011;
- Assessment of additional proposed sites following consultation: Sustainability Appraisal: Supplement to the SA Report (October, 2011) available via
http://www.bradford.gov.uk/bmdc/Consultations/Revised_Chapter_5; and
- Assessment of the sites and policies presented within the Publication Draft DPD: Amended SA report (this report) prepared in February 2013.

3.10 Who was consulted on the SA, when and how

Statutory consultees were consulted twice on the scope of the SA, during 2007 and 2009.

The Preferred Approach SA Report (published alongside the Preferred Approach Waste Management DPD) was sent (electronically) to the statutory consultee bodies (English Heritage, Environment Agency and Natural England) at the Preferred Approach stage for comment / advice and in order to inform their deliberations on the Preferred Approach Waste Management DPD. The SA team have been informed that no consultation comments were received on the SA.

This SA report will also be subject to consultation with the statutory consultees and others.

4 Relationship with Other Plans and Programmes and the Sustainability Baseline

4.1 Relationship with other plans and programmes

The purpose of reviewing other plans, policies and programmes is to set out factors that might influence preparation of the Waste DPD and to identify potential inconsistencies and constraints so that these can be addressed by the plan. The SEA Directive specifically requires environmental protection objectives established at international, European Community and national levels to be taken into account.

A number of plans, policies and programmes have been reviewed in the course of preparing the Core Strategy SA Scoping Report and an in depth review of plans and programmes has been undertaken especially at the local level. However, it was felt that due to the key influences on waste planning from the international, national and regional level that a more comprehensive policy review needed to be undertaken which focused on waste policy. Please see Annex A (of this report) for the results of this waste specific policy review undertaken for the Waste DPD. For a full review of the other local plans and programmes that were reviewed, readers should refer to Appendix 3 of the Core Strategy SA Scoping Report.

A small number of plans and policies have changed since the previous policy review and these have been reviewed in Annex A. The following new plans / legislation have been reviewed:

- Waste Framework Directive (2008/98/EC);
- Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE);
- A Thematic Strategy on the Prevention and Recycling of Waste Update Report (2011);
- Government Review of Waste Policy in England 2011; and
- UK Packaging waste recovery and recycling targets for 2013-17 (set in the Budget).

Some of the key sustainable development messages coming out of the review of plans, policies and programmes are:

- Authorities should establish a network of disposal facilities (Waste Framework Directive);
- Ensure natural resources are used efficiently and waste is minimised, reused or recycled. For example Waste Strategy 2007 outlines the following targets:
 - Higher national targets for re-use, recycling and composting of household waste – at least 40% by 2010, 45% by 2015 and 50% by 2020.
 - Setting national targets for the recovery of municipal waste – 53% by 2010, 67% by 2015 and 75% by 2020.
 - Reducing the amount of commercial and industrial waste going to landfill by at least 20% by 2010 compared to 2004.
- Reduce waste going to landfill. The Waste and Emissions Trading Act 2003 (Amendment) Regulations 2011 require that by 2013 biodegradable municipal waste disposed to landfill should be reduced to 50% of that produced in 1995 (and to 35% by 2020);

- Reduce and avoidance nuisance associated with waste management (Waste Framework Directive); and
- Reduce CO₂ emissions (Waste Strategy, 2007).

4.2 Sustainability baseline and issues

Table 4.1 presents a summary of baseline data and the likely evolution of the baseline in the future, without the Waste Management DPD. The likely evolution of the baseline has been extrapolated using available information, such as that relating to trends and information provided by Bradford Metropolitan District Council.

4.3 The Sustainability Appraisal Framework

The SA Framework is presented in Table 4.2.

SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
<p>Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.</p>	<p>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.</p> <p>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.</p>	<p>It is assumed that energy efficiency in domestic consumption will continue to improve each year without the plan, due to the legislative controls and targets that are currently in place. However, waste management can influence energy use either through increasing or decreasing energy consumption and therefore it is difficult to predict the future baseline environment with regards to carbon dioxide emissions without the Waste Management DPD. The Waste Management DPD could be a mechanism to help the achievement of the energy efficiency target.</p> <p>There are no waste to energy technologies which can be described as purely renewable energy technologies but some, such as anaerobic digestion of agricultural waste, are considered to be low carbon. Without the Waste Management DPD, the promotion of low-carbon energy generation from waste is unlikely to increase.</p> <p>Without the Waste Management DPD the production of recycled aggregate may be less because this is something that the Waste Management DPD will encourage.</p>
<p>Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered.</p>	<p>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.</p> <p>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.</p>	<p>The Bradford Core Strategy is also likely to contain policies which promote recycling and minimise the growth in waste therefore the future baseline with regards to waste arisings is likely to show a reduction. However, the Waste Management DPD will be instrumental in providing facilities for recycling materials and therefore the future baseline situation would be better with the Waste Management DPD.</p>

SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
Reduce the District's impact on climate change and vulnerability to its effects.	<p>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.</p> <p>The CO₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO₂, compared with 7.3 tCO₂ 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.</p>	<p>With regards to flooding, the future baseline situation is considered to be stable or stable and declining because although climate change is likely to make the extent of areas at risk from flooding more widespread and the risk of flooding more frequent, the programme of investment for flood protection should manage flood risk. The Bradford Core Strategy should also contain policies which steer development away from areas at risk from flooding and require developments to control their potential to increase the risk of flooding elsewhere.</p> <p>It is assumed that carbon dioxide will continue to reduce each year without the plan, due to the legislative controls and targets that are currently in place. However, waste management can influence carbon dioxide emissions either through increasing or decreasing the amount that is emitted and therefore it is difficult to predict the future baseline environment with regards to carbon dioxide emissions without the Waste Management DPD. The Waste Management DPD could be a mechanism to help the achievement of carbon dioxide reduction targets.</p>
Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.	<p>Air Quality: The pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are four AQMAs within Bradford, at:</p> <ul style="list-style-type: none"> • 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. <p>Water: The main river systems comprise:</p>	<p>Air quality in the AQMAs at Mayo Avenue and Shipley Airedale Road is predicted to potentially exceed the NO₂ objective at least to 2015 unless action is taken to reduce pollutant contributions (NO₂ in particular) from road transport by 25-40% (City of Bradford Metropolitan District Council, April 2009, 2009 Air Quality Updating and Screening Assessment for Bradford). Air quality at Manningham Lane and Thornton Road AQMAs is due to meet the</p>

SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
	<ul style="list-style-type: none"> • The becks in the south of the District; • The streams around Bradford; • The River Worth; • The River Aire; and • The River Wharfe. <p>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.</p> <p>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.</p>	<p>NO2 objective by 2010.</p> <p>The future water quality of the District's watercourses is unknown. It is assumed that the current conditions will prevail and it is likely to be poor or bad in the urban areas (Bradford and the becks to the south of the District) but better quality within the River Aire catchment.</p> <p>With regards to soils the future baseline is considered to be stable, although soils could be lost through greenfield development for housing, employment uses and infrastructure.</p>
<p>To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.</p>	<p>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.</p> <p>In addition, Bradford has:</p> <ul style="list-style-type: none"> • Four SSSIs; 	<p>It is difficult to determine the future baseline with regards to biodiversity and nature conservation sites in the absence of the plan as there is little trend information available. On a national scale, certain species are under threat from various sources such as loss of habitat to development and farming practices, loss of food sources, predation, pollution, recreation damage, disease and climate change. The future baseline is therefore considered to be unknown but potentially declining. A Waste Management DPD could affect biodiversity through development, contributions to emissions to air, soil</p>

Table 4.1: SA Baseline Summary and Future Baseline		
SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
	<ul style="list-style-type: none"> • Twenty-one Sites of Ecological or Geological Importance (SEGIs); • Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and • Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). <p>Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations.</p> <p>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).</p> <p>Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.</p>	and water and through restoration of used waste sites for biodiversity gain.
Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets.	<p>Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status:</p> <ul style="list-style-type: none"> • Upland oak woodland; • River edges/ings/scrapes; • In by grassland; • Ancient and/or species rich hedgerows; • Otter; • Water vole; • Pipistrelle; • Brown hare; • Freshwater White-clawed Crayfish; • Common Frog/Toad and Palmate/Smooth Newt; • White Letter hairstreak butterfly; • Green hairstreak butterfly; 	<p>No monitoring information is available in relation to the Bradford BAP on the Biodiversity Action Reporting System website http://www.ukbap-reporting.org.uk/.</p> <p>As mentioned above, it is therefore difficult to determine the future baseline in the absence of the plan as there is little trend information available. On a national scale, certain species are under threat from various sources such as loss of habitat to development and farming practices, loss of food sources, predation, pollution, recreation damage, disease and climate change. The future baseline is therefore considered to be unknown but potentially declining. A Waste Management DPD could affect biodiversity through development, contributions to emissions to air, soil and water and through restoration of used waste sites for biodiversity gain.</p>

Table 4.1: SA Baseline Summary and Future Baseline		
SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
	<ul style="list-style-type: none"> • Bluebell; • Twite; • Yellowhammer; • Lapwing; • Lesser twayblade. <p>There are two Natura 2000 sites within close proximity to Bradford, South Pennine Moors SAC and SPA and the North Pennine Moors SAC and SPA.</p>	
To maintain, restore and enhance the character, value and diversity of natural and man-made landscapes.	<p>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.</p> <p>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.</p>	There is no baseline data that suggests that landscapes are under threat or declining, however, it cannot be assumed that landscapes are not under threat from development and climate change. The future baseline is unknown but possibly not stable due to influences such as climate change.
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	<p>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.</p> <p>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),</p>	Without the Waste Management DPD, waste arisings may increase with population increase and housing development, meaning that more waste will need to be transported across the District for transfer and disposal. The future baseline without the plan is therefore declining. However, it should be recognised that even with the DPD in place waste arisings will increase. However, with a waste planning framework in place, the waste arisings will

Table 4.1: SA Baseline Summary and Future Baseline		
SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
development.	then transported by road to landfill sites in Wakefield and Skipton.	be dealt with more sustainably.
Reduce nuisance caused to communities by waste transport.	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.	Major regeneration projects, particularly in the city centre itself, are likely to lead to increased traffic movements on inner and outer ring roads. Employment growth in the M606 corridor is likely to lead to increased congestion on the M606-A6177-A650 junction and the A650. Future growth in the numbers of jobs and housing in the Airedale Corridor is expected to put increased pressure on road and rail capacity in the Airedale Line, where the topography concentrates local movements and through movements to north Yorkshire. The future baseline is therefore considered to be declining.
Encourage a modal shift away from road freight.	Rail access to the District is good, with direct passenger services via the Airedale Line and Wharfedale to Leeds and Skipton. Direct passenger rail links are also available to Manchester and York from Bradford Interchange via the Caldervale Line.	Non-road transport infrastructure within the District is expected to remain stable in the future and will remain the same with or without the Waste Management DP. However, without the plan, there may not be an increase in the amount of waste that is transported via non-road modes. The future baseline is therefore stable / declining.
Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land.	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.	It is very difficult to predict the future baseline with regards to the quality of the built environment and efficient use of land as the future will depend largely on new development, investment and maintenance. At the current time, investment in property and new developments are not coming forward rapidly, due to the recent global economic downturn. The future baseline with regards to this issue is therefore uncertain.

SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
Avoid, protect and enhance historic assets.	<p>The District has:</p> <ul style="list-style-type: none"> • Over 5000 Listed Buildings; • 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 key threats to historic assets include loss due to development, damage from climate / natural events, lack of maintenance and factors affecting their setting such as inappropriate development or traffic. The risk of any of these factors affecting the historic assets within the District is unknown and therefore the future baseline is unknown.
Improve the quality and range of services available within communities and connections to wider networks.	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.	There is no baseline data which suggests that access to facilities and services will change in the future. With regards to household waste recycling centres, these are widespread across the District. It is therefore assumed that the future baseline will remain stable.
Ensure local communities (both residents and the business community) take more responsibility for their own waste	<p>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.</p> <p>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.</p>	The future baseline without the plan is expected to get worse. In the absence of the plan there will be no planning framework to protect important existing waste management facilities that are delivering the Bradford Waste Hierarchy.
Avoid impacts on open space, cultural, leisure and recreation opportunities	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	It is assumed that the future baseline without the plan will remain stable.

Table 4.1: SA Baseline Summary and Future Baseline		
SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
	playgrounds and playing fields formally laid out for team sports.	
Reduce the impact of waste management on people's safety and security, health and quality of life	<p>Please note that there are no data available on how waste management specifically affects people's safety and security, health and quality of life. The data below sets out generic information about safety and security, health and quality of life in Bradford.</p> <p>Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	The future baseline without the plan is expected to remain the same.
Support employment in the waste industry for local people.	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	Most recent jobseekers allowance claimant figures available on the Bradford Economy website (www.bradfordeconomy.com) indicate that unemployment has fallen in Bradford between

Table 4.1: SA Baseline Summary and Future Baseline		
SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
	<p>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.</p> <p>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.</p>	<p>January and April 2010. However, with public sector cuts announced recently by the coalition Government, the future economic outlook for Bradford is uncertain. With regards to employment in the waste industry, this is largely provided through private companies and may not be affected by public sector cuts and could potentially therefore remain more stable.</p>
<p>Ensure the provision of adequate waste management capacity.</p>	<p>The preferred forecast projections for each waste stream are as follows:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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 RSS identifies the 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.</p>	<p>Without the plan, capacity for the management and disposal of waste will not be provided within Bradford and waste will continue to be sent outside of the District for disposal in landfill.</p>

SA Objective	Summary of Baseline Data	Future Baseline without the Waste Management DPD
	Agricultural and 'Other' Types of Waste: Legislation established in 2006 requires Agricultural waste to be managed on-site where possible, or off-site subject to licensing. As such therefore there is no identified requirement for facilities to deal with this type of waste arising.	

Topic	Core Strategy Sustainability Appraisal Objectives	Draft Waste DPD Sustainability Appraisal Objectives	Appraisal Questions. Will the plan...
Energy and Resources	<p>Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.</p> <p>Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered.</p>	<p>SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.</p> <p>SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered.</p>	<p><i>Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities?</i></p> <p>Lead to a reduction of the amount of waste that will require treatment?</p> <p><i>Minimise any adverse impacts on water resources at all stages of waste management?</i></p> <p>Put in place adequate and sustainable treatment facilities?</p> <p>Help the District to meet its recovery and recycling targets?</p> <p>Help the authority meet its quota under the LATS?</p> <p><i>Encourage the use of and markets for waste</i></p>

Table 4.2: SA Framework			
<i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report). We have been informed that there were no comments received on the SA report published in 2010.</i>			
Topic	Core Strategy Sustainability Appraisal Objectives	Draft Waste DPD Sustainability Appraisal Objectives	Appraisal Questions. Will the plan...
			<i>derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials).</i>
Response to Climate Change	Reduce the District's impact on climate change and vulnerability to its effects	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 <i>reduce vulnerability of waste management facilities to the effects of climate change: (including increased flooding)?</i> Encourage the development of renewables and energy efficiency within the waste sector?
Air, Soil & Water Quality	Safeguard and improve air, water and soil resources.	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? <i>Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?</i>
Natural Assets	To conserve and enhance the internationally, nationally and locally valued wildlife species and habitats. Maintain and enhance the character of natural and man-made landscapes.	SA5: To conserve, <i>restore, expand</i> and enhance the <i>internationally</i> , nationally and locally valued wildlife species and habitats. SA6: To maintain, <i>restore</i> and enhance the character, <i>value and diversity</i> of natural and man-made landscapes.	Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, <i>RIGS</i> or other designated sites? Include actions that will cause habitat loss or fragmentation <i>or restoration, expansion or enhancement of wildlife networks or habitats?</i>

Table 4.2: SA Framework			
<i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report). We have been informed that there were no comments received on the SA report published in 2010.</i>			
Topic	Core Strategy Sustainability Appraisal Objectives	Draft Waste DPD Sustainability Appraisal Objectives	Appraisal Questions. Will the plan...
		SA7: 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? Protect, <i>restore</i> and enhance the landscape?
Housing	Provide the opportunity for everyone to live in quality housing which reflects individual needs, preferences and resources.	SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled <i>and encouraging waste segregation in new development.</i>	Include actions that change mileage travelled per tonne of waste? <i>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?</i>
Transport	Develop and maintain an integrated and efficient transport network which maximises access whilst minimizing detrimental impacts. Reduce congestion and pollution by increasing transport choice and by reducing the need to travel by lorry / car.	SA9: Reduce nuisance caused to communities by waste transport. SA10: Encourage a modal shift away from road freight	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? Include actions that would encourage a shift from road freight to rail freight?
Land use	Improve the quality of the built environment and make efficient use of existing land and buildings.	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? <i>Maximise use of previously developed land where possible.</i>
Historic Environment	Protect and enhance historic assets.	<i>SA12: Avoid, protect and enhance</i>	Preserve and where relevant enhance sites of built and archaeological heritage <i>and their</i>

Table 4.2: SA Framework			
<i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report). We have been informed that there were no comments received on the SA report published in 2010.</i>			
Topic	Core Strategy Sustainability Appraisal Objectives	Draft Waste DPD Sustainability Appraisal Objectives	Appraisal Questions. Will the plan...
		<i>historic assets.</i>	<i>settings?</i> Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas?
Accessibility & Local Needs	Improve the quality and range of services available within communities and connections to wider networks.	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?
Communities	Promote social cohesion, encourage participation and improve the quality of deprived neighbourhoods.	SA14; Ensure local communities take more responsibility for their own waste	Reduce the amount of waste that is treated outside of the District?
Culture, Leisure and Recreation	Create good cultural, leisure and recreation activities available to all.	<i>SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities</i>	<i>Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?</i>
Safety and Security / Health and Social Welfare	Improve safety and security for people and property. Provide the conditions and services to improve health and well being and reduce inequality to access to health and social care.	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?

Table 4.2: SA Framework			
<i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report). We have been informed that there were no comments received on the SA report published in 2010.</i>			
Topic	Core Strategy Sustainability Appraisal Objectives	Draft Waste DPD Sustainability Appraisal Objectives	Appraisal Questions. Will the plan...
Education and Training/ Local Economy and Employment	<p>Promote education and training opportunities which build the skills and capacity of the population.</p> <p>Increase the number of high quality job opportunities suited to the needs of the local workforce.</p> <p>Support investment and enterprise that respects the needs of a local area.</p>	<p>SA17: Support employment in the waste industry for local people.</p> <p>SA18: Ensure the provision of adequate waste management capacity.</p>	<p>Include actions that change the number of local people directly employed in <i>skilled jobs in</i> the waste industry?</p> <p>Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability?</p>

5 Options Assessment and the Reasons for Selecting Alternative Policy Approaches

5.1 Introduction

The SEA Regulations require that this report:

“outline the reasons for selecting the alternatives dealt with” (Schedule 2 (8)).

“shall identify, describe and evaluate the likely significant effects on the environment of (a) implementing the plan or programme; and (b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme” (Part 3 12.—(2)).

In addition post adoption procedures require “the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with are explained” (Part 4 16.—(4)).

This involves setting out the alternative options (both for policies and for sites) that were considered by the Council, what the sustainability effects of those options were, and how these effects have been taken into account in the selection of the final approach (both the approach to sites and to policies). We have set out in this section how this process has been undertaken for the policy options. Section 6 addresses the same process for the site options.

5.2 Selecting the policy options

The alternative options for the DPD were set out in a document called the Bradford Waste Management DPD Issues and Options Paper, which was published in November 2009. This options paper included the following elements:

- Issue 1: Internal Waste Management:
 - Issue 1 Option 1: Focus on consolidating and increasing capacity at existing facilities across the District, and recognise that some waste will need to be managed outside Bradford;
 - Issue 1 Option 2: Provide additional sites and capacity to manage growing waste arisings within the District;
 - Issue 1 Option 3: Provide additional sites and capacity to manage more waste than is produced in the District, allowing scope to import and handle waste from other places in the future?;
 - Issue 1 Option 4: Work with adjacent authorities to identify appropriate sites / facilities to accommodate waste arisings as closely as possible to their source?; and
 - Issue 1 Option 5: Minimise waste production / arisings across the District through appropriate planning policies, therefore minimising site allocations required.
- Issue 2: Location of Waste Sites:
 - Issue 2 Option 1: Concentrate waste management facilities in a small number of strategic sites; and
 - Issue 2 Option 2: Identify a large number of small sites dispersed across the District for waste management purposes.
- Issue 3: Identifying Sites for Waste Management Facilities;

- Issue 3 Option 1: Test all sites on the initial long list within the area of search, excluding those in the Green Belt other than existing facilities; and
- Issue 3 Option 2: Test all sites on the initial long list, including new potential sites in the Green Belt.
- Issue 4: Locational Criteria for Municipal Solid Waste and Commercial and Industrial Waste Management Facilities, only one option is presented as follows:
 - Issue 4 Option 1: Test the long list of potential waste sites (appendix 1) against the Municipal Solid Waste and Commercial & Industrial waste facility location criteria as identified.
- Issue 5: Management of Construction and Demolition Waste;
 - Issue 5 Option 1: Include criteria based policies in the Waste Management DPD that require the maximisation of on-site recycling and re-use of construction and demolition waste as part of the development process to minimise waste arisings;
 - Issue 5 Option 2: Include a criteria based policy for locating new and expanded construction and demolition waste management facilities; and
 - Issue 5 Option 3: A combination of Options 1 and 2.
- Issue 6: Management of 'Other' Waste Streams:
 - Issue 6 Option 1: Identify potential new sites for managing hazardous waste now even though such capacity may not be required in the short term plan period;
 - Issue 6 Option 2: Do not identify potential new sites for managing hazardous waste as they are not required in the short term period;
 - Issue 6 Option 3: Develop a criteria based policy approach for locating 'other' waste management facilities, including hazardous and agricultural waste; and
 - Issue 6 Option 4: Develop a policy approach combining either Option 1 or 2 with Option 3.
- Issue 7: Management of Residual Waste:
 - Issue 7 Option 1: Through the inclusion of appropriate criteria based policies, encourage the use of alternative technologies for the treatment of residual waste through limiting landfill capacity within the District;
 - Issue 7 Option 2: Provide additional landfill capacity within the District through the identification of suitable sites within the Waste Management DPD;
 - Issue 7 Option 3: Provide a combination of both Options 1 and 2; and
 - Issue 7 Option 4: Utilise the existing sub-regional capacity in the first instance, but still provide additional landfill capacity within the District through the identification of suitable sites within the Waste Management DPD. Any identified additional landfill capacity only to be utilised when the sub-regional capacity nears exhaustion.

The range of these alternative options were considered reasonable as they set out a wide spectrum of potential, realistic alternative approaches to the management of waste arisings reflecting national policy and guidance as well as the local spatial characteristics relevant to Bradford District.

5.3 Assessing the sustainability effects of the policy options

The policy options put forward in the Issues and Options paper were assessed for their sustainability effects. The full assessment of the issues and options is available in the *Bradford Local Development Framework, Waste Development Plan Document Sustainability Appraisal of the Issues and Options Paper (ENVIRON, May 2010)*. This report was an internal report but the results of the issues and options assessment can be seen at the following weblink. I think we need to make this report public and put it on the internet. It was an internal report so is not on the net as the moment.

The results are also summarised in Section 5.4 below.

5.4 The reasons for selecting the policy approaches

The post-adoption procedures for SA state that the reasons for choosing the plan as adopted (in light of other reasonable alternatives) should be set out. Best practice dictates that this reasoning should also be outlined in the SA report. Therefore, for each strategic issue Table 5.3 summarises why strategic options were chosen over the alternatives available. Please note that we have not included copies of the full options assessment or the site assessment in this report but these are available in the Issues and Options SA report – the details of which are provided in the previous section.

The policy approach that was chosen was then used to develop detailed policies for the Waste Management DPD that were presented in the Preferred Approach Waste Management Plan DPD (2010). These policies were then slightly amended (see Table 7.1 which includes a summary of changes that have been made to each policy) and have been finalised in this Submission Draft Plan (2013).

Table 5.3: The reasons for selecting the policy approaches	
SA results	Development of the selected policy option
Issue 1: Internal waste management	
<p>Option 1 has a mixed performance against the SA Objectives; it could result in increased mileage per tonne of waste and give rise to transport-related impacts on air quality, however, it does not propose new waste management sites and, hence, performs well in relation to some SA objectives, such as safeguarding water and soil resources and protecting and enhancing biodiversity, landscape quality and historic assets.</p> <p>Option 2 proposes increased provision of waste management sites and performs well with regard to waste transportation, access to waste management facilities and ensuring that local areas take responsibility for their own waste. This option should also provide new jobs within the waste industry in the District. However, it would not necessarily assist in minimising waste arisings or increasing the amount of reused, recycled or recovered waste. Also, it has potential to result in nuisance to local communities from transport, dust and noise and adverse environmental impacts.</p> <p>Option 3 performs similarly to Option 2, but effects would be greater given that it intends to identify more sites and create a greater waste management capacity.</p> <p>It is uncertain whether Option 4 will require new waste management facilities to be located within the District, therefore, there is uncertainty regarding its potential impacts. It could result in waste being managed outside of the District, directly in conflict to the stated aspiration for self-sufficiency, and impacts would be dependent upon the nature and location of any new waste sites required. This option will not help to minimise waste arisings or encourage reuse, recycling or recovery of waste. This option may see an increase in waste management facilities sub-regionally with resulting increase in the number of jobs within the sector, although potentially not directly within the District.</p> <p>Option 5 should help to minimise the amount of waste that will require treatment and should therefore help to minimise energy demand and greenhouse gas emissions associated with waste treatment and transport. However, it is unclear whether Option 5 will result in the identification of additional waste management facilities, therefore, its potential environmental impacts are uncertain. It is also uncertain as to whether the option will improve the accessibility of waste management sites, or whether it will create new employment opportunities.</p>	<p>The preferred policy approach will be a combination of Options 2, 3 and 4 in order to reflect consultation and SA findings and the need to ensure that the Waste DPD has sufficient flexibility and adaptability to respond to future circumstances and approaches to waste management.</p> <p>On this basis, the preferred policy approach will identify a range of suitable waste management sites capable of accommodating Bradford's MSW and C&I waste arisings with a further contingency allowance to ensure that the District can contribute to meeting wider sub-regional waste management needs where appropriate and to ensure flexibility in supply over the plan period.</p> <p>A criteria based approach will be adopted for the identification and provision of sites for CDEW, Agricultural, Hazardous and landfill residual waste arisings. This will support the range of choices available to waste operators in delivering future waste management facilities.</p>

Table 5.3: The reasons for selecting the policy approaches	
SA results	Development of the selected policy option
Issue 2: Location of waste sites	
<p>The two options had a mixed performance against the identified SA Objectives and neither was found to meet a majority of those considered.</p> <p>The appraisal of Option 1 has assumed that the option makes use of existing waste management sites and it would, therefore, limit the effects of waste management sites in relation to environmental SA objectives, through development on greenfield land. However, it may result in more waste related trips around the District and would not improve the accessibility of waste management sites or lead to waste management/treatment near to or at source. It could result in greater mileage per tonne of waste and greater emissions of greenhouse gases and other pollutants from transport, although some technologies which require small sites could potentially be co-located or combined. It is unclear whether Option 1 would limit the capacity of waste management within the District, and whether any waste would need to be managed outside of the District.</p> <p>Option 2 should reduce trips and mileage per tonne of waste by locating a larger number of sites across the District, although this could also spread the adverse environmental effects of waste sites across the District. Option 2 would provide a range of waste sites which are easily accessible to the public, but could also create waste-related traffic in areas which are currently unaffected by traffic and HGV's.</p> <p>It is unclear which of the two options would result in a greater job generation across the District.</p>	<p>The preferred policy approach to the location of potential waste sites for MSW and C&I combine both Options 1 and 2 to make provision for both small and large sites, including potential to accommodate a combination of waste technologies and offer sufficient choice to the waste operators on the market.</p> <p>The preferred policy will need to recognise that a range of site sizes will be required to ensure an adequate reflection of the nature, location and type of waste arisings in the District. The policy will state the need to treat different waste streams in individual ways using the drivers of their particular requirements and location preferences relevant to the individual types of waste facility.</p> <p>Potential site selection criteria will be established to include juxtaposition and proximity to the established settlement hierarchy, and the broad areas of search defined in the Waste Core Strategy, as key drivers for locating sites. This approach takes account of the consultation and SA findings for this issue.</p>
Issue 3: Identifying sites for waste management facilities	
<p>There is a significant degree of uncertainty within the SA assessment of options presented in response to this issue. It is assumed that there is a greater likelihood of habitats and wildlife corridors being adversely affected by development in the Green Belt and, therefore, Option 1 performs better in this context. Option 1 is also considered to have lower potential adverse effect on landscape quality, and to guide development away from versatile agricultural land. This option may not help minimise the mileage per tonne of waste, however, since it limits waste management sites and so would require longer journey lengths through the District.</p> <p>Option 2 may create a greater flexibility to locate waste management facilities across the District in a manner which reduces the amount of distance travelled, however this option may</p>	<p>The Council's preferred policy approach will adopt Option 2 both on the basis of the findings of consultation and SA but also on the basis of ensuring effective, proactive and robust evidence underpins the identification and selection of Waste Management sites. All sites on the pre-eligibility list will be taken into account. All will be considered with the Green Belt designation applied as an additional site assessment filter following the assessment of all sites. This is to ensure an objective and robust site assessment</p>

Table 5.3: The reasons for selecting the policy approaches	
SA results	Development of the selected policy option
also introduce waste traffic into areas which are not currently affected (albeit this would depend on the location of suitable sites outside of and within the Green Belt). There are a number of watercourses running through the Green Belt, although all sites will be tested individually in relation to their flood risk potential.	process is capable of being undertaken to select the most appropriate waste management sites for MSW and C&I waste
Issue 4: Locational Criteria for Municipal Solid Waste and Commercial and Industrial Waste Management Facilities	
<p>The SA suggests the following with regard to the site search and assessment methodology and criteria:</p> <ul style="list-style-type: none"> • Sites that have been discounted on the basis of the broad location criteria should be reintroduced to the site assessment process at the end of the process if there are insufficient sites to meet identified need. The location constraints could then be considered in order to identify whether a detrimental impact would be caused by development. • <i>Policy alignment:</i> the assessment should consider whether a site is brownfield or greenfield land and contains, or is proximate to, scheduled monuments and/or listed buildings. • <i>Policy alignment:</i> the assessment should consider Sites of Ecological and Geological Importance and information relating to environmental designations should be noted. • <i>Physical constraints and delivery:</i> information on Flood Risk Zones (1, 2, & 3) should be noted. Sensitivity of nearby watercourses should be noted. • <i>Site surveys:</i> proforma should include consideration of: any nearby Public Rights of Way with views into the site; any surface water features on the site or visible within the surrounding environment; the presence of mature trees, belts of trees or woodland areas, hedges or grassland which would need to be removed for development of the site; any derelict buildings on the site; any nearby rail freight access; and the presence of any historical buildings within the site surroundings. 	The Council's preferred policy approach will adopt Option 1 both on the basis of the findings of consultation and SA but also on the basis of ensuring effective, proactive and robust evidence underpins the identification and selection of Waste Management sites. All sites on the pre-eligibility list will be taken into account. All will be considered with the Green Belt designation applied as an additional site assessment filter following the assessment of all sites. This is to ensure an objective and robust site assessment process is capable of being undertaken to select the most appropriate waste management sites for MSW and C&I waste.
Issue 5: Management of construction and demolition waste	
Option 1 encourages efficient use of natural resources, reduces the amount of waste that needs to be managed within the District, reduces the amount of waste being moved within the District and avoids potential negative environmental effects of developing new or expanded waste management sites to deal with CDEW waste. Option 1 may not be able to accommodate	The Council's preferred policy approach is to adopt Option 3. This is on the basis that there is strong consultee support provided the policy distinguishes between CDEW generated through large-scale demolition and development

Table 5.3: The reasons for selecting the policy approaches	
SA results	Development of the selected policy option
<p>waste arisings from small CDEW sites.</p> <p>Option 2 enables the waste that comes from small construction sites (of which it is noted there could be a considerable number across the District) to be re-used, recycled and recovered via waste management sites rather going straight to landfill, or being tipped across the District.</p> <p>Option 3 comprises a combination of Options 1 and 2 and performs the best of the three against the SA Objectives. However, as Option 3 includes the development of new or expanded waste sites it poses a higher risk that it will directly impact upon some of the environmental SA Objectives, including biodiversity, landscape, nuisance and reduction in waste mileage and transport emissions. This is because of the risk of direct land take issues and the risk of increased waste transport, for example.</p> <p>By developing waste management sites for CDEW waste, Options 2 and 3 could enable the sale of CDEW waste products, with potential economic benefits and job creation within the District.</p>	<p>projects and those on small-scale sites where on-site recycling is often impractical or not possible. It is further supported by the SA findings provided the generation of further CDEW waste is minimised in accordance with Bradford’s established waste hierarchy. A criteria based approach will be established with additional policy wording emphasising the preference for re-use / adaptation of existing buildings where viable as an initial policy imperative. Detailed matters of the environmental, transport, energy generation on waste sites and site restoration will be dealt with through separate Waste Development Management policies.</p>
<p>Issue 6: Management of ‘other’ waste streams</p> <p>None of the options presented promote renewable energy generation or reduce hazardous waste arisings. The SA has found it difficult to identify environmental effects of hazardous waste facilities, as such facilities will need to meet specific compliance criteria in order to gain an Environmental Permit. However, there is much uncertainty in the SA since it cannot be assumed that no environmental effects will occur through development or operation of hazardous waste management facilities.</p> <p>Option 1 identifies sites for hazardous waste in the short term and would support job creation, although it is assumed that waste management sites would not actually be developed until the capacity was required within the District or the sub-region, as appropriate.</p> <p>Option 2 does not identify new hazardous waste management sites as they are not identified to be required within the short term. Therefore, this option is likely to involve the transportation of hazardous and agricultural waste arisings outside of the District and it performs poorly in relation to reducing waste mileage and transport emissions. It is uncertain whether communities would be adversely affected by traffic associated with the transportation of hazardous waste. Option 2 does not secure long term capacity for the treatment of hazardous waste and, therefore, does not ensure provision of adequate waste management capacity or</p>	<p>The Council’s preferred policy approach is to take forward Option 3 including the development of a criterion based policy for locating agricultural waste and for hazardous waste streams.</p> <p>Detailed matters of environmental impacts, transport, energy generation and site restoration will be dealt with through separate Waste Development Management policies. This is on the basis of the need to ensure flexibility and choice in the District’s approach to handling other waste streams. It also reflects the balance of waste management facilities and forecast need identified in the Waste Management DPD.</p> <p>The preferred policy approach will respond to comments made relating to the appropriateness of encouraging on-site treatment of agricultural waste in accordance with GAEC requirements in the Common Agricultural Policy.</p>

Table 5.3: The reasons for selecting the policy approaches	
SA results	Development of the selected policy option
<p>support employment in the waste industry for local people.</p> <p>Option 3 identifies potential hazardous waste facilities in the short term and should provide the necessary capacity to avoid waste being transported outside of the District for treatment. It should also support the generation of local employment opportunities. This option includes a criteria-based approach for the location of ‘other’ waste management facilities (including for agricultural and hazardous waste arisings) and therefore it is assumed that the criteria within the policy would include the consideration of potential environmental effects.</p> <p>Option 4 has been difficult to appraise because it involves the combination of potentially conflicting policy approaches. It is suggested that this option should have been considered as two separate options, one which combined Options 1 and 3 and one which combined Options 2 and 3. For the purposes of the SA it has been assumed that Option 4 will involve the identification of hazardous waste facilities in the short or long term and should provide the necessary capacity in order to avoid waste being transported out of the District for its treatment. This option also includes a criterion based approach for the location of ‘other’ waste facilities and, therefore, it has a similar performance to Option 3.</p>	<p>Hazardous waste must be considered in conjunction with neighbouring local authorities across the sub-region. The Council will put in place a plan to manage and monitor approach which will consider the need for a hazardous waste site in the sub-region within the short, medium and long term.</p> <p>With regard to other possible waste streams that might be included within the DPD, the preferred approach is not to specifically include any other streams on the basis that there is a lack of identifiable, robust and accurate data.</p> <p>The preferred policy will be positively worded to resolve the perceived negative approach to other waste streams in the Issues and Options Report.</p>
<p>Issue 7: Management of residual waste</p>	
<p>Option 1 generally performs well against the SA Objectives but there is uncertainty regarding the potential effects of the alternative methods of dealing with residual waste. It is assumed that these alternative methods would not require as large a land take as landfill and therefore a lower risk of adverse environmental effects is assumed.</p> <p>Option 2 does not perform well against many of the SA Objectives because it may result in new and/or expanded landfill sites within the District and does not limit waste arisings or encourage waste re-use, recycling, and recovery. It is likely to increase the amount of greenhouse gases released from landfill sites and would be associated with nuisance effects on communities, land take, loss of soils and adverse environmental effects. A monitor and manage approach to landfill capacity, combined with technological advances over the Plan’s lifetime, may mitigate the need to utilise additional landfill site capacity within the District. However, this option will support the creation of local employment opportunities. It will also help ensure that local communities take more responsibility for their own waste and should minimise the mileage per tonne of waste.</p> <p>Option 3 represents a combination of Options 1 and 2. It will, therefore, provide limited</p>	<p>The Council’s preferred approach is to identify where additional residual waste capacity within existing facilities can be used alongside a criteria-based policy for the identification of any new residual waste facilities in the District in the medium and long term, subject to future monitoring and identified need.</p> <p>This approach accords with and emphasises the need to support alternative technologies for treating residual waste and reflects the need to (co)locate facilities in close proximity to waste arisings. This approach supports other preferred policies to emphasise reduction, re-use and recycling of waste; supports moves towards the District improving its self-sufficiency in handling waste but also contributing to sub-regional and cross-boundary working. The preferred policy approach will reflect the role of the</p>

Table 5.3: The reasons for selecting the policy approaches	
SA results	Development of the selected policy option
<p>additional capacity for landfill and will encourage the use of alternative treatment of residual waste. The SA records a mixed performance by this option as both the pro's and con's of Options 1 and 2 combine but do not cancel each other out. Option 3 supports more of the SA Objectives than Option 2 but not as many as Option 1. It will support the creation of local employment opportunities, help to ensure local communities take more responsibility for their own waste and should minimise the mileage per tonne of waste.</p> <p>Option 4 does not propose any additional landfill capacity so could result in increased mileage per tonne of residual waste, with waste travelling greater distances as the sub-regional capacity reduces and individual landfill sites are closed. Therefore, this option performs badly in relation to reducing emissions of greenhouse gases. In the long term, Option 4 may result in new landfill sites within the District, although a monitor and manage approach to landfill capacity combined with technological advances over the Plan's lifetime may mitigate the need to utilise additional landfill site capacity. New landfill sites could result in nuisance effects on communities, land take, loss of soils, and potentially negative environmental effects. Option 4 supports the long term creation of employment opportunities within the District, although this is not the case in the short term, resulting in a mixed performance against the relevant SA Objective.</p>	<p>waste management PFI, the provision of residual waste capacity through existing, extant planning permissions and the role of effective management and monitoring of residual waste generation and existing site capacities.</p> <p>The specific identification of new landfill residual waste sites is not considered necessary in view of:</p> <ul style="list-style-type: none"> • The current permitted landfill supply, which is in excess of 12 years for the Bradford sub-region; • The extant planning permissions for residual waste; • The Bradford-Calderdale joint PFI programme; and • The need to achieve recycling and treatment targets, as set out in the RSS.

6 Options Assessment and the Reasons for Selecting Alternative Sites

6.1 Developing the site options

The selection and assessment of site options has been a long and complex process but sustainability issues have been considered throughout. Figure 6.1 outlines how sites have been selected and assessed.

The first task of this process was to identify all potential sites. The second task involved identifying which of these are reasonable sites to be considered based on a number of site suitability criteria. Thirdly, the suitability of the remaining sites was evaluated in relation to certain waste management technologies on the basis of a more detailed consideration of environmental and social constraints. This third process was undertaken more than once as explained in Section 6.2.

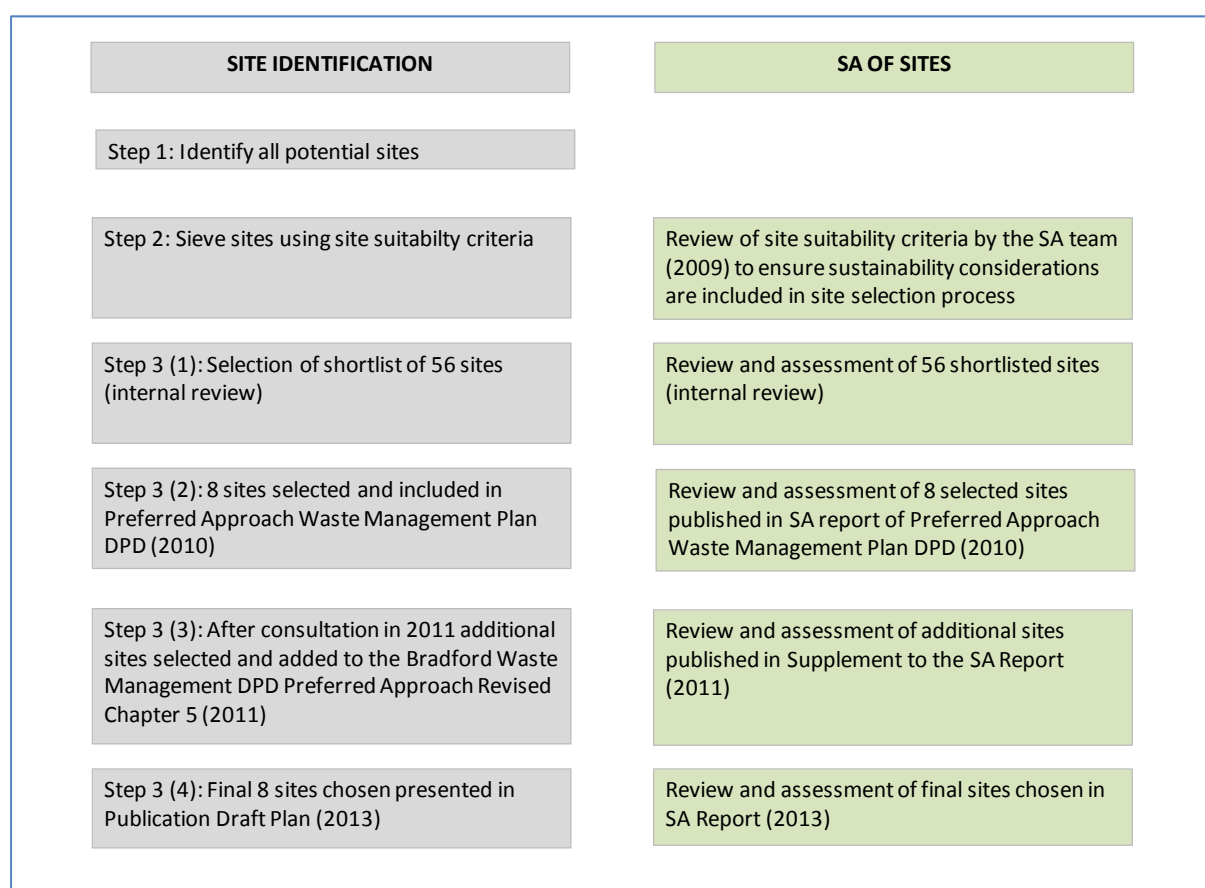


Figure 6.1: Site selection and assessment

6.2 Step 1: Identifying the sites

The Waste Management DPD Issues and Options identified the initial search for sites to include:

- Existing waste management facilities;
- Allocated employment land;

- Council depots including current waste facilities;
- Civic amenity sites;
- Exhausted mineral workings; and
- White (undesignated or allocated) land.

A number of possible sites were put forward as candidate waste locations through a public Call for Sites process.

6.3 Assessing the sustainability effects of the site options

6.3.1 Step 2: Site suitability criteria

Site suitability criteria were outlined in order to select those sites that were considered reasonable for waste management uses.

In order that the site selection and assessment process incorporates important sustainability issues, the SA team has been involved in developing these site suitability criteria which were used in Step 2 as highlighted above. The site suitability criteria were reviewed by the SA team and recommendations were given for amendment of the criteria to better address sustainability issues. These amended final criteria were then used to select the sites that were considered reasonable. The final criteria are discussed below.

Each of the potential waste sites was subject to a site survey and assessment of potential for development as a waste management facility. A number of sites when surveyed were found to have been developed or were in the process of being developed and were discounted on this basis.

The remaining sites were then assessed against the following criteria in order to generate a shortlist of the most appropriate sites for each type of waste facility:

- Site size;
- Shape of site;
- Environmental designation and heritage;
- RUDP designations
- Proximity to the road network;

Those sites which did not pass all of the initial assessment criteria were considered to be unsuitable for MSW or C&I waste management facilities and discounted from further assessment. The remaining sites were assessed and rated as Green, Amber or Red depending on their suitability against the following additional criteria:

- Site status in RUDP;
- Alignment to strategic objectives;
- Land status;
- Location;
- Site proximity to sensitive uses;
- Site accessibility to transport networks;
- Visual / landscape impact;
- Physical development constraints;
- Site topography;
- Extant planning consents;

- Current use;
- Site ownership;
- Cultural / heritage constraints; and
- Development cost value for money

Sites with the largest number of green scores were concluded to have the greatest potential to accommodate MSW or C&I waste management facilities although site size still dictate the use of certain sites for waste management using particular technologies or operations.

For each type of waste facility a shortlist of sites was created based on site size and the proportion of positive (green) scores against the criteria long list. A number of sites were shortlisted as having potential to accommodate more than one type of waste management facility.

6.3.2 Step 3 (1): Assessment of the shortlist of sites

The next stage of the SA was an assessment of all the sites that were shortlisted after the application of the site suitability criteria (56 sites in total). A commentary was provided to the plan team on the sustainability constraints identified, the risk of adverse sustainability effects and the opportunities for positive sustainability effects. This commentary focused on the following spatial issues:

- Flood Risk;
- Biodiversity and Nature Conservation, including presence of habitats and/or vegetation on the sites;
- Heritage assets;
- Water quality, air quality and soils;
- Proximity to a railway; and
- Public rights of way located nearby.

The SA commentary was guided by the SA Framework. Matrices were created based on the SA Framework and a number of objectives and appraisal questions which were not considered to be relevant to the site assessment process due to the fact that they were not spatial in nature were not addressed within the assessment. Comments were made with regards to each of the relevant objectives within the SA Framework and a summary of the key points was provided for each site. Each matrix was used to appraise up to five sites.

Once the findings of the SA Commentary were summarised for each site a conclusion was reached regarding whether the site fell into one of the following three categories:

Table 6.1: SA commentary conclusions categories	
	No significant constraints have been identified in the assessment
	Some constraints have been identified in the assessment. Environmental Impact Assessment is likely to be required of planning applications in order to determine potential impacts and put forward appropriate mitigation.
	Some significant constraints have been identified in the assessment. Due to the nature of the constraints it is questionable whether potential impacts could be mitigated.

The conclusions were made on the basis of a worst case scenario.

The conclusions provided Bradford Metropolitan District Council and their consultants with an indication of the risks associated with taking each site forward with regards to the sustainability issues identified. For example, a 'red' conclusion does not indicate that a site should not be taken forward but indicates that there are significant risks associated with taking that site forward which it may not be possible to mitigate.

A summary of the assessment results for each site tested is available in Appendix B of this report. For details of the full results please see the following report: *Bradford Local Development Framework, Waste Development Plan Document Sustainability Appraisal of the Issues and Options Paper (ENVIRON, May 2010)*. I think we need to make this report public and put it on the internet. It was an internal report so is not on the net as the moment.

6.3.3 Step 3 (2): Assessment of sites selected in Preferred Approach document

Based on the SA results and other factors, 8 sites were selected to be taken forward in the Preferred Approach Waste Management Plan DPD (2010). The assessment of the 8 sites that were selected (taken from the 56 above) were then presented in the SA report in 2010. The following 8 sites were selected:

- Site 1 – Princeroyd Way, Ingleby Road, Listerhills.
- Site 11- Ripley Road, Bowling.
- Site 29 - Ingleby Road, Girlington.
- Site 56 - Royds Hall Lane, Woodside.
- Site 57 - Neville Road / Lower Lane, Bowling.
- Sites 71-74-Belton Road/Keighley Road, Silsden.
- Site 92- Waste PFI Site, Bowling Back Lane.
- Site 102 - Stockbridge Depot, Royd Ings Avenue, Stockbridge.

The Preferred Approach SA report (available via: http://www.bradford.gov.uk/bmdc/the_environment/planning_service/local_development_framework/Preferred_Approach_January_April_2011) includes the full assessment of these 8 sites and Appendix B of this report shows the summary tables for all sites (including the 8 sites that were selected at this stage).

6.3.4 Step 3 (3): Assessment of additional sites

In January 2011, the Council published the Waste Management DPD: Preferred Approach for public consultation, for a period of 10 weeks. The Council received over 300 formal representations on the document and a significant number of comments were related to the proposed shortlisted sites. The Council took account of the comments on the site assessment methodology and proposed a number of changes. It then subjected all of the sites and the new sites put to the Council as part of the preferred approach consultation to the site-selection process.

This included the following initial criteria in order to generate a shortlist of the most appropriate sites for each type of waste facility:

- Site size;
- Shape of site;

- Environmental designation and heritage;
- Replacement Unitary Development Plan designation;
- Proximity to strategic road network; and
- Developed sites.

Those sites which did not pass all of the initial assessment criteria were considered to be unsuitable for MSW or C&I waste management facilities and discounted from further assessment. The remaining sites were assessed and rated as Green, Amber or Red depending on their suitability against the following additional criteria:

- Site status in RUDP;
- Alignment to strategic objectives;
- Land status;
- Location;
- Site proximity to sensitive uses;
- Site accessibility to transport networks;
- Visual / landscape impact;
- Physical development constraints;
- Site topography;
- Extant planning consents;
- Current use;
- Site ownership;
- Cultural / heritage constraints; and
- Development cost value for money

This resulted in an amended shortlist of sites retaining some sites previously proposed, but also proposing some alternative sites. This new list of sites was published in October 2011 as the Bradford Waste Management DPD Preferred Approach Revised Chapter 5. The addition of new alternative sites was considered to be a significant change and the revised sites were subject to further SA and a supplement to the SA report was published in January 2011. The Supplement to the SA report (available via: This report does not appear to be publicly available online – comment to BMDC – this needs to be added to the website) includes the full assessment of the sites shortlisted in October 2011.

Appendix B of this report shows the summary tables for all sites (including the 8 sites that were selected at this stage).

6.3.5 Step 3 (4): Assessment of final sites chosen in the Publication Draft

Eight sites have been selected as part of the Publication Draft, as follows:

- Site 1 – Princeroyd Way, Ingleby Road, Listerhills.
- Site 11- Ripley Road, Bowling.
- Site 35- Staithgate Lane, Odsal.
- Site 48- Staithgate Lane South, Low Moor.
- Site 78- Aire Valley Road, Worth Village Keighley.
- Site 92- Bowling Back Lane HWS, Bowling Back Lane.
- Site 104 - Merrydale Road, Euroway.

- Site 121- Steel Stock and Scrapholders Site, Birkshall Lane.

This list is the same as that included and assessed as part of Step 3 (3) above with the exception of Site 31. Site 31 has been removed from consideration because of objections to the allocation from Sport England. The assessment of these sites (all of which have been assessed during earlier stages) is shown in Annex C of this report.

6.4 The reasons for selecting the sites

The post-adoption procedures for SA state that the reasons for choosing the plan as adopted (in light of other reasonable alternatives) should be set out. Best practice suggests that this reasoning should also be outlined in the SA report. Therefore, for each stage where sites have been selected we have outlined below the reasons why these particular sites were chosen over the alternatives available.

A large number of sites were tested as part of the SA process. Very few of these sites had no significant constraints. None of the sites that registered a score of red (high risk) were taken forward. In terms of the amber and green sites, the information from the SA with relation to the sites assessment was taken into account by the plan team when selecting the short list of sites.

6.4.1 Selection of the sites in the Preferred Approach

At this stage of the process a shortlist of 56 sites was reduced to the 8 sites that were presented in the Preferred Approach Waste Management Plan DPD (2010). Table 6.2 outlines for each site that was selected the reasons that the site was chosen in light of the alternatives available.

- Site 1 – Princeroyd Way, Ingleby Road, Listerhills.
- Site 11- Ripley Road, Bowling.
- Site 29 - Ingleby Road, Girlington.
- Site 56 - Royds Hall Lane, Woodside.
- Site 57 - Neville Road / Lower Lane, Bowling.
- Sites 71-74-Belton Road/Keighley Road, Silsden.
- Site 92- Waste PFI Site, Bowling Back Lane.
- Site 102 - Stockbridge Depot, Royd Ings Avenue, Stockbridge.

Table 6.2: Reasons for selecting sites contained in the Preferred Approach

Site	Summary of SA results	Reasons for choosing the site
Site 1 – Princeroyd Way, Ingleby Road, Listerhills	Environment Agency flood mapping shows the site to be located in an area of flood risk equivalent to Flood Zone 3. It 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 passed all the initial criteria and scored the following on the site assessment criteria: Green - 9 Amber - 6 Red - 0

Table 6.2: Reasons for selecting sites contained in the Preferred Approach		
Site	Summary of SA results	Reasons for choosing the site
Site 11- Ripley Road, Bowling	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 passed all the initial criteria and scored the following on the site assessment criteria: Green - 10 Amber - 5 Red - 0
Site 29 - Ingleby Road, Girlington	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 passed all the initial criteria and scored the following on the site assessment criteria: Green - 6 Amber - 6 Red - 3
Site 56 - Royds Hall Lane, Woodside	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 passed all the initial criteria and scored the following on the site assessment criteria: Green - 7 Amber - 7 Red - 1
Site 57 - Neville Road / Lower Lane, Bowling	This site is brownfield and close to 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 passed all the initial criteria and scored the following on the site assessment criteria: Green - 11 Amber - 4 Red - 0
Sites 71-74-Belton Road/Keighley Road, Silsden	These sites have been grouped together in the site assessment. Three major constraints are identified. 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 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 passed all the initial criteria and scored the following on the site assessment criteria: Green - 8 Amber - 3 Red - 4
Site 92- Waste PFI Site, Bowling Back Lane	No constraints have been identified in relation to this site.	The site passed all the initial criteria and scored the following on the site assessment criteria: Green - 9 Amber - 6 Red - 0

Site	Summary of SA results	Reasons for choosing the site
Site 102 - Stockbridge Depot, Royd Ings Avenue, Stockbridge	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. 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 passed all the initial criteria and scored the following on the site assessment criteria: Green - 8 Amber - 4 Red - 3

6.4.2 Selection of the additional sites

The changes made to the Preferred Approach are reported in Table 6.3 and below.

Shortlisted potential sites in January 2011	Shortlisted potential sites in October 2011
Site 1 – Princeroyd Way, Ingleby Road, Listerhills	Site 1 – Princeroyd Way, Ingleby Road, Listerhills
Site 11- Ripley Road, Bowling	Site 11- Ripley Road, Bowling
Site 29 - Ingleby Road, Girlington	
	Site 31- Hollingwood Lane, Paradise Green
	Site 35- Staithgate Lane, Odsal
	Site 48- Staithgate Lane South, Low Moor
Site 56 - Royds Hall Lane, Woodside	
Site 57 - Neville Road / Lower Lane, Bowling	
Sites 71-74-Belton Road/Keighley Road, Silsden	
	Site 78- Aire Valley Road, Worth Village Keighley
Site 92- Waste PFI Site, Bowling Back Lane	Site 92- Bowling Back Lane HWS, Bowling Back Lane
Site 102 - Stockbridge Depot, Royd Ings Avenue, Stockbridge	
	Site 104 - Merrydale Road, Euroway
	Site 121- Steel Stock and Scrapholders Site, Birkshall Lane

The following five sites have been removed from consideration:

- Site 29 - Ingleby Road, Girlington.
- Site 56 - Royds Hall Lane, Woodside.
- Site 57 - Neville Road / Lower Lane, Bowling.
- Sites 71-74-Belton Road/Keighley Road, Silsden.
- Site 102 - Stockbridge Depot, Royd Ings Avenue, Stockbridge.

The reasons for removing these sites are presented in Table 6.4.

Sites removed from shortlist	Reasons for removal
Site 29 - Ingleby Road, Girlington	Some potentially abnormally high cumulative development costs have been identified which may affect the viability of developing the site for a waste management facility including steep areas of the site, scrub requiring clearance and access improvements steep sided areas of scrub requiring clearance . The site also scored poorly on the additional criteria (see Section 2.1 for the additional criteria) and subsequently falls out of the preferred sites.
Site 56 - Royds Hall Lane, Woodside	Although the site was included in the January 2011 SA Report this site was not included in the Preferred Approach Waste Management Plan DPD. This is because the site has been developed for alternative uses.
Site 57 - Neville Road / Lower Lane, Bowling	The developable area is unlikely to be sufficient for modern waste management facilities for MSW & C&I.
Sites 71-74-Belton Road/Keighley Road, Silsden	A proportion of the sites are within flood zones which reduces their developable area to below the threshold needed for modern waste management facilities for MSW & C&I.
Site 102 - Stockbridge Depot, Royd Ings Avenue, Stockbridge	Site is within flood zone and is therefore not considered suitable for waste management facilities.

A number of sites were also added at this stage and Table 6.5 outlines the reasons for this.

Site	Summary of SA results	Reasons for choosing the site
Site 31- Hollingwood Lane, Paradise Green	This site is greenfield and therefore development of the site will result in the loss of soil resources. There is no railway nearby. The site will therefore not encourage a shift from road freight.	The site passed all the initial criteria and scored the following on the site assessment criteria: Green - 12 Amber - 1 Red - 1

Table 6.5: Reasons for selecting new sites in 2011		
Site	Summary of SA results	Reasons for choosing the site
Site 35- Staithgate Lane, Odsal	The site has no significant negative or significant positive effects. The rest of the effects are neutral, uncertain, minor negative or minor positive. The minor negative effects relate to the fact that the site is greenfield and therefore redevelopment does not represent an efficient use of land and could result in loss of soil resources. The site adjoins a railway line but is at a distance from rail freight facilities. Therefore, modal shift is possible, but only at significant investment. There is also a minor negative effect in relation to the proximity of Bradford Wildlife Sites to the site and there is also uncertainty over the ecological value of the site itself.	The site passed all the initial criteria and scored the following on the site assessment criteria: Green - 13 Amber - 1 Red - 0
Site 48- Staithgate Lane South, Low Moor	The site has no significant negative or significant positive effects. The rest of the effects are neutral, uncertain, minor negative or minor positive. The minor negative effects relate to the fact that the site is Greenfield and therefore redevelopment does not represent an efficient use of land and could result in loss of soil resources. The site adjoins a railway line but is at a distance from rail freight facilities. Therefore, modal shift is possible, but only at significant investment. There is also a minor negative effect in relation to the proximity of Bradford Wildlife Sites to the site and there is also uncertainty over the ecological value of the site itself.	The site passed all the initial criteria and scored the following on the site assessment criteria: Green - 14 Amber - 0 Red - 0
Site 78- Aire Valley Road, Worth Village Keighley	The site has no significant negative effects and one significant positive effect. The latter relates to the sites suitability for freight transport. The rest of the effects are neutral, uncertain, minor negative or minor positive. The minor negative effects relate to the fact that the site is near to two Bradford Wildlife Sites and it is visually prominent, although the site and its immediate surroundings are currently of low landscape quality.	The site passed all the initial criteria and scored the following on the site assessment criteria: Green - 12 Amber - 2 Red - 0

6.4.3 Selection of the sites chosen in the Publication Draft

This list is the same as that included and assessed as part of Step 3 (3) above with the exception of Site 31. Site 31 has been removed from consideration because of objections to the allocation from Sport England. The assessment of these sites (all of which have been assessed during earlier stages) is shown in Annex C of this report.

7 Results of the Appraisal

7.1 Introduction

The full results of the appraisal of the Publication Draft are reported in Annex C to this report. Matrices are provided for the assessment of policies and of sites.

In relation to the appraisal of the policies, Annex C contains a summary of the changes that have been made to each policy, the appraisal that was carried out at the previous stage (Preferred Approach) and alongside this, the appraisal of any changes to the amended policies. Updated information on how the sites will affect Natura 2000 sites has also been provided in the matrices. This information has been taken from the updated HRA screening assessment (give web reference once this report has been finalised). The matrices are very clear how each policy has changed and how this has affected its sustainability performance.

In relation to the appraisal of sites, the site assessment matrices for the final selected sites presented in Policy W6 have been included in Annex C.

Within this report, the results of the assessment have been summarised in two ways. Section 7.1 outlines the significant negative and positive effects that have been identified. Tables 7.1 and 7.2 then present a summary of the findings of the assessment for each policy and for each site respectively. This summary also outlines the outstanding mitigation and enhancement measures proposed for each policy.

Mitigation measures are measures outlined to prevent, reduce or offset effects. Where a policy or site has a significant adverse effect measures should be implemented to prevent, reduce or offset these effects. This may take the form of compensatory measures to be implemented prior to the policy itself being implemented or it can take the form of a change in wording of policy laid out in the plan. In addition, any uncertain effects should have mitigation suggested in order to reduce uncertainty and the potential for this to give rise to a significant negative effect.

Where possible enhancement measures have been suggested to enhance the positive or neutral effects of policies.

7.2 Significant effects identified

7.2.1 Effects of the policies

With relation to the assessment of the plan policies, the sustainability assessment has not identified the potential for significant negative effects. However a number of uncertainties were identified against the following SA objectives (please see Table 7.1 for further information on the effects identified):

- *Policy W2: Cross Boundary Working* in relation to the following SA objectives: SA10: Encourage a modal shift away from road freight, SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life
- *Policy: W9: Hazardous Waste* in relation to the following SA objective: SA3: Reduce the District's impact on climate change and vulnerability to its effects and SA17: Support employment in the waste industry for local people.
- *Policy: WDM2: Assessing all applications for New, Expanded and Residual Waste Management Facilities* in relation to the following SA objectives: SA10: Encourage a

modal shift away from road freight, SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities

- *Policy: WDM4: Waste Management within Development* in relation to the following SA objectives: SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites
- *Policy: WDM5: Landfill Development for Residual Waste* in relation to the following SA objectives: SA10: Encourage a modal shift away from road freight.

The assessment identified the following significant positive effects:

- *Policy W1: Vision and Waste Objectives* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites, SA9: Reduce nuisance caused to communities by waste transport, SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste, SA17: Support employment in the waste industry for local people and SA18: Ensure the provision of adequate waste management capacity;
- *Policy W2: Cross Boundary Working* in relation to the following SA objectives: SA18: Ensure the provision of adequate waste management capacity;
- *Policy W3: Bradford's Future Waste Capacity Requirements* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste, SA17: Support employment in the waste industry for local people, and SA18: Ensure the provision of adequate waste management capacity;
- *Policy W7: Sites for Construction, Demolition and Excavation Waste* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA14: Ensure local communities take more responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;
- *Policy: W8 Agricultural Waste* in relation to the following SA objectives: SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites, SA14: Ensure local communities take more responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;
- *Policy: W9: Hazardous Waste* in relation to the following SA objective: SA18: Ensure the provision of adequate waste management capacity;
- *Policy: W10: Sites for Residual Waste* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA17: Support employment in the waste industry for local people and SA18: Ensure the provision of adequate waste management capacity;
- *Policy: WDM1: Unallocated Sites* in relation to the following SA objectives: : SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more

responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;

- *Policy WDM2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities* in relation to the following SA objectives: SA11 Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land and SA12: Avoid, protect and enhance historic assets;
- *Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered;
- *Policy: WDM4: Waste Management within Development* in relation to the following SA objectives: SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy, SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered and SA3: Reduce the District's impact on climate change and vulnerability to its effects.; and
- *Preferred Policy: WDM5: Landfill Development for Residual Waste* in relation to the following SA objectives: SA18: Ensure the provision of adequate waste management capacity.

7.2.2 Effects of the sites

The assessment identified the following significant negative effects with relation to the assessment of the selected sites (please see Table 7.2 for further information on the effects identified):

- *Site 78* in relation to in relation to the following SA objective: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats
- *Site 104* in relation to the following SA objective: SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites.

In addition, the following uncertain effects have been identified which have the potential to give rise to significant negative effects:

- *All of the sites (apart from site 104)* in relation to the following SA objective SA6: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets; and
- *Site 78* in relation to the following SA objective: SA7: To maintain, restore and enhance the character, value and diversity of natural and man-made landscapes.

The assessment identified the following significant positive effects:

- *Site 1* in relation to effects on landscape and improving the quality of the built environment and making efficient use of land;
- *Site 11* in relation to encouraging modal shift;
- *Site 78* in relation to encouraging modal shift; and
- *Site 121* in relation to encouraging modal shift.

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
W1: Vision and Waste Objectives		
<p>The vision now considers waste prevention rather than reduction; removes the reference to self-sufficiency (although objective 1 still states that the area should be more self-sufficient) but still discusses taking waste to the nearest facility and also discusses cross boundary working.</p> <p>The objectives have removed the reference to managing other area's waste. Cross boundary working is now discussed in the context of working beyond the sub region. The objectives now support the production of waste derived fuels.</p>	<p>The policy has been slightly strengthened through the consideration of the prevention of waste and through promoting the use of waste derived fuels and the SA is slightly more positive as a result.</p> <p>This is a positive visioning type policy that commits the plan to self-sufficiency, waste prevention, 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.</p> <p>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.</p> <p>Policy W1 will have no significant negative impacts or minor negative impacts.</p>	<p>Enhancement measures outstanding</p> <p>Include explicit reference to how measures of self-sufficiency, promotion of waste hierarchy and the proximity principle which are embedded in the policy also support climate mitigation and to a degree adaptation.</p> <p>Include commitment to modal shift in vision and objectives.</p> <p>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"</p>
W2: Cross Boundary Working		
<p>The policy has been amended to state that Bradford Council will attend and contribute to groups, bodies or meetings to support cross-boundary working. . The policy also now refers to sharing information with regards to performance in disposing (as well as reducing, re-using and recycling) of waste.</p>	<p>There have been no major changes to the policy and no changes to the results of the SA.</p> <p>Significant positive effects have been identified in relation to 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, minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, reducing the District's impact on climate change, achieving the proximity principle, reducing nuisance caused to communities by waste transport, ensuring local communities take more responsibility for their own waste and supporting employment in the waste industry for local people.</p> <p>No negative effects were identified but neutral impacts were noted in relation to</p>	<p>Mitigation measures outstanding</p> <p>Include pursuit of modal shift as an aim of cross boundary working as this cannot be achieved in isolation from neighbouring authorities. Although much of the waste transport in the District is transported short distances a commitment is still felt to be important in case the future situation changes.</p>

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
	<p>safeguarding air, water and soil resources, biodiversity, landscape, efficient use of land, historic assets, improving the quality and range of services available within communities and open space and recreation opportunities. 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 and reducing the impact of the waste industry on people’s safety and security, health and quality of life.</p>	
W3: Bradford’s Future Waste Capacity Requirements		
<p>Due to more recent data becoming available there have been slight changes in the amount of waste that needs to be accommodated within the District (a slight overall increase of 72,000 tonnes to 2026). The increase is due to an increase in commercial and industrial waste that needs to be accommodated. All other waste streams have stayed the same or decreased. The policy also refers to forecast figures being seen as a minimum. The policy also acknowledges that the most appropriate and sustainable solution may results in relying on treatment capacity in other local authority areas.</p>	<p>There have been no significant changes to the policy and no changes to the results of the SA. The amounts that need to be planned for have slightly changed due to more up to date data being available. The policy also now recognises that the Council may have to rely on treatment capacity in other adjacent areas. However, it is not felt that this weakens the policy as Bradford is moving significantly towards managing more of its own waste in the future. 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</p>	<p>None</p>

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
	<p>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.</p> <p>No negative effects have been identified for this policy.</p>	
W7: Sites for Construction, Demolition and Excavation Waste		
<p>The policy has been amended to recognise that CDEW development should not sterilise the extraction of important gas or mineral resources.</p>	<p>The policy has been amended to recognise that CDEW development should not sterilise the extraction of important gas or mineral resources. However, this has not changed the results of the SA.</p> <p>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.</p> <p>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 the District.</p> <p>Neutral impacts are identified for the potential for sites to help reach BAP targets, effects on designated biodiversity sites 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.</p> <p>No negative impacts have been recorded. The rest of the SA objectives have been scored as minor positive.</p>	None
W8: Sites For Agricultural Waste		
<p>The policy has removed a layer of priority as it now does not refer to using existing industrial or employment land. The policy has been amended to recognise that</p>	<p>The policy has removed a layer of priority as it now does not refer to using existing industrial or employment land. The policy has been amended to recognise that agricultural waste management sites should not sterilise the extraction of important gas or mineral resources. However, this has not changed the results of the SA.</p> <p>The policy has significant positive impacts in terms of safeguarding and</p>	<p>Enhancement measures outstanding</p> <p>If possible, the policy should address the use of agricultural waste as a fuel for renewable energy.</p>

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
agricultural waste management sites should not sterilise the extraction of important gas or mineral resources.	<p>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.</p> <p>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 Waste Development Management policies should avoid potential adverse effects upon people and the environment through the location and siting of new agricultural waste facilities.</p> <p>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.</p>	
W9: Hazardous Waste		
The policy has been amended to recognise that hazardous waste development should not sterilise the extraction of important gas or mineral resources.	<p>The policy has been amended to recognise that hazardous waste development should not sterilise the extraction of important gas or mineral resources. However, this has not changed the results of the SA.</p> <p>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.</p> <p>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.</p> <p>The situation is uncertain regarding local skilled job creation. Hazardous waste is</p>	None

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
	<p>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).</p> <p>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.</p>	
W10: Sites for Residual Waste		
<p>The policy has extended the consideration of the supply of residual landfill sites to those in the West Yorkshire sub region and also discusses the use of alternative sub regional capacity where it provides an environmentally preferable solution (technologies such as gasification, autoclaving etc). The site location criteria have also been amended. The first locational criterion has been amended to include the expansion of existing residual waste facilities outside of the District (where this is environmentally preferable). The criteria have also been amended to recognise that residual waste development should not sterilise</p>	<p>The policy has extended the consideration of the supply of residual landfill sites to those in the West Yorkshire sub region and also discusses the use of alternative sub regional capacity where it provides an environmentally preferable solution (technologies such as gasification, autoclaving etc). The site location criteria have also been amended to include the expansion of existing residual waste facilities outside of the District (where this is environmentally preferable). This has made the results of the SA more positive in most instances.</p> <p>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 waste hierarchy. Significant positive impacts are identified in relation to minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, supporting employment in the waste industry for local people 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, reducing the District's impact on climate change, 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.</p> <p>The previous version of the policy as assessed by the SA highlighted two minor negative impacts 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. This was because the supporting text to the policy recognised that residual waste is capable of being managed by</p>	None

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
<p>the extraction of important gas or mineral resources. Proposals for landfill sites will only be accepted permitted they meet a number of criteria and these have been slightly amended. Extension to existing landfill sites will not now be acceptable for operational reasons.</p>	<p>advanced treatment technologies (for example through gasification, EfW or autoclaving) rather than landfilling however this was not reflected in the policy. The policy has now addressed this issue and these objectives have been scored as positive.</p> <p>Neutral impacts are identified in relation to biodiversity sites, improving the quality and range of services available within communities and connections to wider networks and ensuring that local communities take more responsibility for their own waste. These impacts were scored as significant positive in the last version of the SA. The scoring has changed because the emphasis of the policy with regards to self-sufficiency has changed. The policy is likely to have a neutral effect as it is less likely to lead to development within the District.</p>	
WDM1: Unallocated Sites		
<p>The criteria for deciding on applications for proposals on unallocated sites have been amended. Proposals should now assist in the delivery of the vision and objectives of the DPD and the requirement for the need of the facility has been broadened out from just a local need. The sequential hierarchy has been amended to include existing industrial or employment land, non-restored landfill sites (provided it would not sterilise the extraction of important gas or mineral resources) and fully restored landfill sites. The site should also be sequentially preferable to the named sites in Policy W6 and compliant with all</p>	<p>The criteria for deciding on applications for proposals on unallocated sites have been amended. Proposals should now assist in the delivery of the vision and objectives of the DPD and the requirement for the need of the facility has been broadened out from just a local need. The sequential hierarchy has been amended to include existing industrial or employment land, non-restored landfill sites (provided it would not sterilise the extraction of important gas or mineral resources) and fully restored landfill sites. The site should also be sequentially preferable to the named sites in Policy W6 and compliant with all other planning policy. The changes to the policy have not changed the results of the SA.</p> <p>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.</p> <p>Significant positive impacts are identified for objectives that seek to improve the accessibility of waste management and treatment services to centres of</p>	None

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
other planning policy.	<p>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.</p> <p>There are no negative impacts identified.</p> <p>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.</p>	
WDM 2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities		
<p>Proposals must now demonstrate that they will not adversely affect the historic environment. Proposals should be in accordance with the waste hierarchy, help to deliver the vision and objectives of the DPD and must demonstrate a need for the facility. The consideration of the impact on designated areas has been broadened to include designated structures and also Local Plan designations. The effect on archaeological interest must now be assessed. Heritage statements and Strategic Flood Risk Assessment s (for sites over 1ha) must now be provided. The consideration of BREEAM excellent has been amended by the addition of the phrase “where</p>	<p>The changes to the policy have caused some changes to the results of the SA. Although the policy will still help to achieve some sustainability objectives, the addition of the phrase “where economically viable” has weakened the requirement to meet BREEAM excellent and has, therefore, weakened the sustainability credentials of the policy.</p> <p>However, the policy has been strengthened in its consideration of heritage and archaeological issues and now scores significantly positive against the two SA objectives that address these issues.</p> <p>A HRA screening assessment has now been undertaken and concludes that the wording of this policy should be changed (see below). Currently the policy requires adverse effects to be minimised which is not strong enough to conclude that the plan will not have an adverse effect on European Sites.</p> <p>The uncertain and minor negative effects recorded during the appraisal of the previous draft of this policy still stand.</p> <p>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 effects. The policy will have significant positive effects on enhancing historic assets and improving the quality of the built environment. Minor negative impacts are included for biodiversity and landscape. In terms of biodiversity, protection of designated sites is accounted for in the policy but the policy would be stronger if it addressed the importance of enhancing biodiversity. The policy does not address the effects of sites on habitat loss or fragmentation. For landscape the policy is clear that minimising</p>	<p>Mitigation measures outstanding</p> <p>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.</p> <p>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.</p> <p>Opportunities for landscape enhancement (including of a long term nature through restoration) should be sought to avoid cumulative negative effects.</p> <p>More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.</p> <p>Make it clearer in the policy that areas of open space / recreation are protected within policy.</p> <p>New mitigation measure</p>

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
economically viable". The final change is that proposals should demonstrate the mitigation of emissions including the consideration of cleaner fuels and technologies.	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.	Policy wording should read "adverse effects on European Designated Sites are avoided". Enhancement measures outstanding Climate change adaptation - The policy requires assessment of the facilities on the environment but not of the environment on the facilities. Future climate proofing could be a requirement to reduce the vulnerability of waste management facilities. This needs to include issues such as ensuring adequate drainage is in place.
WDM3: Applications Resulting in the Loss of a Proposed or Existing Waste Management Facility		
There have been no significant changes to the policy	There have been no changes to the policy. 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.	None
WDM4: Waste Management within Development		
The policy has been changed to state that proposals for new development will only be permitted where they demonstrate the minimisation of	The policy has been changed to state that proposals for new development will only be permitted where they demonstrate the minimisation of waste from construction and contribute to climate change mitigation. This has strengthened the policy and made a small number of the positive effects of the previous policy even more positive. Significant positive impacts are recorded for ensuring the prudent and efficient	Mitigation measures outstanding 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

Table 7.1: Summary of the effects identified within the SA (policies)		
Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
waste from construction and contribute to climate change mitigation.	<p>use of energy and natural resources, the promotion of renewable energy and climate mitigation 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.</p> <p>Minor positive effect are identified for supporting employment in the waste industry for local people, and ensuring the provision of adequate waste management capacity.</p> <p>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.</p> <p>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.</p>	cause undue nuisance.
WDM5: Landfill Development for Residual Waste		
The policy has strengthened the emphasis on landfill being the last resort in the waste hierarchy. The policy has added a requirement that development on mineral extraction sites should not sterilise the extraction of gas or mineral resources. It has added the consideration of unrestored	<p>The changes to the policy have caused some changes to the results of the SA. Although the policy will still help to achieve some sustainability objectives, the removal of the consideration of sustainable construction and the requirement to achieve BREEAM has weakened the sustainability credentials of the policy.</p> <p>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,</p>	<p>Mitigation measures outstanding</p> <p>It would be useful if the policy addressed the effects of sites on habitat loss or fragmentation.</p> <p>More emphasis should be given in Policy WMD4 to supporting sites where non-road transport is a possibility.</p> <p>Enhancement measures outstanding</p> <p>The policy could go further in encouraging climate adaptation. Vulnerability to climate change, risks</p>

Table 7.1: Summary of the effects identified within the SA (policies)

Changes to the policy	Summary of the effects	Outstanding mitigation and enhancement measures
<p>mineral sites as a potential area where landfill suites would be acceptable. The policy has removed the references to applications meeting construction standards and BREEAM excellent. The final change is that proposals should demonstrate the mitigation of emissions including the consideration of cleaner fuels and technologies.</p>	<p>quality of life and support of local employment. There are also significant positive impacts in relation to provision of adequate facilities into the future.</p> <p>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.</p> <p>A minor negative impact has been identified with regard to biodiversity as the policy does not address habitat loss or fragmentation.</p>	<p>from extreme weather events, flooding hotter summers, etc. should be taken into account in the design and siting of these facilities.</p> <p>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.</p>

Table 7.2: Summary of the effects identified within the SA (sites)

Site	Summary of the effects	Mitigation measures
<p>Site 1 – Princeroyd Way, Ingleby Road, Listerhills</p>	<p>A number of minor negative effects are identified in relation to flooding, visual impact and air and noise quality. Environment Agency mapping indicates that a small amount of the site could be located within the flood zone. The site will have significant positive effects on landscape (due to its low visibility) and in relation to quality of the built environment and historic assets (no assets are nearby and current environment is largely industrial). Air quality, noise and landscape and visual assessment and mitigation would be required as there is a residential area and school close to the site. The effect on the rest of the SA objectives will be minor negative, minor positive or uncertain. A minor negative effect is identified because the site is adjacent to a protected recreation ground which could be affected by redevelopment.</p>	<p>For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of the local BAP targets</p> <p>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), air quality and noise (sensitive receptors nearby), effects on the local cycle route and protected recreation area that are near to the site.</p>
<p>Site 11- Ripley Road, Bowling</p>	<p>Will have no significant negative effects. A significant positive effect is identified because there is a railway and rail freight facility within 200m and therefore modal shift to rail transport could be possible.</p>	<p>For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of</p>

Table 7.2: Summary of the effects identified within the SA (sites)		
	The effect on the rest of the SA objectives will be minor negative, minor positive, uncertain or neutral. There are no nature conservation or heritage designations in the site surrounds and the site is previously developed land. Residential land uses in the vicinity of the site could be affected by changes to noise and air quality. Air quality and noise should be assessed and mitigation measures put in place to minimize any adverse effects. Stack emissions would be controlled through environmental permitting under the Environmental Permitting (England and Wales) Regulations 2007.	the local BAP targets 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). Air quality and noise should be assessed and mitigation put in place as necessary due to residential receptors located nearby
Site 35- Staithgate Lane (North), Odsal	The site has no significant negative or significant positive effects. The rest of the effects are neutral, uncertain, minor negative or minor positive. The minor negative effects relate to the fact that the site is greenfield and therefore redevelopment does not represent an efficient use of land and could result in loss of soil resources. The site adjoins a railway line but is at a distance from rail freight facilities. Therefore, modal shift is possible, but only at significant investment. There is also a minor negative effect in relation to the proximity of Bradford Wildlife Sites to the site and there is also uncertainty over the ecological value of the site itself.	For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of the local BAP targets
Site 48- Staithgate Lane (South), Low Moor	The site has no significant negative or significant positive effects. The rest of the effects are neutral, uncertain, minor negative or minor positive. The minor negative effects relate to the fact that the site is Greenfield and therefore redevelopment does not represent an efficient use of land and could result in loss of soil resources. The site adjoins a railway line but is at a distance from rail freight facilities. Therefore, modal shift is possible, but only at significant investment. There is also a minor negative effect in relation to the proximity of Bradford Wildlife Sites to the site and there is also uncertainty over the ecological value of the site itself.	For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of the local BAP targets.
Site 78- Aire Valley Road, Worth Village Keighley	The site has one significant negative effects and one significant positive effect. The significant negative effect relates to the effect on Natura 2000 sites if incineration, pyrolysis or gasification is proposed. The significant positive effect relates to the site's suitability for freight transport. The rest of the effects are neutral,	For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of the local BAP targets.

Table 7.2: Summary of the effects identified within the SA (sites)		
	<p>uncertain, minor negative or minor positive. The minor negative effects relate to the fact that the site is near to two Bradford Wildlife Sites and it is visually prominent, although the site and its immediate surroundings are currently of low landscape quality. A minor negative effect has also been recorded for cultural heritage. If incineration, pyrolysis or gasification went forward on the site a very tall stack is likely to be needed to mitigate effects on Natura 2000 sites. A very tall stack of this kind could have effects on a grade II* building near to the site.</p>	<p>Site 78: Visual and landscape assessment would be required due to the sites visibility and prominence within the area. Visual improvements to the site should be sought through its redevelopment; The potential effects of a waste management use could be avoided by the plan stating that an incinerator, gasification and/or pyrolysis plant is not operated on that site. Alternatively, potential effects of an incinerator, gasification and / or pyrolysis plant would need to be assessed through a project level Appropriate Assessment (AA). The effects of a very tall stack (if development of this type does proceed on site) will need to be investigated before development goes ahead.</p>
<p>Site 92- Bowling Back Lane Household Waste Collection and Recycling Site</p>	<p>The site has no significant negative or significant positive effects. Minor negative effects are identified because the distance to potential rail freight facilities is unlikely to encourage a significant shift to rail transport, there is a risk of bats being present in existing structures on site and there are two listed buildings c500m from the site. However, it is likely that the potential negative effects associated with bats and Listed Buildings can be mitigated if, through assessment, potential negative effects are identified. The rest of the effects are neutral, uncertain or minor positive.</p>	<p>For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of the local BAP targets</p> <p>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). Air quality, noise and visual effects should be assessed and mitigation put in place as necessary due to residential receptors located nearby;</p>
<p>Site 104 - Merrydale Road, Euroway</p>	<p>The site is Greenfield and therefore the development will result in the loss of soil resources. The development of the site could also result in air and noise effects. There are mature trees present on the site. The condition and value of these trees is unknown. This would need to be assessed in more detail to understand the risk of habitat loss, should the trees be lost to development. There is also a Bradford Wildlife site in close proximity to the site. Ecological assessment and mitigation measures would be required in order to ensure that the site is not negatively affected by the development of</p>	<p>For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of the local BAP targets</p> <p>Site 104: Air quality and noise assessment and appropriate mitigation will be required in order to ensure there are no negative effects on sensitive receptors</p>

Table 7.2: Summary of the effects identified within the SA (sites)		
	the site. Given the distance to potential rail freight facilities, it is unlikely that a significant shift to rail transport could be achieved.	
Site 121- Steel Stock and Scrapholders Site, Birkshall Lane	The site has no significant negative effects. A significant positive effect is recorded in relation to modal shift. There is a railway line within close proximity to the site and a working railway siding within the site. Minor negative effects are identified because there is a risk of bats being present in existing structures on site and there are two listed buildings c500m from the site. However, it is likely that the potential negative effects associated with bats and Listed Buildings can be mitigated if, through assessment, potential negative effects are identified. The rest of the effects are neutral, uncertain or minor positive.	<p>For all of the sites appraised, ecological surveys should be undertaken at the planning application stage and any mitigation required should work towards the achievement of the local BAP targets</p> <p>Site 121: 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).</p>

7.3 Cumulative assessment

The SEA Regulations require an assessment of cumulative effects. Cumulative effects arise, for instance, where several developments each have insignificant effects but together have a significant effect; or where several individual effects of the plan (e.g. noise, dust and visual) have a combined effect. The term can also be used to describe synergistic effects, which interact to produce a total effect greater than the sum of the individual effects.

A separate cumulative effects assessment has been undertaken following the assessment of the individual policies and sites. The cumulative effects assessment has considered potential cumulative effects of other programmes, plans, policies and projects with the effects of the Waste Management DPD.

Cumulative effects have been identified following the appraisal of individual policies and once the whole Waste Management DPD could be reviewed as one document. A number of programmes, plans, policies and projects have been identified as potentially having effects on receptors within the Bradford area. The programmes, plans, policies and projects have been identified on the basis of forthcoming activities / development which would occur within the plan period and relate only to published plans or related documents (such as options consultation documents).

The cumulative assessment is presented in Tables 6.3 (potential cumulative effects with other plans) and 6.4 (potential cumulative effects within the Bradford Waste DPD).

Table 7.3: Potential cumulative effects (other plans and programmes)		
Plan or programme	Potential cumulative effect	Mitigation / enhancement measures needed
Bradford Local Development Framework Core Strategy <i>Bradford Core Strategy Further Engagement Draft (October 2011)</i>	The spatial strategy is to focus development within Bradford City but to continue to support development in the principal towns (Keighley, Bingley and Ilkley). It is important that waste management capacity is planned which supports planned growth by bringing waste management sites as near to centres of population as possible. The Waste DPD does this by allocating sites mainly in Bradford. However, the DPD does allocate some sites in other areas, for example site 78 in Keighley. Therefore, the Core Strategy and the Waste DPD will have a positive cumulative effect through helping to reduce the transport of waste and re-enforce the proximity principle. The Core Strategy has not put forward any strategic site allocations, only a broad spectrum of development within geographical areas. Therefore, it is not possible to judge whether development in the Core Strategy and the sites in the Waste Management DPD are likely to have a cumulative effect.	None.
West Yorkshire Local Transport Plan 3. 2011 - 2026	There are no schemes included in the LTP that could have cumulative impacts with the Bradford Waste DPD.	None.
Leeds Integrated Waste Strategy 2005 to 2035 ¹	Within Leeds, a proposed municipal waste incinerator is planned at Cross Green and a proposed Commercial and Industrial Waste Incinerator at Stourton. There is also a large MRF for 200K tpa capacity approved at Gelderd Rd. As none of the facilities are expected to take waste from outside of Leeds there is likely to be no cumulative effect in association with the Bradford Waste DPD.	None.

¹ Please note that the information regarding sites being considered by other Waste Planning Authorities has been gained by reviewing the relevant documents and also from consultation responses sent by the authorities to BMDC.

Table 7.3: Potential cumulative effects (other plans and programmes)		
Kirklees Local Development Framework Core Strategy Proposed Submission Document (Kirklees Council, 2012)	Land has been identified land for the location of possible additional waste handling/treatment facilities for the reuse, recycling and recovery of municipal waste in Huddersfield, preferably in the vicinity of the waste to energy plant, and in the Dewsbury/Batley area. As the facilities are not expected to take waste from outside of Kirklees there is likely to be no cumulative effect in association with the Bradford Waste DPD.	None.
Calderdale Local Development Framework Waste Policy Options (Calderdale Council, 2012).	There are at present no proposed strategic waste facilities within Calderdale. There will be no cumulative effect of the Calderdale Waste DPD combined with the Bradford Waste DPD.	None.
Airedale Corridors: A Masterplan and Strategy for Airedale (Airedale Partnership)	<p>The Royd Ings is set out as an area which could contribute more to the economy of Airedale. It has been defined as a Business Improvement Area, with road access improvements connected to the dualling of this section of the A650.</p> <p>Site 78 is within this area and will benefit from any road improvements that are included as part of the Business Improvement Area designation. This will be a positive cumulative effect.</p>	None

Table 7.4: Potential cumulative effects (Bradford Waste Management DPD)		
Policies and Sites	Potential cumulative effect	Mitigation / enhancement measures needed
Effects on environmental receptors of the various sites put forward in the plan.	<p>Where a number of sites are put forward there is the potential for a cumulative effect on certain types of habitats, species and other environmental receptors such as heritage assets and landscape.</p> <p>However, the cumulative effect of the sites on environmental receptors is likely to be neutral. All of the sites are in built up areas and this will minimise the risk of cumulative effects.</p>	None
Effects of all of the sites in relation to effects on transport.	<p>All of the sites, if implemented are likely to be taking waste from a large area within Bradford and this could cause negative cumulative effects on road transport.</p> <p>Because the exact mix of sites that will come forward is uncertain (and whether sites will utilise alternative modes – even if they are available), the effect on transport is also uncertain. To reduce the risk of cumulative negative effects on transport, mitigation has been suggested (see opposite).</p>	Before sites go ahead the effects on road transport should be assessed as part of the planning application. This should assess the impacts in relation to other developments (including waste development) that are reasonably foreseeable and that might cause cumulative impacts in association with the development.

8 Monitoring

The SEA Regulations (Regulation 17) require the significant environmental effects of plans and programmes to be monitored, in order to identify at an early stage unforeseen adverse effects, and to be able to take appropriate remedial action.

The monitoring undertaken on the Waste Management DPD will help to:

- Monitor the significant effects of the plan;
- Track whether the plan has had any unforeseen effects; and
- Ensure that action can be taken to reduce / offset the significant effects of the plan.

The requirements of the SEA Regulations focus on monitoring the effects of the plan. This equates to both the plan's significant effects and also unforeseen effects.

Monitoring will allow the Council to identify whether the recommended mitigation measures from the SA have been effective and develop further mitigation proposals that may be required where unforeseen adverse effects are identified. In some cases monitoring may identify the need for a policy to be amended or deleted, which could trigger a review of the Waste Management DPD, or for further policy guidance to be developed (for example an SPD).

Table 8.1 set outs this draft monitoring programme.

Table 8.1: SA monitoring programme	
Significant / uncertain effect identified	Monitoring required
Significant effect: Site 78 in relation to the effect on Natura 2000 sites. If waste to energy technologies are used on the site (incineration, gasification and/or pyrolysis) there could be a likely significant effect on the South Pennine Moors SAC and Phase 2 SPA and the North Pennine Moors SAC and SPA.	If development of waste to energy technologies occurs on the site rigorous monitoring of air pollution (as well as mitigation measures) will need to be agreed with Natural England and the Environment Agency.
Significant effect: Site 104 in relation to soil resources and potential air and noise effects on neighbouring receptors.	The site is close to urban greenspace and therefore could have an effect on sensitive receptors (people using the greenspace). The effect of any site development on the use of the greenspace needs to be monitored.
Uncertain effect: All of the sites in relation to Biodiversity Action Plan (BAP) targets	The contribution of waste development to potential BAP targets should be monitored.
Uncertain effect: Site 78 in relation to landscape and visual effects	Any planning application would need to be accompanied by a landscape and visual impact assessment to demonstrate the level of effects and their importance depending upon the design of the particular scheme
Uncertain effect: Effects of all of the sites in relation to effects on transport. All of the sites, if implemented are likely to be taking waste from a large area within Bradford and this could cause negative cumulative effects on road transport.	As sites come forward for development the effects on road transport should be monitored.
<p>Uncertain effect: Preferred Policy W2 will have an uncertain effect on modal shift. 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.</p> <p>Uncertain effect: Preferred Policy WMD2 will have an uncertain effect on promoting modal shift. More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.</p> <p>Uncertain effect: Preferred Policy WMD5 will have an uncertain effect on promoting modal shift. More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.</p>	It would be useful to monitor the use of alternative modes of transport used to transport waste (although this is expected to be minimal).

Table 8.1: SA monitoring programme	
Significant / uncertain effect identified	Monitoring required
Uncertain effect: Preferred Policy W2 will have an uncertain effect on reducing the impact of the waste industry on people's safety and security, health and quality of life. 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.	The effect on communities of waste management developments will need to be monitored as part of the planning process. This could include noise, air quality monitoring and monitoring of HGV movements.
Uncertain effect: Preferred Policy W9 (on hazardous waste) will have an uncertain impact on climate emissions. This is because if a sub regional facility is developed relatively far away from Bradford, transport (thus climate emissions) could rise.	As part of the DPD monitoring process the effects of sub-regional waste facilities (including on employment and on the distance that waste in general and hazardous waste is travelling) should be monitored and an assessment made (at the next round of the Waste DPD) as to whether this is the most sustainable management of waste.
Uncertain effect: Preferred Policy W9 (on hazardous waste) will have an uncertain impact on supporting employment in Bradford.	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. Ongoing monitoring is needed regarding the strategy for hazardous waste disposal in the Sub Region.
Uncertain effect: Preferred Policy WMD2 will have an uncertain effect on protecting open space. The policy should be clearer that areas of open space / recreation are protected within policy.	The effect of waste sites on areas of land-take of open space should be monitored.
Uncertain effect: Preferred Policy WDM4 will have an uncertain effect on minimising nuisance to communities. 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.	Measures put in place to reduce nuisance to communities from CDEW sites needs to be monitored to ensure they are effective. This could be through requiring a residents perception survey to be undertaken for sites taken forward.

9 Next Steps

This is the SA report of the Bradford Waste Management DPD Publication Draft. The Publication Draft of the plan (and this SA report) will be subject to a further brief period of consultation (6 weeks) before it is submitted to the Secretary of State.

Client query: Do we have a couple of sentences about what will happen next – appointment of an inspector, when the examination will take place etc?

Once the plan is adopted, a Sustainability Appraisal (SA) adoption statement will need to be published in accordance with the SEA Regulations (Statutory Instrument 2004 No. 1633 on The Environmental Assessment of Plans and Programmes). These regulations state that as soon as reasonably practicable after the adoption of the plan a statement should be produced and published setting out how environmental considerations and opinions expressed through consultation have been taken into account in the planning process.

The SEA Regulations set out the particulars that should be covered by the statement as follows:

- How environmental (sustainability) considerations have been integrated into the Waste Management DPD;
- How the Environmental (SA) Report has been taken into account;
- How opinions expressed in response to consultation have been taken into account;
- The reasons for choosing the Waste Management DPD as adopted, in the light of the other reasonable alternatives dealt with; and
- The measures that are to be taken to monitor the significant environmental (sustainability) effects of the implementation of the Waste Management DPD.

For further information on the timetable with regard to the next steps in the production of Waste Management DPD please contact the Planning Policy team on ldf.consultation@bradford.gov.uk or consult the following web site.

http://www.bradford.gov.uk/bmdc/the_environment/planning_service/local_development_framework/bradford_waste_development_plan.htm.