



Joint Merseyside & Halton Waste Local Plan

Sustainability Appraisal and Strategic Environmental Assessment

Re-issued report including assessment of main modifications following the Examination Hearings

August 2012



Revision Schedule

August 2012

Rev	Date	Details	Prepared by	Reviewed by	Approved by
01	August 2011	Draft	J. Boca	Colin Bush	Colin Bush
02		Final	J. Boca	Colin Bush	Colin Bush
03	August 2012	Revised Final	Colin Bush	A. Wooddisse	A. Wooddisse

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1 Introduction

1.1 This Report

URS was commissioned by the districts of Halton, Knowsley, Liverpool, St. Helens, Sefton and Wirral to undertake an independent Sustainability Appraisal (SA) of the Joint Merseyside and Halton Waste Local Plan ('Waste Local Plan').

SA seeks to identify the economic, social and environmental impacts of a plan and suggests ways to avoid or minimise negative impacts and maximise positive ones. This report provides the findings of the SA.

1.2 The Joint Waste Local Plan

The Joint Merseyside and Halton Waste Local Plan is being produced by the six Merseyside Waste Planning Authorities; Halton Borough Council, Knowsley Metropolitan Borough Council, Liverpool City Council, St. Helens Council, Sefton Council and Wirral Metropolitan Council. It will form part of each of the districts Local Development Framework (LDF).

The Waste Local Plan seeks to facilitate the development of waste management facilities across the sub-region. It will address the facilities needed to manage all types of waste including municipal, commercial, industrial, construction and demolition and hazardous waste. The scale, location and type of facilities needed will be considered.

The Waste Local Plan will put in place a planning policy framework, which will enable the six Merseyside Waste Planning Authorities to take decisions on the locations of new waste management facilities. Criteria-based policies within the Waste Local Plan will provide a consistent approach for dealing with waste planning applications across the six authorities.

Merseyside Environmental Advisory Service ('Merseyside EAS') has published the proposed Submission Draft Waste Local Plan on behalf of the joint authorities. That document was submitted to the Secretary of State for Examination in Public by an independent Inspector and the Hearings into representations on the Plan took place in late June 2012.

A number of modifications were proposed to the Inspector and these proposals have been incorporated into the Waste Local Plan along with some amendments to policies reflecting the recently published National Planning Policy Framework ('NPPF'), which sets out the Government's vision for planning policy in England. The proposed changes remain subject to approval by the respective Councils and the outcome of further public consultation on the proposed changes which will begin later in 2012.

1.3 Sustainability Appraisal

The purpose of SA is to ensure that social, environmental and economic considerations are taken into account during the preparation of land use plans. According to the NPPF:

"A sustainability appraisal which meets the requirements of the European Directive on strategic environmental assessment [SEA] should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors."

SA seeks to identify the likely significant economic, social and environmental impacts of a plan and suggests ways to avoid or minimise adverse impacts and maximise the beneficial ones.

Sustainability Appraisal is a five-stage process. The stages of Sustainability Appraisal are outlined in Figure 1.1 below.

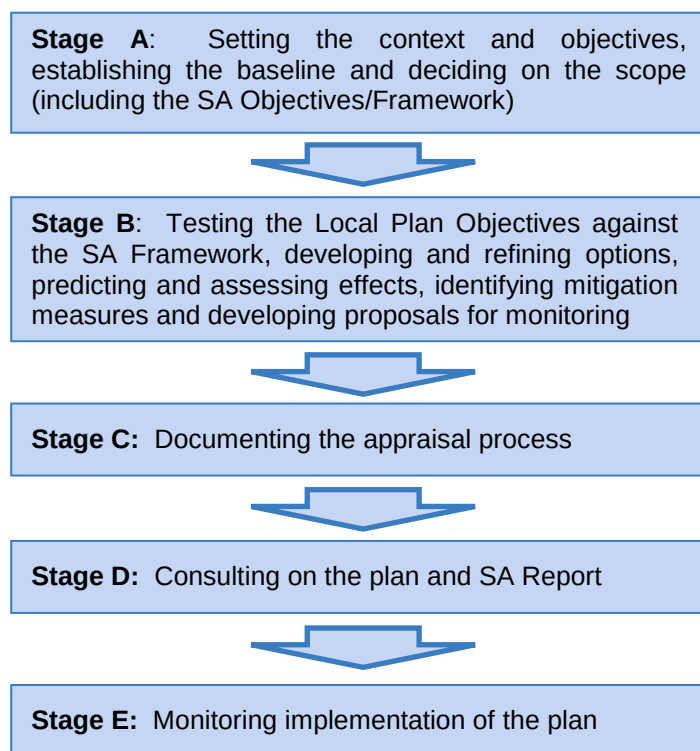


Figure 1.1: Five-Stage Approach to Sustainability Appraisal

1.4 Approach adopted to the SA

The Merseyside Waste Local Plan SA was carried out as follows:

- **Scoping** (Stage A) – The scope of the appraisal was defined in a Scoping Report¹ that was prepared in March 2007 and was subject to consultation with statutory consultees and other stakeholders. This report sets out the context, baseline, key issues and problems affecting the planning area as well as the objectives for the appraisal. The SA objectives reflect the specific priorities and needs of the area and therefore provide the methodology for identifying significant effects that may result from implementation of the policies set in the Waste Local Plan.
- **Issues and Options** (Stage B) – The Joint Authorities prepared Issues and Options for consultation and these were subjected to SA in line with the SEA Directive requirements and SA Regulations, in Spring 2007. The findings are reported in the Issues and Options Sustainability Commentary Report².
- **SA/SEA of the Spatial Strategy and Sites Report** – Further appraisal of the proposed sites and the supporting spatial policies was undertaken to guide the Merseyside waste planners and inform the site allocations process. This report was consulted on in October-November 2008.

¹ Sustainability Appraisal of the Joint Merseyside Waste DPD, Scoping Report, March 2007.

² Sustainability Appraisal of the Joint Merseyside Waste DPD, Issues and Options Commentary Report, 2007.

- **Preferred Options Appraisal** (Stages B,C and D) – Following the consultation on the Spatial strategy and sites report, the Councils prepared their Preferred Options and these were appraised and the results of that appraisal are documented in the SA Report of Preferred Options.
- **SA of the Publication Waste Local Plan – (Stages B, C and D)-** Following the consultation on the Preferred Options, the Councils have now prepared the Publication Waste Local Plan and changes to policies have been appraised and the findings are documented in this SA Report and in Technical Appendix 1.
- **SA of the Main Modifications** - Changes to the Waste Local Plan which have been proposed to the Inspector reflecting matters discussed at the Examination Hearings, which in turn considered issues raised in representations on the Proposed Submission document (public consultation November 2011 to January 2012), or other matters identified by the Inspector in Examining the Plan; or changes to national legislation, policy and planning guidance that has been issued since the Waste Local Plan was submitted to the Secretary of State. These modifications are discussed in Section 4.

Further minor amendments to policies have been made because they are:

- Editorial amendments (grammar and typographical) made to improve the reading of the document;
- Further clarification of the intent of the policy and how it should be applied; or
- Updates since the Proposed Submission Document was published in November 2011, to make the Waste Local Plan as up-to-date as possible or correct factual inaccuracies where they have mistakenly occurred.

The Inspector conducting the Examination has advised that appraisal of these further changes is not considered necessary.

Figure 1.2 illustrates the relationship between Waste Local Plan preparation process and the points at which SA is undertaken. This report has been produced following modifications to the submitted Waste Local Plan.

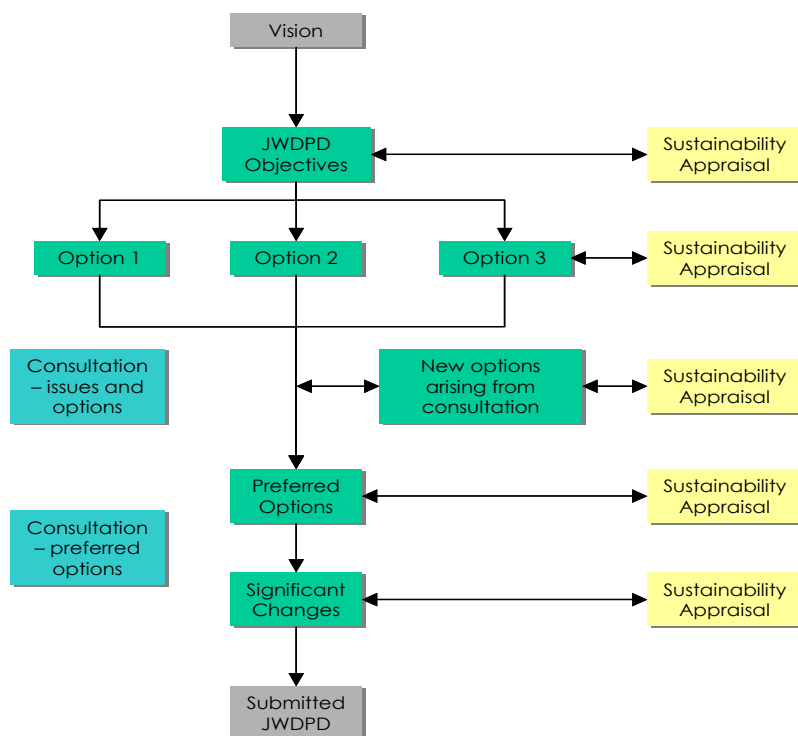


Figure 1.2 The Application of SA in the Preparation of the Waste Local Plan

The SA report should also be read in conjunction with the Habitats Regulation Report, the Strategic Flood Risk Assessment and the latter's frontispiece. These reports are can be viewed or downloaded via the Waste Local Plan consultation portal.

1.5 Alternatives

A summary of the main alternatives considered during the development of the Waste Local Plan, the findings of the SA and the reasons for selecting the alternatives chosen is presented in Technical Appendix 2.

1.6 Compliance with SEA Directive

The SEA Directive sets out a legal assessment process that must be followed. This report clearly sets out the relevant requirements of the SEA Directive. Table 1.1 below provides an indication of where the information required for inclusion in the 'Environmental Report' can be found.

Table 1.1 Compliance with SEA Regulations

Environmental Report requirements	Where covered
An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.	Chapter 2 – Policy Context Review
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	Chapter 2 – Baseline Summary
The environmental characteristics of areas likely to be significantly affected.	Chapter 2 - Baseline & Chapter 4 – Appraisal Findings
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 Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive.	Chapter 2 – Sustainability Issues and Problems
The environmental protection objectives, established at international, Community or Member State 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.	Chapter 2 - Sustainability Issues and Problems
The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as— (a) biodiversity; (b) population; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (k) cultural heritage, including architectural and archaeological heritage; (l) landscape; and (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l).	Chapter 4 & Technical Appendices
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.	Chapter 4
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.	Chapter 3 – Methodology & Chapter 4 – Uncertainties and Risks & Technical Appendices
A description of the measures envisaged concerning monitoring in accordance with regulation 17.	Chapter 5 – Monitoring Measures
A non-technical summary of the information provided under paragraphs 1 to 9.	Non-technical Summary provided as a separate document

2 Sustainability Context, Baseline and Objectives

2.1 Introduction

This chapter, in compliance with the SEA Directive, sets the context of the appraisal and provides the details of the current state of the environment as identified in the Scoping Report. It also identifies the key issues and problems that the Waste Local Plan and SA should respond to as well as the SA objectives that are used to appraise the Waste Local Plan.

The information in this chapter summarises that in the SA/SEA Scoping Report, which was undergoing a final update at the time this report was prepared³. Some of the information in this chapter has been updated but some reflects the content of the March 2010 revision of the Scoping Report. However all data about waste arisings and capacity are up to date.

2.2 Policy Context Review

The SEA Directive requires the Environmental Report (in this case SA Report) to provide information on the relationship of the Waste Local Plan with other relevant plans and programmes. During the Scoping stage, policies, plans and programmes that were considered to influence or affect the Waste Local Plan were reviewed. The purpose of this review was to identify the implications of the objectives of these policies, plans and programmes on the Waste Local Plan as well as implications for the SA.

The full list of the Plans and Programmes reviewed during the Scoping Stage can be found in Appendix 1 of the Scoping Report. The key issues that the Waste Local Plan and SA need to take into account identified during the review of plans and programs are outlined below.

- Improving the sustainability of the way all wastes are managed, migrating treatment and disposal systems up the Waste Hierarchy, and reducing the volume of waste sent to landfill.
- Raising the level of environmental protection particularly by avoiding the creation of wastes.
- Significantly reducing the amount of biodegradable waste being sent to landfill. Pre-treatment and separate disposal of hazardous and non-hazardous waste.
- Introduction of separate collections of recyclable and household wastes coupled with promotion of clean technologies and recyclable and reusable products including the development of markets for recycled and recovered materials.
- Achieving more with less i.e. recognition of waste as a resource.
- Establishing an integrated and adequate network of waste disposal facilities including revision of planning systems to deliver the required facilities and strategies that help to deliver sustainable development through driving waste management up the waste hierarchy.
- Promoting disposal of waste as close as possible to the site of production. Limiting the hazards of transport of wastes and promoting more sustainable transport choices for moving waste.
- Introducing systems of strict control through waste management plans, issuing permits and inspection of installations.

³ Strategic Environmental Assessment / Sustainability Appraisal of the Joint Merseyside Waste DPD, Scoping Report, as updated in March 2010 and September 2011.

- Reduction of the impacts of waste crime e.g. fly-tipping.
- Prevention and reduction of adverse effects of waste management on human health.
- Protection of:
 - Habitats, species and biodiversity including sites of geological interest;
 - The historic environment, listed buildings, conservation areas, parks and gardens;
 - Important archaeological sites; and
 - Inland and coastal waters.
- Avoidance, prevention and reduction of:
 - Environmental noise;
 - Air pollution; and
 - Light nuisance.
- Management of landscape character.
- Minimising the use of resources including land. Encouraging new development, when appropriate, on brownfield land.
- Reduction in production of greenhouse gases. Stimulation of new and more efficient sources of power generation.
- Reduced flood risk.
- Sustainable design including location of facilities in relation to transport systems.
- Social equity that promotes equality, challenges discrimination and enables all citizens to participate fully.
- Effective engagement and participation by local people, groups and businesses.
- Decoupling of waste generation and economic growth whilst promoting sustainable economic growth and improving productivity. Recognition of the waste sector as an employer.

2.3 Baseline summary

During the Scoping stage baseline information is collected in order to develop an understanding of the current state of the area covered by the Waste Local Plan. This information facilitated the identification of key sustainability issues affecting the area, as well as helping to inform the impact prediction.

A summary of Merseyside's baseline conditions is provided below. The detailed description of the social, environmental and economic baseline characteristics can be found in the Scoping Report.

The Scoping Report has been updated in Summer 2011 to update the most current demographic information. This is taken from data published by Merseyside Information Service which was compiled, in turn, largely from government statistical sources that are identified in references below.

Statistics quoted in the following sections are for the Liverpool City Region unless otherwise stated. In real terms the Region also includes small areas of North East Wales, North Cheshire

and West Lancashire; however government statistics aggregated for the same area covered by the Waste Local Plan.

2.3.1 Overview

The Waste Local Plan covers the Districts of Halton, Knowsley, Liverpool, Sefton, St. Helens and the Wirral. The area consists of a conurbation surrounding the Mersey Estuary and covers 724km² of landmass⁴.

The majority of the Merseyside area is classed as urban⁵. Population density is higher than the national average for each of the districts⁶.

2.3.2 Population

The latest published estimates show a population of 1.47 million for the Waste Local Plan area in mid-2010, of which 30% live in Liverpool, 21% in Wirral, 19% in Sefton and the rest are roughly evenly spread between the other three boroughs⁷.

The population has shrunk by 175,000 since 1981 at a steady rate of around -0.4% annually but is forecast to increase at less than 0.1% per year over the coming decade, increasing to around 1.1% over the next 10 years, returning the total to almost 1.5 million by 2030⁸.

2.3.3 Employment & Output

Unemployment in the Liverpool City Region (most of which is the area covered by the Waste Local Plan) was just over 10% in 2009/10, with the highest rate (12.6%) in Liverpool. These figures represent a considerable increase on the range of 4.2%-6.0% quoted in the first SEA/SA Scoping Report in 2006, and this clearly reflects the effect of recession over the last 2-3 years⁹.

The rate above is somewhat higher than the national average of 7.9%. The City Region has consistently shown a higher than average unemployment rate although the difference has widened slightly over the past 5-6 years.

In terms of output, the Liverpool City Region is dominated by two sectors. The broader services sector, including retail, wholesale, leisure, financial services, etc. generated 46% of GVA though this is marginally less than the national average. However the public sector generated a further 27% of GVA, which is 50% more than the national average, indicating its importance to the local economy and the highlighting the likely implications of recent government spending cuts¹⁰.

Gross Value Added per head of population ranged from over £19,800 in Liverpool in 2008 to £11,400 in Sefton and Wirral. The highest rate of almost £24,000 was in Halton although this was aggregated with Warrington as part of the Mid-Mersey local government region. These figures can be compared to the regional average of £17,600 and the UK average of £21,100¹¹.

⁴ Office of National Statistics, Regional Trends No. 39, 2006 Edition

⁵ Rural and Urban Area Classifications 2004 <http://www.statistics.gov.uk/geography/nrudp.asp>

⁶ Office of National Statistics, Regional Trends 39, 2006 Edition

⁷ Mid Year Estimates www.nomisweb.co.uk

⁸ *ibid.* and <http://www.statistics.gov.uk/statbase/product.asp?vlnk=997> for population growth forecasts

⁹ <https://www.nomisweb.co.uk>

¹⁰ Merseyside Economic Review 2011, p.11

¹¹ <http://www.statistics.gov.uk/Statbase/Product.asp?vlnk=14650>

2.3.4 Social Deprivation

All of the Districts are still within the 100 most deprived local authorities in England. Liverpool is the most deprived local authority area in England and Wales; Knowsley is the fifth most deprived and Halton twenty-fourth¹².

In 2009, crime levels in Merseyside and Halton remained lower than those in the other principal metropolitan areas in England; while the levels in the sub-region as a whole are a little lower than the national and regional averages. Only Halton and Liverpool have higher levels of notifiable incidents per head of population, whereas Sefton and St Helens are lower and Wirral's rate is less than half the national average¹³.

2.3.5 Health

Average life expectancies in 2009 across Merseyside and Halton are slightly below in the rest of the North West at approximately 75.5 years for men and women. One positive change is that the previously reported low expectancies in Liverpool and Knowsley appear to have improved however these figures are still 2-3 years lower than the corresponding averages for England and Wales¹⁴.

The proportion of people describing their health as 'Good' was slightly comparable to the regional average (66%) but slightly lower than the average for England and Wales (69%) and there are slight variations between districts in the range 64%-67%. The number who described their health as 'Fair' is the same as the regional and national averages (22%)¹⁵. Between a quarter and a fifth of the population of each district have a long-term illness, which is a little higher than the regional average and noticeably higher than the average for England and Wales (18%).

2.3.6 Housing

The total number of households in the Waste Local Plan area was just under 670,000 in 2010 with the total forecast to increase annually at rates of between 0.7% and just over 1% annually in the period to 2025, at which point total stock will be almost 730,000 properties. However these figures represent the targeted levels of increase which will no longer apply once the Regional Spatial Strategy is completely withdrawn following passage of the Localism Bill¹⁶.

They also need to be adjusted to reflect successful housing growth point bids submitted by local authorities, with Liverpool and Wirral applying to build an additional 4410 homes, with Halton and St Helens committing to a further 3800 properties¹⁷.

Average property prices in 2007 and 2008 in the Waste Local Plan area were between £114,000 in Knowsley, and as high as £167,000 in Sefton¹⁸. These figures hold up relatively well compared to the 2006 range of £122,000 to £171,100 as reported previously although this masks changes in individual districts with Knowsley suffering a more marked decline than Liverpool or St Helens

¹² <http://www.communities.gov.uk/publications/corporate/statistics/indices2010>

¹³ <http://www.neighbourhood.statistics.gov.uk/dissemination/Download1.do>

¹⁴ <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=8841>

¹⁵ <http://www.neighbourhood.statistics.gov.uk/dissemination/Download1.do>

¹⁶ Regional Spatial Strategy for the North West, September 2008, Table 7.1.

¹⁷ <http://www.communities.gov.uk/documents/housing/doc/partnershipsforgrowth.doc> - Halton, St Helens and Warrington submitted a successful bid for 5700 homes which has been pro-rated according to the respective borough household levels to show the total only for the first two authorities

¹⁸ Liverpool City Region Housing Strategy Annual Monitoring Report, Mott McDonald, March 2010, Chapter 5 which quotes data from the Land Registry

which were previously the cheapest areas, whereas house prices in Sefton have only fallen marginally in the two years since the recession began.

Average income to price ratios in 2008/2009 also showed considerable variation with the lowest rates of 2.3 in Liverpool and 2.6 in Knowsley, suggesting house price inflation had not been excessive. Ratios of around 3.5 in Sefton and Wirral were at the threshold of being unaffordable with Halton and St Helens being at the lower end of the unaffordable scale in terms of this ratio¹⁹.

2.3.7 Transport

The main roads running through the Merseyside Area are:

M53 – running through Wirral to Chester

M62 – from the centre of Liverpool to Manchester as well as the A580(T) East Lancashire Road which runs parallel to it approximately 7km to the north

M57 – which acts as an outer ring road for the Liverpool conurbation, and the M58 providing a link across to the M6 at Wigan, with both motorways connected to the main working docklands by the A5036

M56 – running past the southern edge of Halton which provides links to Manchester and Chester, and also to the M6 and the rest of the national motorway network

A561 – this provides a principal trunk route serving central and southern Liverpool to the Mersey crossing at the Runcorn Gap.

The main train station in the area is Liverpool Lime Street, which connects Liverpool to other destinations such as London, Manchester and Birmingham via a spur onto the West Coast Main Line which runs to the east of the Waste Local Plan area.

Merseyside is served by the Merseyrail urban rail network. The Merseyrail network has three lines. The sections of the Merseyrail network which are within the city centre run underground and also provide connections down the Wirral peninsula to Chester and North Wales.

There are three main railheads in use at present. One serves the working docklands in North Liverpool and Bootle and which is linked across to the West Coast Main Line at Wigan. There are also road/rail container freight interchanges at Garston Dock in South Liverpool and at the 3M Gateway site at Widnes, which is currently under redevelopment and expansion as a major multi-modal transport hub by the Stobart Group.

The City Region is served by the Liverpool John Lennon Airport which is situated seven miles south east of the city centre and is adjacent to the River Mersey. The current Master plan – covering the period from the present to 2030 - proposes a modest eastward extension of the runway towards Runcorn, expansion onto open land to the south of the runway to allow construction of a new terminal and apron, and improved road access²⁰.

The Port of Liverpool, which comprises the Liverpool Docks and the Birkenhead Docks serves the North Atlantic route and handles more than 30mt of cargo a year. Local Ferries operate across the River Mersey from the Wirral to Pier Head in Liverpool²¹.

¹⁹ loc. cit. Chapter 6, Figure 78.

²⁰ Peel Airports Ltd – Liverpool John Lennon Airport Master plan - liverpoolairport.com/about-us/master-plan.html

²¹ Mersey Ferries www.merseyferries.co.uk

There are several canals in the Waste Local Plan area. These include the Leeds Liverpool Canal and the Bridgewater Canal but the most significant is the Manchester Ship Canal which still remains in use for coastal-sized shipping for much of its length. Peel Group, which owns the Birkenhead and Liverpool dock estates and the ship canal land is currently investing in development of a chain of road/canal freight interchanges at intervals of 3-5 miles along the lower stretch of the canal from Eastham, Wirral up to Warrington.

The River Weaver runs from Winsford in Cheshire, through Northwich to Runcorn, linking the Trent with the Mersey. Meanwhile the Liverpool Canal Link will use existing dock basins along Liverpool's waterfront to link the Leeds Liverpool Canal with the Albert Dock and a new link opened in Spring 2008 providing access to the Mersey Estuary at the Pier Head²². However in both cases the canals have little freight traffic and are primarily used for recreation.

2.3.8 Biodiversity

The Waste Local Plan area contains two Special Areas of Conservation, the Sefton Coast and the Dee Estuary, and three Special Protection Areas, the Mersey Estuary, the Ribble and Alt Estuaries, and the Dee Estuary. All these sites are also designated under the Ramsar convention. Additionally, there is a further provisional SPA – Mersey Narrows and North Wirral Foreshore, while Liverpool Bay is being evaluated as a potential future designation.

There are three National Nature Reserves (NNRs) within the study area which are nationally important sites for wildlife and geological formations.

The Merseyside Area contains 17 Sites of Special Scientific Interest (SSSIs) and 29 Local Nature Reserves (LNR). Analysis of Natural England reports on the condition of the former suggests that more than 93% of the designated areas are currently in satisfactory condition.

2.3.9 Cultural Heritage

Liverpool was the Capital of Culture during 2008. Liverpool Waterfront is a UNESCO World Heritage site due to the importance of the city in the development of world trade and dock technology. There are over 4,000 listed buildings in the Merseyside Area. Just over a third of these are located within Liverpool and the city has more listings than any other city in England with the exception of London²³. There are 48 Scheduled Monuments within the Merseyside area²⁴.

2.3.10 Water

Wastewater discharges into rivers and coastal waters in the North West region have improved significantly over the last ten years. The region has around 17% of England's most polluted rivers²⁵. The three main rivers in Merseyside Area are the River Alt, the River Dee and the River Mersey.

There are seven designated beaches with Sefton and Wirral districts at which water quality is monitored systematically. Three of the four Wirral beaches earned an overall 'Excellent' rating in 2008, with the other awarded the same 'Good' rating awarded to the three Sefton beaches. The quality of these beaches has been steadily improving over the past ten years as waste water

²² British Waterways <http://www.britishwaterways.co.uk/liverpoolcanallink/> Liverpool Canal Link

²³ 08 Liverpool Capital of Culture www.liverpool08.com

²⁴ MAGIC – www.magic.gov.uk

²⁵ Environment Agency www.environment-agency.gov.uk North West Regional Water Quality

discharges into rivers and coastal waters have decreased²⁶. All 7 beaches meet the minimum requirement and all beaches with an overall 'Good' requirement had periods of 'Excellent' quality during the year.

Approximately 30% of the sub-region is classed as a groundwater protection zone (GPZ – including both inner and outer areas). These zones are largely within urbanised parts of Merseyside.

A Strategic Flood Risk Assessment of the sub-region has been prepared in parallel with the SA/SEA, drawing on similar exercises conducted by each of the six Districts, and the results used to inform the evaluation of individual sites. The assessment suggests the main risk in terms of total area affected is marine flooding in coastal regions although there are substantial inland areas at risk from fluvial (river) flooding²⁷. Areas at greatest risk are as follows:

Halton	Land to the south and east of the town centre bordering the Mersey upstream of the Runcorn Gap; land along Ditton Brook; the Wigg Island and Randle Island area; and lower reaches of Ram's Brook east of Hale.
Knowsley	Certain stretches of the River Alt east of Croxteth; in the south of the Borough along the upper reaches of Ditton Brook and Longwood Mill Brook, and also a watercourse in Bowring Park, Court Hey.
Liverpool	A very narrow strip along the estuary embankment from Sandhills down to Toxteth. Otherwise concentrated in the north east of the Borough along the upper reaches of the River Alt, and along Tue and Fazakerley Brooks.
Sefton	Extensive areas along the River Alt from Sefton Meadows to the coast at Hightown and to the north along Downholland Brook. A further extensive area along the seafront at Southport and inland through Churchtown along Three Pools Waterway.
St Helens	Concentrated along Sankey Brook and Rainford Brook to the north west of the town, along Mill Brook to the west, along the St Helens Canal to the east, and in the area upstream and downstream of Carr Mill dam. Two small stretches to the east of Rainhill and south east of Bold Heath.
Wirral	Floodplain of the River Fender between Moreton and Bidston, and between Woodchurch and Noctourn. Land along The Birket between Moreton and Meols. Stretches of Clatter Brook to the east of Brimstage. Land at the head of the Float, Birkenhead, and some patches of land immediately to its south.

2.3.11 Landscape

As Merseyside is an urban conurbation the landscape is typically characterised by residential developments, town and city centres, and industrial premises. There are no Areas of Outstanding Natural Beauty (AONB) within Merseyside. A large proportion of the non built-up area in Merseyside is designated as Green Belt.

The landscape characteristics of Merseyside are described by the Countryside Character Initiative which identifies seven Countryside Character Areas; Merseyside Conurbation, Wirral,

²⁶ Environment Agency - What's in Your Backyard - Bathing water quality <http://maps.environment-agency.gov.uk/wiyby/wiybyController#x=324528&y=411214&lg=1,&scale=3>

²⁷ Capita Symonds – SFRA Draft Stage 3 report (May 2008) and Draft Stage 4 report (April 2009), both prepared for Merseyside Environmental Advisory Service

Sefton Coast, Mersey Valley, Lancashire and Amounderness Plain, Lancashire Coal Measures, Shropshire, Cheshire and Staffordshire Plain.

Liverpool has a wealth of green space with more than 1,200 hectares of Public Park. This includes the Victorian Parks: Stanley Park, Newsham Park and Sefton Park.

2.3.12 Soil Quality

The Merseyside Area is predominantly urban. Most of the land outside of the conurbations is Agricultural Land of Grade 1 and 2, with much of the best quality land concentrated inland of the Sefton Coast. There is a limited amount of information about the extent of contaminated land on Merseyside. However the industrial heritage of much of the sub-region suggests that the area may be substantial.

Analysis of the stock of Employment Land suggests that around a sixth of the potential supply of land for non-residential use is known or believed to be contaminated²⁸. These figures refer only to sites which are available for commercial and industrial use and do not include contaminated land currently occupied by housing or existing business activities.

2.3.13 Air Quality

Merseyside has been identified as having very poor air quality²⁹. However the Metropolitan Boroughs of Halton, Knowsley, Sefton and Wirral do not have any Local Air Quality Management Areas (AQMAs). There are two well-established AQMAs in Liverpool, in the City Centre and at Rocket Junction at the west end of the M62. Both of these areas have been designated due to nitrogen dioxide (NO₂) pollution from road transport.

Since publication of the original Scoping Report, Liverpool City Council has declared the whole of the city to be an AQMA. In April 2009 St Helens Council announced it had designated two new AQMAs along the stretch of the M6 which crosses the Borough, and in Newton-le-Willows High Street. Again, both designations are the result of excess levels of NO₂.

2.3.14 Climate

Predictions for the climate in the North West in 2050 include³⁰:

- Average temperatures have increased by between 0.8°C and 2°C
- Winter rainfall will have increased by between 6% and 14%
- Summer rainfall may be reduced by up to 10%
- Sea levels will rise by between 12cm and 67cm

Impacts of the predicted changes in climate include a loss of mudflats and salt marshes resulting in a loss of sea bird habitat as a consequence of sea level rise. The ports in the North West are likely to experience an increase need for dredging as siltation patterns alter due to changes in

²⁸ North West Regional Assembly: Merseyside Employment Land Study, Survey by White Young Green & Mason Owen, November 2004, pp.36-41 – source:

http://rpg.nwra.gov.uk/uploads/rpg_docs/rp_HYjr_MGBS_Appendix_1_-_Merseyside_E.pdf

²⁹ ECO Travel - www.ecotravel.org.uk/pollution

³⁰ Sustainability Northwest – Climate Change in the Northwest and its Impacts: A Summary Document March 2005.

http://www.actionforsustainability.org/uploads/documents/feb_06/asf_1140702251_Climate_change_in_the_NW_Summa.pdf

wind direction and rainfall. Heat islands are expected within and around urban areas such as Merseyside. This will create hot microclimatic conditions for homes, workplaces and recreational areas³¹.

Estimates of the production of carbon dioxide emissions by activity in the Merseyside area appear to show a limited contribution of waste-related activities compared to that derived from fuel generation and use, and road transport³². However the figures are estimates only and do not make account of emissions generated during the collection of waste which would be included in the road transport category.

2.3.15 Noise

Tranquil areas are described as areas which are of sufficient distance from visual or noise disturbance from development or traffic and as such are considered to be unspoilt by urban influences³³.

The Tranquil area maps prepared by the Campaign for the Protection of Rural England (CPRE) show that the Merseyside area has few such areas. Maps produced in the early 1990s show such areas to be largely confined to the Sefton Coast between Crosby and Southport and the open countryside between Kirkby and St. Helens³⁴.

There is no more up to date evidence to indicate the extent of tranquil areas has changed since the original statistics were compiled.

2.3.16 Waste

This section summarises arisings and the mix of techniques used to manage them for the principal controlled waste streams. It continues to use the term Municipal Solid Waste to refer to a range of wastes including those generated by households, material collected from parks and street sweepings, so-called Schedule II wastes collected from schools and other establishments, and trade waste collected from smaller businesses by local authorities. It is acknowledged that Defra has now re-named the stream Local Authority Collected Waste as part of measures to ensure the UK complies with EU waste legislation³⁵.

2.3.16.1 Overview of the Current Situation

All the Districts that comprise the Merseyside and Halton sub-region are unitary authorities and are therefore responsible for arranging their own waste disposal and collection facilities. Waste collection from households, the public realm and small businesses is organized by each authority separately, whereas waste disposal for the five metropolitan authorities is co-ordinated by Merseyside Waste Disposal Authority (MWDA). Halton has its own disposal authority but is now coordinating these activities with the other five authorities through membership of the Merseyside Waste Partnership and their planning functions are also collaborating in the production of a single, common waste planning document, the Waste Local Plan.

All data in this section therefore refer to Merseyside and Halton together unless otherwise stated.

³¹ Everybody has an Impact – Climate Change Impacts in the North West of England. December 1998

³² Defra - <http://www.defra.gov.uk/environmental/statistics/globalatmos/regionalrpt/laregionalco2rpt20061127.xls>

³³ CPRE – Tranquil Areas

³⁴ CPRE – Saving Tranquil Areas, November 2006 – see

<http://www.cpre.org.uk/resources/pub/pdfs/landscape/tranquillity/saving-tranquil-places-report.pdf>

³⁵ Defra: Local Authority Collected Waste – Definition Of Terms; briefing note issued in February 2011.

Inevitably the largely urbanized area of Merseyside & Halton is a significant producer of waste. In 2009 the sub-region produced almost 23% of the Municipal Solid Waste (MSW) arising in the North West region³⁶. The proportion of Commercial & Industrial (C&I) wastes³⁷ was 15% of the regional stream³⁸. Compared with figures quoted in the previous version of this report (for 2008) these data show a slight increase in the share of MSW while the C&I figure has fallen from 18%. However there are no reliable data to provide a comparison for the largest waste stream, Construction, Demolition & Excavation (CD&E) waste, but the quantity produced is similar to that generated by Greater Manchester and by Lancashire.

The relative proportions of the streams have changed since the initial Scoping Report was prepared for several reasons. Municipal waste growth has slowed and arisings are not in decline. Commercial wastes appear to have continued to grow modestly in spite of recession, whereas industrial wastes have continued to fall as the sub-regional economy has been re-structured from one based on heavy industry and manufacturing to one increasingly dominated by employment in service industries and the public sector. Also, the initial estimates of the size of the sub-regional CD&E waste stream have been reduced by more than 1 million tonnes because of apparent double-counting in the original data, and as the construction sector has shrunk under the effects of recession.

Collectively, these changes mean that the total quantity of locally generated waste has fallen by about 7% since the original SEA/Scoping Report was prepared in 2006, mostly as a result of shrinkage of the CD&E stream.

In 2009, Merseyside & Halton is estimated to have generated almost 4.45m tonnes of waste, comprising:

- Municipal – 860,000 tonnes
- Commercial – 750,000 tonnes
- Industrial – 360,000 tonnes
- CD&E – 2,300,000 tonnes
- Hazardous – 160,000 tonnes
- Agricultural – 20,000 tonnes

Low and very low-level radioactive waste is also produced in extremely small quantities which cannot be readily converted into a tonnage.

These estimates are considerably more reliable than those stated in the original Scoping Report due to the efforts of Defra and the Environment Agency to develop improved data collection methods and processes for validating statistical returns. One key consequence of these changes

³⁶ All data are taken from Merseyside EAS, Needs Assessment Publication Stage Report, June 2011. MSW data are as reported to Defra in WasteDataFlow (and are for the 2009/10 financial year rather than the 2009 calendar year); C&I figures are derived from the Environment Agency's 2009 survey of these wastes in the North West; CD&E figures are MEAS estimates based on regional surveys which reported in 2006/7; hazardous figures are based on data released by the Environment Agency; radioactive figures are MEAS an MEAS estimate based on Environment Agency data for 2007; agricultural data are based on a 2006/7 survey undertaken by MEAS. These are also the sources for the quantities of locally produced wastes which appear on this page.

³⁷ Urban Mines Ltd, North West England Commercial and Industrial Waste Survey 2009, report commissioned by for the Environment Agency, March 2010, sections 3.4 and 3.6 and other detailed survey results analysed by Merseyside EAS.

³⁸ Source as footnote 1, table 5.3.

is that a previous problem of accurately identifying the quantity of waste arising in Halton has been resolved. Nevertheless some problems persist. Estimates of the site and management mix of the C&I waste stream depend on the effectiveness of the survey method used, while the CD&E stream remains extremely difficult to quantify because material that is recycled on site or spread on land is not captured by the transfer note system which feeds data to the Environment Agency.

Consequently many of the data problems identified in the earlier Scoping Report have either been resolved or significantly reduced. One of the key issues which has been addressed is more exact estimation of wastes arising in Halton which is normally aggregated with figures for Warrington and shown as a total for the Mid-Mersey government sub-region. In the sections which follow the term “sub-region” is used to identify data for Merseyside and Halton as in the rest of this Report.

The next section summarises the forecast growth in arisings and available waste management capacity for the principal controlled waste streams in Merseyside & Halton.

The final needs assessment undertaken by Merseyside Environmental Advisory Service replaces the previous approach of a single ‘best estimate’ with a forecast ‘envelope’. The lower boundary of this envelope is referred to as the Optimistic scenario, which assumes the Waste Local Plan aspiration of high levels of landfill diversion, recycling and/or recovery are matched by limited growth, and in several cases by decline, in arisings. The upper boundary is referred to as the Pessimistic scenario which assumes a more modest rate of landfill diversion, some improvement in recycling rates and modest increase in waste arisings after 2015 once recovery from recession is assumed to have begun.

This forecasting approach means the evidence base supporting the Waste Local Plan has greater flexibility to accommodate further unforeseen changes to waste arisings as a result of the effects of government initiatives, regulatory change or other market factors.

Further detail on the approach and an explanation of the trends shown in the figures quoted below is available in the final revision of the Needs Assessment Report (Publication stage) which is available for review and download along with the Waste Local Plan and its other supporting evidence.

Municipal Solid Waste: Arisings & Treatment

In 2009/10 the sub-region generated MSW arisings of 836,000 tonnes of which 92% originated from households and the rest from the non-household sources referred to at the beginning of this section. Table 2.1 shows the predicted arisings trend for the two scenarios referred to above.

Table 2.1 Predicted MSW Growth to 2025³⁹

Arisings	2010	2015	2020	2025
<i>Optimistic</i>	836,000	805,000	787,000	819,000
<i>Pessimistic</i>	836,000	848,000	860,000	860,000

Table 2.2 summarises the management routes used for dealing with the sub-region’s municipal wastes. Detailed figures for individual authorities are not currently available but figures given in the earlier Scoping Report suggest Liverpool accounts for almost a quarter of the sub-region’s MSW; Wirral for 16%; Sefton for 14%; and the other three authorities account for roughly even proportions of the remainder.

³⁹ Merseyside EAS, Needs Assessment – Publication Stage Report (4th revision), July 2011.

Table 2.2 Breakdown of management methods for MSW⁴⁰

Management Route	Merseyside	Halton	Total
Residual waste (kerbside collection & left at HWRCs)+	464,972	42,886	507,858
Recycled waste (kerbside collection & left at HWRCs)	241,901	19,193	261,094
Total Household Waste	706,873	62,079	768,952
Unrecycled non-household waste	24,835	2,134	26,956
Recycled non-household waste	24,672	3,406	28,078
Total municipal waste	767,772	68,203	835,864

+ this figure includes material rejected from HWRCs and recycling facilities

The most recent annual performance information for 2009/2010 shows the sub-region recycled or composted about 33% of household waste, compared to the target of 40% which was almost achieved on a national scale. This performance clearly suggests scope for further improvement to increase the rate further and it appears likely that the 2015 and 2020 targets which are referred to later in this chapter can only be achieved with the fairly prompt and extensive rollout of food waste collections and the composting of this material.

Green waste is composted at various locations inside and outside the sub-region as a result of contracts negotiated by individual Districts. Three Districts send kerb-collected recyclables to the 100,000 tonne Materials Recycling Facility at Bidston, Birkenhead, currently and total capacity will be doubled towards the end of 2011 when a second plant of the same size opens at Gillmoss, North Liverpool.

Previously MWDA has sent a modest quantity of residual waste to the Orchid treatment plant at Huyton although this facility is now operating as a merchant facility which is increasingly treating C&I waste.

Residual waste is currently sent to landfill at Arpley, Warrington under a contract that runs until 2015. At the time of this report the planning permission for Arpley will expire in 2013, however the site operator (WRG) is intending to apply for a substantial time extension. Meanwhile MWDA is now in the closing stages of tendering for a residual Energy from Waste facility which will be partly funded by PFIU credits. Two companies are left in the bidding: Covanta, which plans to send the residual waste to an EfW plant that it is building in North Cheshire West and Chester; and SITA, which is planning to trans-ship the waste at a railhead in Kirkby in order to take it to an EfW facility in Teesside. It is not known when the preferred bidder will be announced.

Commercial & Industrial Waste: Arisings & Treatment

The previous SA Scoping Report estimated sub-regional arisings of 1.49m tonnes in 2003 with roughly equal proportions of each. However these data are from the Environment Agency which has previously advised that care should be taken in using the estimates.

Two regional surveys have been commissioned which provide more reliable data which includes details for individual waste planning authorities. These surveys were undertaken in 2006 and 2009 and therefore provide an indication of how waste arisings from businesses have changed as a result of the recession which started roughly half way between the two survey years.

The survey attributes commercial wastes to the retail and wholesale, leisure, catering and services sectors, and also the public sector. Industrial wastes derive from a wide range of

⁴⁰ Source: <http://www.defra.gov.uk/statistics/files/mwb200910a.xls>, downloaded on 9 November 2010 from <http://www.defra.gov.uk/statistics/environment/waste/wrfg23-wrmsannual/>

manufacturing involving wood, plastics, metals, machinery and foodstuffs, as well as the production of organic and inorganic chemicals and energy generation. Notwithstanding, the composition of the streams is quite similar in several respects with both producing a substantial quantity of mixed waste comprising various recyclable materials which are similar to MSW.

Both surveys suggest that the commercial stream has continued to grow in spite of recession, outstripping the size of the industrial stream which has shrunk over much of the last decade. There remain some minor concerns about how representative this information because a small number of large industrial companies generate a disproportionate amount of that stream and the inclusion of their contribution into the survey results needs careful management⁴¹.

The most recent regional survey suggests that the combined streams are around 1.11 million tonnes of waste, excluding around 200,000 tonnes of water treatment wastes which is burned at United Utilities' incinerator in Widnes.

The composition of the two waste streams is summarised in Table 2.3.

Table 2.3 Composition of the commercial and industrial waste streams in Merseyside & Halton

Generic material	Examples	Share of stream	Recycling potential	Treatment potential
Metallic wastes	Scrap metal incl. vehicles	7%	Nearly 100%	No opportunity
Discarded equipment		1%	Nearly 100%	No opportunity
Non-metallic wastes	Paper, wood, plastics, etc.	37%	Already very high	High but would reduce recycling
Mixed ordinary wastes	As above with food waste and unseparated	34%	Modest now but high potential	Not at present but high potential
Chemical wastes	Solvents and similar	6%	Only moderate	Only moderate
Common sludges	Probably waste oils, etc.	1%	Limited now; high potential	Very little opportunity
Animal & vegetable wastes	Waste food, kitchen waste	8%	Already high ⁴²	Moderate
Mineral waste	Rubble, etc.	3%	Limited now; further potential	Very little opportunity
Health care wastes	Equipment, packaging, etc. (all non-hazardous)	3%	Limited given nature of material	Moderate but potentially high

Based on the Waste Local Plan needs assessment, commercial arisings are forecast to grow at the rate shown by the trend in Table 2.4, which takes account of the likely depression in business output and therefore waste creation in the period to 2015 as a result of the current economic downturn, and with growth increasing in the second half of the next decade in the Pessimistic scenario. No further growth is forecast in the Optimistic scenario, which is acknowledged to be conservative but has been discussed and agreed with representatives of the local waste sector

⁴¹ The regional survey does not include wastes produced by businesses with less than 5 employees and it is assumed that this will be trade waste which is collected by local authorities and recorded as MSW (local authority collected waste). This may cause difficulty reconciling the earlier Environment Agency data with the regional survey.

⁴² In this case the composting of wastes is classified as "recycling" rather than "treatment". The current performance and current scope for recycling or treatment of each sub-stream is based on the responses given by those involved in the regional survey.

Table 2.4 Forecast growth in commercial waste to 2025

Arisings	2010	2015	2020	2025
<i>Optimistic</i>	751,000	742,000	733,000	733,000
<i>Pessimistic</i>	751,000	742,000	772,000	791,000

Table 2.5 presents the growth forecasts for industrial wastes. The two boundaries of the forecast envelope assume no further decline in this stream (Pessimistic) in the light of the substantial fall over the previous decade, and some modest decline as a result of waste minimisation initiatives (Optimistic).

Table 2.5 Forecast growth in industrial waste to 2025

Arisings	2010	2015	2020	2025
<i>Optimistic</i>	354,000	331,000	331,000	331,000
<i>Pessimistic</i>	363,000	363,000	363,000	363,000

The modest differences between the composition of the two streams gives rise to unsurprising but small variations in how they are managed. Based on the 2009 regional survey the current mix can be summarised as follows:

- Recycled or composted – 60%
- Sent to non-thermal treatment facility – 7%
- Sent to thermal treatment facility – 4%
- Landfilled – 23%
- Fate unknown – 6%.

These latest statistics show an importance change from those in the last report, with both parts of the stream showing a 50% increase in recycling performance and a corresponding reduction in the landfill rate (though the latter may not be quite as large if the 'fate unknown' material was eventually landfilled). Following recent meetings with local waste management companies Merseyside EAS has concluded that the recycling rate is likely to peak at around 65% and the key issue then will have relative rates of landfill and treatment. With the cost of landfilling non-inert wastes likely to exceed £100 per tonne by 2013/14.

Merseyside & Halton has modest amounts of treatment capacity for dealing with these wastes though much of it is specialised or privately owned (i.e. the plants do not take wastes from third party sources). Orchid Environmental has operated a treatment facility in Huyton which was to be expanded from the original 50,000 tonnes but which was closed in Summer 2011. Additionally there are planning permissions for pre-treatment and/or thermal treatment facilities with a combined capacity of almost 1.9 million tonnes. However a key issue for the sub-region is how much of this capacity will come into stream, and how quickly this will happen. Two commercial Materials Recycling Facilities and a number of the sub-region's largest waste transfer stations provide recycling capability for non-inert C&I wastes as well as inert materials. Finally, the sub-region has a single non-inert landfill site at Haydock, although this is currently scheduled to close in June 2012 which will necessitate export of landfill material to other waste planning authorities.

Construction, Demolition & Excavation Waste: Arisings & Treatment

This waste stream is the largest but also the most difficult to estimate accurately. Previously its size was estimated by periodic national surveys but this created inaccuracies when regional results were interpolated or apportioned between sub-regions based on a proxy such as relative population or industrial output. The surveys also only estimated the quantities of 'hard wastes' such as concrete, brick and asphalt rubble, tiles and other building materials, but excluded 'soft wastes' such as wood, plastics, etc.

The 2006/7 regional survey attempted to remedy this situation but was only partially successful, and the estimates remain fraught with inaccuracies which require careful interpretation⁴³. Arisings could not be estimated due to very poor response rates from house-builders and demolition contractors, which are two of the biggest generators of arisings. Waste quantities were also calibrated by surveying companies which processed and treated (e.g. recorded for crushing plant); and those involved in disposal. This approach carries a clear risk of double-counting.

The survey results suggested the following quantities:

- Arisings: 1.25m tonnes - 70% was from concrete manufacture and 26% from quarrying; suggesting practically no waste was created by house-building, renovation or regeneration work and illustrating the problem referred to above;
- Processed waste: 2.63m tonnes - 50% was processed by crushing plant and 25% by other recycling facilities; the rest was used in land raising or landscaping (exempt sites).
- Disposal: 1.67m tonnes - 55% went to landfill and the rest was spread on exempt sites.

The total quantity of CD&E waste created in 2006/7 is now estimated to be approximately 2.4m tonnes. The previous SA Scoping Report contained a forecast of 2.54m tonnes by 2005 and suggested a total of over 2.6m tonnes by 2006/7. This means that the current forecast is approximately 10% lower than the earlier figure, however the comments above about the accuracy of earlier forecasts should be borne in mind.

The most recent survey data suggested the following management methods:

- Material recovered and recycled or re-used at source – 36%
- Material recovered and recycled or re-used off-site – 20%
- Material used beneficially in landfill sites for engineering and landscaping – 2%
- Material spread on exempt sites (typically for landscaping) – 23%
- Material sent to landfill – 21%.

In 2010 WRAP published the results of a survey of CD&E management in England which showed a different distribution as summarised below and compared with the corresponding figure above:

- Material recovered and recycled or re-used – 62% (compared to 56%)
- Material used beneficially in landfill sites – 12% (2%)
- Material spread on exempt sites – 13% (23%)

⁴³ Smiths Gore Ltd & Terraconsult Ltd, Study to fill evidence gaps for construction, demolition and excavation waste streams in the North West region of England, July 2007, a report to North West RTAB.

- Material sent to landfill – 13% (21%).

This distribution has been reviewed with representatives of the local waste management sector who advised that the WRAP distribution is likely to be typical of what is occurring in Merseyside & Halton although the quantity of waste used beneficially on landfills should be reduced because there are so few sites currently accepting waste or undergoing restoration.

These contacts also advised that the local sector had undergone a sizeable slump since 2007. This reflected the combined effects of recession and a reduction in regeneration and other commercial development projects which were widespread in Merseyside in the run-up to the Capital City of Culture year. They advised that the waste stream was likely to remain depressed for several years and was unlikely to see a return to levels of or growth in arisings comparable to those seen in the last decade. Nevertheless growth assumptions must also reflect forthcoming major development projects in the sub-region notably Wirral Waters, Liverpool Waters, and the new Mersey Crossing bridge.

Current forecast growth informing the Waste Local Plan is summarised in Table 2.6.

Table 2.6 Forecast growth in CD&E waste to 2025

	2010	2015	2020	2025
<i>Optimistic</i>	2,220,000 ⁴⁴	2,220,000	2,231,000	2,253,000
<i>Pessimistic</i>	2,220,000	2,233,000	2,280,000	2,385,000

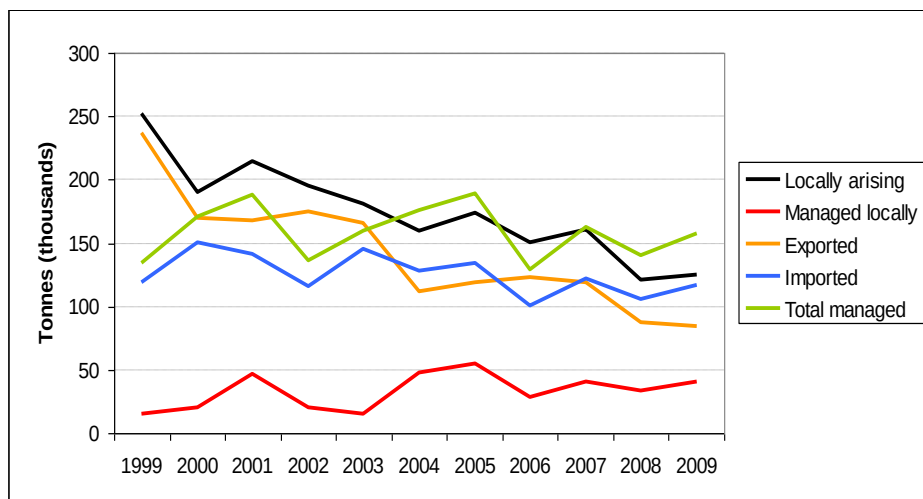
Hazardous Waste: Arisings & Treatment

All movement of hazardous wastes from source to intermediate handling or final disposal is monitored using consignment notes which are submitted to the Environment Agency as part of its statutory role. As a result the information on arisings which can be drawn from its Hazardous Waste Interrogator facility can be considered the most accurate indication of arisings, how and where the wastes are managed. Moreover this means that projecting recent historical trends remains the best way of forecasting future arisings for this waste stream alone.

Hazardous wastes are treated in a network of facilities which will normally accept wastes from all over the UK due to their specialised nature. This situation means that more hazardous wastes move between regions than is the case with other streams, and therefore it makes sense to forecast future requirements once the high levels of imported and exported materials have been taken into account. Figure 2.1 shows the recent historical trend in the three elements (arisings, imports and exports) and in the total which is managed locally.

⁴⁴ Note that recessionary effects are assumed to have reduced arisings from the 2.4m tonnes estimated in 2006/7 and the quantity continued to fall until 2010.

Figure 2.1 Historical trends in hazardous waste management in Merseyside & Halton⁴⁵



The figure shows the unpredictable nature of all the forecast trends, which is believed to partly reflect the short-term nature of many contracts to transport and process these wastes. Changes in period 2004-2006 also reflect changes to the definition of hazardous wastes and the options for managing them. Notwithstanding, the figure suggests a gentle decline in most trends apart from the quantity that is created and managed locally, which is rising gently.

Based on the most recent data the quantities are as follows:

- Total arisings on Merseyside – 161,000 tonnes, of which:
 - 42,000 tonnes (26%) was managed and/or disposed of locally
 - 119,000 tonnes (74%) was exported
- Imported waste – 122,000 tonnes
- Total hazardous waste managed locally – 164,000 tonnes.

Table 2.8 compares the composition of locally arising wastes with those which are managed locally as this gives an indication of the type of treatment and disposal facilities in Merseyside and Halton. The similarities disguise differences in the specific materials which are being handled and therefore, for example, some types of organic chemical waste may be managed locally together with similar wastes from elsewhere in the UK, while other organic chemical wastes are sent for treatment in other authorities.

⁴⁵ Environment Agency, Hazardous Waste Interrogator 2009 (distributed on CD).

Table 2.8 Composition of the hazardous waste stream⁴⁶

Type of material	% of local arisings	% of waste managed
Inorganic chemicals	6%	3%
Organic chemicals	18%	13%
Paints, inks, varnishes, etc.	2%	2%
Other treatments and coatings	1%	
Oils and solvents	30%	29%
Fuel refining and preparation	<0.1%	5%
Packaging materials	4%	4%
Metals and plastics	<0.5%	6%
Construction rubble including asbestos	12%	8%
Incinerator ash	1%	1%
Waste water treatment residues	6%	8%
Municipal and commercial wastes	5%	4%
Healthcare wastes	4%	<0.5%
Unspecified materials	11%	17%

Extremely small quantities (<0.1%) of waste were produced locally by (i) agriculture and food production; (ii) wood processing and paper manufacture; (iii) leather and textile production; and (iv) photographic processes.

The same Environment Agency source also provides details of the fate of the wastes, which can be summarized as follows:

- Sent to long-term storage - <1%
- Recycled, re-used or recovered – 60%
- Treated (non-thermal) – 17%
- Treated (thermal, mostly without energy recovery) - <12%
- Sent to landfill – 11%.

These figures indicate the high levels of recycling of these materials currently and the nature of this waste stream suggests these proportions are unlikely to change substantially in the near future unless there are further legislative changes or new technologies emerge.

Agricultural Waste: Arisings & Treatment

The Waste Management (England and Wales) Regulations 2006 came into force on 15 May 2006 and for the first time brought agricultural waste within the definition of the Controlled Waste Regulations.

Merseyside EAS undertook a sub-regional survey in 2006/7 of agricultural waste which indicated total arisings of around 19,000 tonnes of waste⁴⁷. It is recognized that these figures are at best indicative and at the present time the survey has not been repeated. However, given the relatively small quantity of wastes involved, and the nature of the sector, it is assumed that the total quantity is unlikely to have changed substantially in the interim or in the foreseeable future.

The key finding of the survey was that 64% of arisings were sewage/silage and 26% straw. Other materials included building rubble, scrap metal and equipment, agricultural pharmaceuticals and

⁴⁶ Ibid, based on Merseyside EAS analysis.

⁴⁷ Merseyside EAS, Survey of agricultural waste arisings in Merseyside & Halton, April 2007. A summary of this report is available as a supporting document for the Waste Local Plan consultation process. Note that the total arisings estimated by the survey are only 10% of the quantity indicated by interpolation of Environment Agency survey results (data for 2005).

plastics which individually comprised small proportions of the remainder. More significantly, the survey indicated that at least 90% of these wastes were disposed at source primarily by burial, spreading or burning. The survey suggests the total quantity of agricultural waste is negligible and it makes no demands of the sub-region's waste management infrastructure at present.

Radioactive waste

Merseyside EAS undertook a parallel analysis of low level and very low level radioactive waste arisings drawing on Environment Agency records. This indicated total arisings calibrated as 4,000GBecquerels although it is difficult to convert emission levels directly into waste quantities. A more significant result was that over 99.5% of these wastes are disposed into controlled waters or sewage systems. A current Defra consultation proposes that waste disposal authorities should be more directly involved in the disposal of these wastes however this appears unlikely to have any effect locally provided the current disposal mechanisms continued to be used.

Self-sufficiency

Planning Policy Statement 10 (PPS10) requires waste plans to provide a framework whereby each community takes responsibility for the waste it produces. In most cases this is interpreted as a requirement to be as fully self-sufficient in providing capacity to treat all wastes arising within each planning authority, although exceptions are made in terms of:

- encouraging coordination to deliver regional facilities serving if they are the most cost-effective way of delivering capacity to serve several waste planning authorities;
- movement of waste to facilities in other authorities if there is no feasible way of providing capacity locally (movement of residual wastes from Greater London to landfills in the surrounding Home Counties is the most obvious example of this).

Since the initial Issues & Options consultation in 2007 the Waste Local Plan has proposed a solution based on *net self-sufficiency* which is actually what most authorities achieve. Commercial and industrial wastes can move between authorities as a result of private contracts between waste management companies and their corporate clients and the planning system has limited scope to require local management of these wastes other than indirectly through the supply of land for new waste facilities. Similarly, as discussed in the previous section, hazardous wastes move from source to specialised facilities that are distributed across the UK. Consequently no planning authority is likely to deliver true self-sufficiency and to make no demands on capacity elsewhere.

Merseyside's ability to be self-sufficient is helped, in part, by an abundance of former industrial brownfield land which might be suitable for built waste facilities, but at the same time it is compromised by a limited amount of countryside (most of which is designated as Green Belt) which limits the supply of landfill sites. The Waste Local Plan recognises all these factors and aims to deliver a net self-sufficient solution.

Lacking capacity to landfill non-inert wastes, the Waste Local Plan assumes that capacity will be available at other landfills of this type in adjacent authorities in the North West region, many of which still have substantial voidspace to be filled. This situation is offset by making provision for additional waste sites which could treat, recycle or reprocess wastes created in other authorities, offsetting continued export of residual wastes. Clearly the Waste Local Plan cannot guarantee the land allocations will be used for this purpose or that the waste handled there originates outside the sub-region, but there is little scope to provide any other solution to the local shortage of landfill capacity.

Table 2.9 provides an indicative comparison of levels of waste imports and exports. However the movement of some waste lies outside the reach of the Environment Agency's transfer note system, making it difficult to track some materials from source to eventual fate. There are specific problems with materials handled by transfer stations and recycling facilities which may send bulked recyclates to reprocessors or other customers who are not obliged to record the arrival of this material. Moreover in some cases wastes may have been reprocessed or decontaminated to such an extent that they become a secondary product and their movement to end users is not recorded because the material is no longer classified as a waste.

Table 2.9 Indicative summary of self-sufficiency in managing controlled waste⁴⁸

Stream	Waste movement	Exports	Imports
MSW	Residual waste to landfill	400	15
	Residual waste to treatment	-	25
	Material to composting sites	50	-
	Recyclables sent to reprocessors	Cannot be identified	
	RDF sent to thermal treatment	-	-
C&I	Residual waste to landfill	195	105
	Residual waste to treatment	50	25
	Recyclables sent to reprocessors	Cannot be identified	
CD&E	Residual waste to landfill	10	60
	Aggregates from mobile plant	Cannot be identified	
Hazardous	Material recycled or treated	120	120
Agricultural	-	All handled locally	
Radioactive	-	All handled locally	
Other	Water treatment waste incinerated	-	75
TOTALS		825	425

[All figures in 000 tonnes; some figures have been rounded slightly.]

While it can only be regarded as indicative, this analysis suggests Merseyside & Halton is still a net exporter but this situation will change in the next 2-3 years. Once Ineos Chlor's Energy from Waste facility comes into operation in 2013/2014 it will begin taking waste-derived fuel stock from Greater Manchester and Cheshire which will eventually add a further 375,000te to the bottom row of the MSW section of the table above, taking total imports to around 800,000te. Other recently consented treatment facilities could also take some wastes from elsewhere in the North West once they are in service by 2014/2015 and could then result in the sub-region being a marginal net importer of waste.

There has been some improvement in self-sufficiency with regard to C&I wastes although there is continuing dependence on landfill exports. This position should also change over the current decade once new treatment facilities come into service and help to increase landfill diversion.

Clearly the sub-region's self-sufficiency is dominated by a continuing reliance on landfill, but as new facilities come on-stream this should change. Furthermore, over 90% of material sent to landfill is still managed within the North West in facilities in adjacent waste planning authorities.

⁴⁸ Environment Agency Waste Data Interrogator [distributed on CD] apart from figures in italics which are Merseyside EAS estimates.

Waste management targets

Municipal Solid Waste

The principal targets for this stream as defined by Waste Strategy for England 2007 and the revised Regional Spatial Strategy (RSS) and are summarized in Table 2.10⁴⁹.

Table 2.10 Principal statutory and obligatory targets for MSW

Parameter	Target specified	Current performance
Reduction of biodegradable MSW landfilled [as specified by the EU Landfill Directive] ⁵⁰	By 25% of 1995 levels by 2010 By 50% of 1995 levels by 2013 By 65% of 1995 levels by 2020	Above target level ⁵¹
Growth in municipal waste (RSS)	Reduce to 0% by 2014	See text
Recycling and composting of household waste [<i>this does not apply to all municipal waste</i>]	40% by 2010 45% by 2015 50% by 2020	Halton: 31% in 2009/10 Merseyside: 34% in 2009/10
Value to be recovered from MSW	53% by 2010 67% by 2015 75% by 2020	Halton: 35% in 2009/10 Merseyside: 38% in 2009/10 ⁵²

Achieving zero growth in MSW will be delivered by centrally-led initiatives such as the Courtauld Commitment to reduce packaging levels, and by local programmes delivered by the JMWMS, rather than by measures directly implemented by the Waste Local Plan. Recent reduction in MSW arisings is likely to reflect the effect of recession on household consumption and early successes in waste minimisation through light weighting, etc. These latter developments are expected not just to end growth but to result in a reduction of MSW arisings over the next decade.

Commercial & Industrial Waste

Contrary to initial industry expectation, the outline 2011 revision of the Waste Strategy for England 2007 did not establish enforceable targets for recycling, composting and treatment of C&I wastes. The current position suggests the government wishes to let market forces dictate

⁴⁹ 4NW, North West of England Plan – Regional Spatial Strategy to 2021. This document was revised and republished in September 2008 as the adopted Strategy, and its policies on waste management (policies EM10 to EM13) subsume those in the Regional Waste Strategy which is referred to in the earlier SA Scoping Report. At the time of this report the RSS still carries residual material weight although it will become defunct with the passage of the government's Localism Bill.

⁵⁰ Targets apply to the 68% of MSW which is assumed to comprise biodegradable waste. This quantity can be calculated and then grossed up to include a further 32% by weight of inert material which, collectively, represents the amount of MSW that can be sent to landfill within the provisions of the Landfill Regulations. Waste composition analysis commissioned by MWDA indicates that on Merseyside the proportion is closer to 50:50 however the 68:32 figure is used by Defra and the Environment Agency to calculate landfill allowances and to monitoring performance and is used here.

⁵¹ MWDA has purchased extra credits which will allow it to landfill more MSW than is allowed for under the Landfill Regulations in the period prior to 2013 and therefore this means performance levels are not being achieved at present. However the government has announced that the LATS structure will be removed after 2013 as landfill tax is now the main factor driving waste away from landfills. The revised Joint Municipal Waste Management Strategy assumes that up to 10% of residual MSW may still go to landfill by 2020 but that 90% will be recycled, composted or treated, and that increasing rates of recycling and composting already mean the proportion of biodegradable material in landfilled waste has fallen below the figure shown.

⁵² Merseyside EAS estimates reflecting that 8% of municipal waste is non-household waste and 50% of it is recycled or composted.

what proportion of material diverted from landfill is recycled or composted and what proportion is treated, with these rates being dictated by future trends in market prices for recyclates, waste fuel stock (i.e. RDF) and credits generated by burning waste in EfW plants.

Table 2.11 summarises the principal non-statutory targets. This includes those from the North West RSS pending its final dissolution when the Localism Bill is enacted.

Table 2.11 Non-statutory targets for managing C&I wastes

Parameter	Target specified	Current performance
Growth in arisings	Zero growth (date unspecified)	See text
Recycling of C&I wastes	20% by 2010 (Waste Strategy) 35% by 2020 (RSS)	59% (2009) ⁵³
Value recovered from C&I wastes	70% by 2020 (RSS)	60% (2009) ⁵⁴

The zero growth target illustrates the problems of dealing with these streams together. Regionally, the commercial stream grew annually by 3.5% over the period 2003-2006 whereas the industrial stream shrank at by just under 1% over the same period. Unfortunately the data do not allow sub-regional rates to be estimated accurately. While the Waste Strategy for England 2007 maintains that both growth rates are now decoupled from economic activity it is not clear that there is any current evidence to justify this.

The needs assessment supporting the Waste Local Plan assumes that commercial wastes may eventually return to anything close to a 2% annual growth rate (under the Pessimistic scenario referred to previously) once the current economic conditions have passed, but that this will not occur until after 2015 and will not be sustained indefinitely as arisings will also be increasingly affected by waste minimisation initiatives.

The key conclusion from the table above is that recycling rates are already well above target and it is likely the value recovery target will be met without difficulty. It should be noted that Defra's report on C&I wastes in England suggests an average national rate of around 54% in 2009/2010.

Construction, Demolition & Excavation Waste

There are no statutory targets for this waste stream although the Waste Strategy revision published in 2007 seeks an aspirational target that no CD&E materials will be sent to landfill by 2020. Analysis of the regional CD&E survey data suggests that recycling performance for this stream is already significantly higher than the other principal streams, with only 19% of material going to landfill for non-beneficial use⁵⁵. However a further 23% is held or spread on exempt sites and changes to waste legislation will come into force in 2010 which will tax this management method in the same way as landfills suggesting the government no longer views it as a sustainable way of dealing with these wastes.

A key issue identified from consultation with the waste management industry during the needs assessment work for the Waste Local Plan is that current economic conditions have caused the market for recycling CD&E materials to evaporate, with the result that anything that cannot be re-

⁵³ Environment Agency survey of C&I arisings in the North West region – data for Merseyside & Halton only.

⁵⁴ Ibid.

⁵⁵ CD&E wastes may be used in landfill sites for landscaping (waste soil) or for engineering (asphalt and similar rubble for temporary access roads), which are considered beneficial uses of these wastes.

used at source is likely to be sent to landfill. This development will clearly complicate the task of progressively reducing landfill rates to 0% in the period to 2020.

Hazardous Waste

There are no legislative tools that dictate performance on recycling and value recovery from hazardous wastes but the earlier analysis of management methods shows there is already a very high level of both with only 10% of material going to landfill. Instead the Waste Strategy revision 2007 sought to address the issue by steps which will reduce the hazardousness of wastes at both ends of the life-cycle, i.e. by encouraging:

- manufacturers to use smaller quantities, or to dispense with, hazardous materials in new products (e.g. heavy metal coatings and certain gases in IT equipment); and
- disposal authorities to deploy collection facilities and infrastructure which will treat wastes so as to reduce their hazardousness before disposal.

Existing waste management facilities

Table 2.12 summarises the sub-region's estimated waste management capacity at the end of 2010. Capacities have been corrected to reduce the quantity where this is already earmarked to deal with wastes from outside the sub-region.

It is also important to note that capacity figures show permitted capacity but in some cases only a proportion of this may be exploited at present. However it is assumed that the site operator will be able to increase capacity within the limit imposed by the existing Environmental Permit without the need to seek to vary permissions for the site, enabling the local waste sector to response quickly to any requirement for additional capacity.

Table 2.12 Summary of current waste management capacity⁵⁶

Facility type	MSW	C&I	CD&E	Haz.	Comments
MRF/HWRC	200 (M) + 400 (H)	(The functions are normally performed by transfer stations for these waste streams)			Requirement has been identified for 1 new HWRC in Liverpool and 1 replacement in Halton. The need for further replacements is currently under review
Transfer stations	1150	510	1260	430	CD&E WTS capacity has been reduced as some facilities fall partly in West Lancs ⁵⁷
Open composting	70				See footnote above
In-vessel composting	(75)				Two thirds of the capacity is in a permitted but unbuilt facility at Widnes. The rest is a mothballed facility at Bidston
Anaerobic digestion	-				No capacity in use or planned unless it is for farm use only
Reprocessing recyclables	940		50 (+1100?)	730	The CD&E figure includes an estimate of the capacity of mobile crushing plant which may be operating outside the sub-region
Non-thermal treatment	?	(700)			Three facilities are likely to treat C&I waste but none is built yet. Any MSW would come from other authorities (e.g. North Wales)
Thermal treatment	(400?)	(950)		40	See section below for further detail. The hazardous facility burns only animal wastes covered by Animal By-Products legislation and the figure shown is a Merseyside EAS estimate of the capacity used to manage waste arising locally
Non-inert landfill	575	(400?)			MSW landfill capacity is in Warrington but is secured by contract. C&I landfill capacity is in a site scheduled to close in 2012 but which has unfilled voidspace
Inert landfill	?	6250	(150)		Inert MSW and C&I waste is likely to go to non-inert landfill. The large figure is Ineos Chlor's lagoon which does not accept third party waste. Inert capacity is provided by two permitted sites that have not yet started accepting wastes
Hazardous landfill				225	Capacity is provided by Ineos Chlor's site at Runcorn which accepts third party waste on contract

All figures are expressed in 000 tonnes and rounded to the nearest 5000 tonnes. Figures in brackets refer to capacity which has planning permission but which is not yet built or operational. Grey cells indicate when the waste management function is not appropriate for a particular type of waste.

Transportation of waste

The earlier Scoping Report provides an example of the distance travelled by refuse collection vehicles in Knowsley, totalling over 8,500km in a single year. There is no other data on these parameters.

Assessment of sites for the Waste Local Plan takes account of the proximity of potential locations for new waste management facilities to rail lines (and particularly to sidings), canals and docks, and to the strategic road network.

Planning consent for Ineos ChlorVinyl's Energy from Waste facility at Runcorn requires it to use the rail network to carry significant quantities of waste to the site, using the canal network as an alternative and road as the mode of last resort. The planning application for Biossence's

⁵⁶ Merseyside EAS, Needs Assessment Publication Stage Report, May 2011. Further detail is provided in Appendix 4 to that report.

⁵⁷ This adjustment also affects the figure shown for open composting capacity and has been made to ensure the same capacity is not counted by Lancashire and Merseyside & Halton.

treatment facility at Eastham, Wirral proposed using barges to carry wastes across the Mersey from South Liverpool instead of using longer road routes which may necessitate carrying a lot of the waste through the Mersey tunnels.

Energy from waste

There have been significant changes to Merseyside & Halton's energy from waste capabilities since the original SA Scoping Report was published. Table 2.13 shows the facilities which have been given planning consent. Only the first facility is under construction at the time this report was prepared.

Table 2.13 Summary of consented EfW capacity in Merseyside & Halton

Operator	Location	Capacity (tonnes)	Materials	Energy output ⁵⁸	Comments
Ineos ChlorVinyls	Runcorn (Halton)	850,000	MSW; may take C&I	100MW	Will burn SRF ⁵⁹ . Half of the capacity is already earmarked to take waste from Manchester and Cheshire
Biossence	Eastham (Wirral)	200,000	Likely to be C&I	30MW	Plant has double this capacity but pre-treatment may reduce mass by half before gasification
Granox	Widnes (Halton)	150,000	Industrial	Approx. 14MW	Capacity is for burning ordinary food waste. The site already has separate capacity of 90,000te burning wastes covered by the Animal By-Products Regulations
Energos	Kirkby (Knowsley)	80,000 to 96,000	C&I, may take MSW	Approx. 9MW	
EMR	Bootle (Sefton)	134,500	C&I	30MW	Gasification of automotive shredder residues. Waste metals are sourced from the north of England but the total includes some residues to be brought from the company's plant in the West Midlands

Collectively these facilities are capable of generating around 16% of the North West regional target for 2020 of renewable energy generated from thermal treatment of wastes which is eligible to receive Renewables Obligations Credits⁶⁰.

In addition there are seven landfill sites equipped with gas engines which generate power from landfill gases (i.e. as opposed to flaring the gas)⁶¹. One of these sites provides energy to adjoining brickworks while the rest provide power to the electricity grid network.

⁵⁸ Refers to electricity output only. Some facilities may also generate three times this quantity of heat also.

⁵⁹ SRF is Solid Recovered Fuel, which is created by treating raw waste in a process which reduces its mass by 50%. This plant therefore needs a catchment area capable of delivering 1.7 million tonnes of residual (i.e. raw, unrecycled) waste.

⁶⁰ Based on 4NW, The North West of England Plan – Regional Spatial Strategy to 2020, Table 9.6, and Merseyside EAS analysis.

⁶¹ Sites are in Liverpool (2), Wirral (2), St Helens (3).

Waste Crime

Table 2.14 compares basic statistics for 2005/6 and 2007/8 (for the five district councils of Halton, Knowsley, Sefton, St. Helens and Wirral excluding Liverpool which has a distorting effect on local, regional and national data.

Table 2.14 Summary of fly-tipping statistics⁶²

	No. of incidents		Clean-up cost		Prosecutions	
	2005/6	2007/8	2005/6	2007/8	2005/6	2007/8
Halton	2955	1438	£118,205	£98,651	16	
Knowsley	3433	3328	£192,692	£152,661		
Sefton	1346	1113	£175,680	£54,819	1	
St Helens	2776	2972	£72,990	£173,700		1
Wirral	3354	5175	£252,626	£496,116	10	1
Total	13864	14026	£812,193	£975,947	27	2
Change		+1.1%		+20.1%		-93%
Cost / incident			£58.58	£69.58		

The data show a minor increase in the number of incidents but an escalation in the cost, which is unlikely to reflect inflationary effects alone. Comparison with 2004/5 and 2006/7 data suggests the high levels of prosecutions in 2005/6 are an aberration which is it not possible to explain at present.

2.4 Sustainability Issues and Problems

The following key sustainability issues were identified at the Scoping stage. In some cases the identified issues/problems are constraints or impacts to be avoided. Other identified issues/problems are possible opportunities to be supported where possible by the Waste Local Plan.

2.4.1 Biodiversity, Flora and Fauna

- The area to which the Waste Local Plan refers includes features of biodiversity interest at all levels in the hierarchy of nature conservation designations.
- Virtually all the coastline of the Merseyside area is covered by formal or provisional designations under the EU Birds and Habitats Directives – including the Sefton Coast as well as the estuaries of the Alt, Dee, Mersey and Ribble. These designations require substantial statutory planning controls on all development in the coastal zone and the land immediately inland to protect qualifying species, and the habitats that support them.
- Any permissible development on the coast will also have to take account of the prevailing wind and tidal regimes and may need to take account of impacts on more distant protected sites (e.g. North Wales coast, Ribble Estuary and Liverpool Bay).
- At the national level there are 17 SSSIs representing approximately 28,300 ha of the sub-region. Development should avoid these sites and the area around them and use

⁶² <http://www.defra.gov.uk/Environment/localenv/flytipping/flycapture-data.htm#LA>

all appropriate measures to protect the habitats and features for which they are designated. There are also 29 National Nature Reserves requiring comparable levels of protection, and a substantial number of other designations such as Regionally Important Geological Sites, all of which must be afforded protection appropriate to their importance and rarity.

- The scale of the most stringent European designations may have implications for the opportunity to shift waste onto coastal shipping traffic (as opposed to long-distance movements by road) though the opportunity and economic case for this have not yet been explored.

2.4.2 Population and Human Health

- Merseyside Metropolitan County is one of the most densely populated areas in the country.
- Life expectancy is, overall, lower in Merseyside than for the national average. A high proportion of people describe their health as not good or have a limiting long term illness. There is no evidence linking this situation to waste management facilities, but the consideration of new sites will need to evaluate potential impacts from processing, disposal and transport of materials.
- The population of Merseyside declined from the middle 1970s, this is partially due to decentralisation of Liverpool's population from the City centre to commuter towns. Current trends vary according to District with population levels declining in Knowsley, Sefton and St Helens whilst increasing in Liverpool, Wirral and Halton.

2.4.3 Water and Soil

- The area includes the Rivers Alt, Dee and Mersey as well as several canals. Water quality in the Mersey has improved significantly over the past 50 years. There are also seven designated beaches for which water quality has been improving steadily over the past 10 years.
- Most of the open land lying outside the urban areas in Merseyside is of Grade 1 (excellent) or 2 (very good) quality, representing an important resource for agriculture. Protecting this resource may constrain opportunities to develop new waste facilities of appropriate types (e.g. composting) in rural areas.
- The quality of land lying outside the urban areas in Merseyside constrains opportunities for some types of waste facility which might be appropriate in rural areas.
- Water quality in the main rivers and estuaries has improved to satisfactory condition as a result of management efforts and clean-up programmes over the last 10 years, but it is still vital to limit all risks of pollution through site location, site licensing and good management practices.
- Bathing water quality is excellent or good, having improved over the last 10 years, and reversal of this trend even at individual sites must be avoided.
- A sizeable part of the sub-region lies in groundwater protection zones, adding further possible constraints on development, including some urban areas.

2.4.4 Air

- There are four Local Air Quality Management Areas (LAQMA) within Merseyside. These are the Liverpool City Centre AQMA and the Liverpool M62 / Rocket Junction

AQMA, and two newly-declared designations in Newton-le-Willows and along the M6 at the far east of St Helens Borough. All areas are designated due to high levels of nitrogen dioxide (NO₂) for which the primary source is pollution from road traffic. The situation concerning PM₁₀ levels will be affected by the halving of the national target from its 2005 level by 2010.

- There is no information about the contribution of waste management to the general (background) level of air quality, although concerns about general levels of health (see above) mean that development close to residential and employment areas needs careful evaluation of the potential impacts and use of appropriate controls administered through the planning and waste licensing processes.
- Liverpool has two designated Air Quality Management Areas where there will be stricter controls on new development, although both are the result of traffic pollution. Other councils have monitoring programmes in place but at present there are no other local designations.

2.4.5 Noise

- In both the early 1960s and early 1990s, Tranquil Area maps indicate that Merseyside had few areas that could be classed as tranquil.
- Specific data on noise nuisance from waste management are not currently available, but the effects of new sites close to residential areas and other sensitive receptors will need to be addressed through planning applications and the issue of the waste management licence for a site.
- Limited rural areas of Merseyside are classed as tranquil.

2.4.6 Climate Change

- The significant coastal areas of Merseyside are at risk from estuarine flooding as are areas around the main rivers.
- Existing flood risk will be exacerbated by any rise in sea levels and winter rainfall (this will also affect fluvial flooding on the Rivers Mersey, Dee and Alt).
- Increasing temperatures will affect the rate of decomposition of MSW at all stages in the collection and treatment cycle.

2.4.7 Culture and Heritage

- In 2004 Liverpool's waterfront was inscribed as a UNESCO World Heritage site. Liverpool has more listed buildings than any other City in England apart from London. Liverpool has been named as Capital of Culture for 2008. This is likely to result in substantial inward investment. There will be an increasing number of tourists as a consequence.
- Liverpool's waterfront has UNESCO World Heritage Site status, complementing other regeneration of the area and the city, however this is subject to periodic review and inappropriate or intrusive development should be avoided. Combined with the forthcoming role as European City of Culture, further inward investment is expected, and all new development (including that for waste management) must conform to high quality design principles that minimise adverse sensory and visual impacts, and which complement or blend into the cityscape.

- There are 48 Scheduled Ancient Monuments in Merseyside, 114 Conservation Areas and 22 registered parks and gardens which could provide additional constraints on the location of new waste management facilities which will need to be administered through the planning application process.

2.4.8 Landscape

- There are no Areas of Outstanding Natural Beauty (AONB) or other statutory landscape protection designations within Merseyside. Practically all the rural land lying outside built-up areas is designated as Green Belt. The landscape of the area is variable and is defined through seven Countryside Character Areas.
- The Green Belt designations place substantial constraints on the type and scale of development that might occur in a substantial part of the countryside outside the main urban areas.

2.4.9 Use of Resources

- Recycling and composting rates reached 33% in early 2009, but this suggests the sub-region will struggle to meet the 40% target for 2010 set by the Waste Strategy.
- Landfill gas is recovered for energy use at six closed landfill sites within Merseyside.
- Opportunities for energy and value recovery from waste are limited at present by the scale and type of the waste treatment infrastructure. However this will be addressed within the next 3-4 years once a number of recently-consented thermal treatment facilities begin to operate, all of which will be generating energy (and possibly heat in some cases) from waste.

2.4.10 Waste Arisings (Principal Streams)

- In 2007/8, the total waste arisings for Merseyside were estimated to be between around 4.85 million tonnes.
- The figure for MSW is predicted to grow to around 940,000 tonnes by 2020/21, reflecting the slowing growth in arising. Landfill is currently the dominant mode of disposal of MSW due to the lack of treatment technology to manage wastes that are not being recycled.
- Commercial and industrial waste and construction/demolition/excavation waste account from almost three-quarters of the waste arisings in the Merseyside area (24% and 50% respectively). The Waste Local Plan has greatest influence over the conversion of MSW however for these other waste streams its primary influence is in providing a supply of land available for treatment facilities, though changes to collection/treatment processes will be largely the result of private sector initiatives.
- Recycling performance for MSW has improved from 11% in 2002/3 to 33% in early 2009 suggesting the national target of 40% by 2010 may be missed. Further improvements in collection, distribution, treatment and disposal of these wastes are essential in order to maintain performance in line with targets; these remain challenging until at least.
- The current waste infrastructure in the Merseyside area is dominated by various types of landfill, supplemented by more than 50 recycling facilities (largely for metal at present) and a modest number of HWRCs. Meeting the challenges of waste reduction,

increased recycling and value recovery is likely to demand an increase in the number, capacity and range of types of waste management facilities in the sub-region.

- Recently consented infrastructure has been dominated by a large quantity of thermal treatment capacity. Thermal treatment will enable the eventual diversion of all MSW from landfill and also parts of the C&I waste stream, using waste as an alternative to fossil fuels and generating Renewables Obligations Credits. However if thermal capacity predominates it could result in cannibalisation of MSW and C&I wastes which is exploited for its calorific value but which could be recycled otherwise. Moreover the quantity of consented capacity suggests that if it is all built the sub-region will need to import wastes to enable the facilities to operate at optimal efficiency.
- MSW is forecast to grow at a compound rate of under 1% per annum in the period to 2015 (a higher rate at present is forecast to decline progressively) and is likely to comprise a slightly larger share of overall wastes if a forecast reduction in commercial and industrial wastes materialises.
- The large size of the C&I waste stream suggests infrastructure growth that provides an opportunities should be encouraged for co-treatment of these wastes with MSW at certain sites in order to reduce land demands, infrastructure costs and the impacts. However this appears unlikely at present.
- C&I wastes are forecast to grow at 1% per annum in the period to 2010 reflecting economic growth and other factors (see next point), but at a reduced rate thereafter reflecting the progressive effect of producer responsibility legislation (introduced in 2002/3) on arisings in this stream.
- The Merseyside area is well-served by vehicle disposal facilities, so the implementation of End of Life Vehicle regulations from January 2007 should be accommodated by the existing infrastructure but may require new facilities for collection and disposal of waste oils, etc. Implementation of the Waste Electrical and Electronic Equipment Directive requires new infrastructure, requiring coordination between producers (who must develop collection and disposal mechanisms), local disposal authorities and waste contractors operating HWRCs.
- Although the largest individual component, a high proportion of CD&E wastes are already recycled and their nature means this is usually done at or close to the source of the waste, limiting transport impacts. A key consideration for this stream is whether the recent collapse of markets for secondary recycled aggregates will be short-lived and that an increase in re-use of materials on or off-site will re-assert itself early in the next decade.
- Around 7% of waste generated in the study area is from agriculture although as much of 95% of this is believed to be treated or disposed of on the farm and lies outside the recently implemented control processes. Some regional infrastructure exists for processing the wastes which cannot be dealt with this way but there is scope for improving collection schemes and adding more processing infrastructure.
- There were almost 1 million incidents of flytipping in Merseyside between in 2007/8 (excluding Liverpool). The recent change suggests a slight increase on 2005/6 which may reflect the impact of new legislation, refusal of trade waste at HWRCs, or other factors. Of perhaps greater concern is that the total cost of cleaning up incidents has risen by 20% over the period mentioned above.
- Waste flow data for MSW in Merseyside indicate that the region is only approximately 64% self-sufficient. Excluding Halton, 36% of the sub-region's MSW is exported for

landfill disposal elsewhere. Approximately 69% of the sub-region's C&I waste is exported for disposal, particularly to Warrington and Cheshire.

2.4.11 Hazardous Waste

- The quantity of locally originated wastes has fallen gently but progressively over the current decade. Around 75% of these wastes are exported for treatment (usually resulting in recycling) or disposal at specialist facilities, with most being managed elsewhere in the North West or on Teeside. However they are balanced by a slightly larger quantity of imports, much of which are waste oils and solvents that are processed at two nationally-important facilities.
- No more than 10% of locally managed wastes are disposed to landfill. The Waste Local Plan can provide scope for construction of additional facilities to store, process and/or dispose of hazardous wastes arising both within Merseyside and elsewhere. Such facilities may pose additional environmental risks which would need to be controlled through the planning and environmental permitting regimes.

2.4.12 Economy

- The main employment sector within Merseyside is Services with Wholesale and Retail dominant. Average gross weekly earnings are lower than for the North West and the UK however there is evidence to indicate that this gap is closing.
- There are opportunities to integrate the Waste Local Plan with economic regeneration plans given the potential economic benefits that the waste sector could bring. Although waste management is unlikely to be a major employer and individual sites will not generate large numbers of jobs, there is some scope for a cumulative (beneficial) impact from increasing waste management facilities.
- Peel Land's proposals for the Wirral Waters and Liverpool Waters provide an opportunity to integrate state-of-the-art waste management infrastructure which supports recycling, composting and energy recovery objectives into massive regeneration projects which are capable of contributing sizeable improvements in landfill diversion as they are rolled out.

2.4.13 Employment

- Unemployment is high relative to regional and national averages. Merseyside includes some of the most socially deprived local authorities in England. Apart from Liverpool itself, crime rates are at or below national averages.
- Individual waste facilities employ relatively few staff; nevertheless a significant growth in infrastructure which enables the shift of waste treatment away from landfilling provides a potential benefit from cumulative growth in new jobs. However it is likely that new facilities will be distributed across the Merseyside area so they are as close as feasible to sources of waste. This means there may be limited opportunity to concentrate new jobs in those wards where unemployment is currently highest.
- Notwithstanding this point, diverting waste from landfill will create new skilled and semi-skilled positions in recycling, reprocessing and treatment facilities, as well as growth in jobs in waste collection services. In contrast the loss of jobs as landfilling of waste declines will be negligible.

2.4.14 Access to Services

- Merseyside is well-served by the strategic road network which provides access through the main urban areas and connections to the regional and national motorway network. These routes provide an opportunity to concentrate road movement of wastes within the sub-region although implications of increased waste movements on traffic, air quality, etc. must be assessed and monitored.
- The sub-region is also well-served by rail links serving Liverpool, the Wirral peninsula, St Helens and other larger urban areas; and there is also access onto the West Coast Main-Line. This provides infrastructure which could enable transfer of some long-distance movement of waste off the road network if waste facilities are located appropriately and if there are no gauge restrictions.
- Liverpool's port facilities also provide an opportunity for the movement of waste using coastal vessels or via the canal network, subject to considerations of impacts on adjacent nature designations and subject to assessment of the cost-effectiveness of this approach. The port operator, Peel Ports has been provided consultation responses during the course of developing the Waste Local Plan and have been consulted about its willingness to allow the development of waste facilities in the port estate within which it has permitted development rights.

2.5 Sustainability Objectives

In order to assess the contribution of the Waste Local Plan to future sustainable development, a series of 34 Sustainability Objectives were developed during Stage A. The Sustainability Objectives provide the benchmark for undertaking the appraisal and form the basis of the Sustainability Appraisal Framework.

The objectives against which the sustainability of the Waste Local Plan has been assessed were developed and consulted on during the Scoping stage consultation. These cover the full range of environmental impacts stipulated by the SEA Directive and Regulations, and the broad range of economic and social issues proposed in current guidance on SA⁶³. The Scoping Report sets out the 34 Sustainability Objectives as follows:

Table 2.13 Sustainability Objectives

Sustainability Objectives
1). To protect, enhance and manage biodiversity
2). To improve the health of the community and workers
3) To reduce health inequalities (including poverty, social deprivation and exclusion)
4) To reduce waste related crime, fear of crime, and hazards and risk to health
5) To improve safety for operators and the community
6) To support voluntary and community networks
7) To protect and improve local environmental quality
8) To develop and market the image of Merseyside
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters
11) To protect, manage and restore land and soil quality
12) To use previously developed land where practicable
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)
14) To mitigate and adapt to climate change including flood risk
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation
16) To reduce the kilometres travelled by waste
17) To minimise the impacts of waste-related transport and encourage sustainable transport
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features

⁶³ ODPM (2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents

19) To protect, enhance and manage the local character of the landscape across the sub-region
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste
21) To reduce the amount and hazardous properties of hazardous waste
22) To use energy, water and mineral resources prudently and efficiently
23) To promote sustainable design for both new and existing waste management facilities
24) To maximise opportunities for renewable energy production and heat recovery from waste
25) To improve the competitiveness and productivity of business
26) To exploit the growth potential of new business and new technologies for waste
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste
28) To maximise opportunities for urban and rural regeneration through waste management activities
29) To secure economic inclusion
30) Maintain high and stable levels of employment and reduce long-term unemployment
31) To improve local accessibility of goods, services and amenities for all groups
32) To reduce community severance
33) To enable groups and communities to contribute to decision-making for waste planning
34) To provide opportunities for waste education and awareness raising

2.6 Waste Local Plan Issues and Options

The Issues and Options Consultation raised the following nine specific issues as being particularly relevant to the sub-region.

- Waste Minimisation
- Waste Management
- Self sufficiency in Merseyside
- Identify sites for new waste management facilities
- Spatial pattern/distribution of facilities to serve local communities
- Waste management treatment and disposal options
- Hazardous waste management in Merseyside
- Transport of waste
- Layout and design of new developments
- Criteria based development control policies

These were appraised against the SA objectives and the findings of that appraisal⁶⁴ have been used to inform subsequent preparation of the strategy, core and development management policies which are now presented in the Published version of the draft Waste Local Plan.

⁶⁴ Sustainability Appraisal of the Joint Merseyside Waste DPD, Issues and Options Sustainability Commentary, 2007.

3 Sustainability Appraisal of Waste Local Plan

3.1 Introduction

This chapter presents the appraisal findings of the Publication Waste Local Plan. The findings are also informed by the sustainability appraisal of Issues and Options, Spatial Policies and Sites Report and the Preferred Options. The reports relating to the previous appraisals (Issues and Options, Spatial Policies and Sites Report and the Preferred Options) are available from the Council.

3.2 Appraisal Methodology

The appraisal involved assessing each of the various aspects of the Publication Waste Local Plan against the SA objectives. The appraisal has been carried out in a way which accounts for both the potential positive and negative effects of the proposals in the Waste Local Plan.

Effects may be Primary (or direct effects) or Secondary (or indirect effects). Primary effects are those, which occur as a direct result of the implementation of the Waste Local Plan. Secondary effects are “effects that are not a direct result of the Waste Local Plan, but occur away from the original effect or as a result of a complex pathway”⁶⁵.

In assessing the temporal aspect of the potential significant effects of the Waste Local Plan the following approximate timescales have been used:

- **short term:** the period from the effective start date of the Waste Local Plan where all activities would be approved in line with the plan’s or programme’s guidelines to a certain number of years thereafter (e.g. 1-3 years, as employed in the Council’s existing SA work – the Sustainability Commentary report);
- **medium term:** an approximate time period lasting from the end of the short term, to the beginning of the long term (e.g. 3 – 10 years); and
- **long term:** an approximate time period lasting from the end of the medium term to a certain number of years thereafter (e.g. 10 years or more).

The permanence of effects would be accounted for through the temporal account (short-, medium- and long-term).

Possible cumulative effects have been considered. A cumulative effect is an effect arising from policies external to the Waste Local Plan acting in combination of the policies of the Waste Local Plan upon a common receptor.

⁶⁵ ODPM (2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents

4 Appraisal Findings

This section summaries the conclusions and recommendations of the assessment. In this re-issued report the results of re-assessment of post-Hearing changes to the Waste Local Plan are presented in blue text boxes. The changes have affected the Overall Strategy, and policies WM2, WM3, WM7, W13, WM14 and WM15, and a new policy – WM0 – has also been assessed. Detail of the specific modifications to policy text can be found in the corresponding section of Technical Appendix 1.

4.1 Strategic Vision

The proposed vision for the Waste Local Plan is that:

By 2027, the Waste Local Plan will have facilitated the development of a network of sustainable and modern waste management facilities which serve the needs of the local communities of Merseyside and Halton, enabling them to be as sustainable and self sufficient as possible in terms of waste management. The communities of Merseyside and Halton will have taken responsibility for their waste, and through effective resource management, created economic prosperity by transforming waste into a resource and moving waste up the waste hierarchy. This network of facilities will be sited to avoid negative impact on health and amenity and enhance the natural and built environment, with site allocations being appropriate to the scale and type of waste management facility, and where possible enable waste management in Merseyside to support mitigation and adaptation to climate change.

Summary of Findings

When appraised against the SA objectives, the proposed vision was found to promote sustainable waste management as it was in line with most of the SA objectives. It supports self-sufficiency which would lead to waste being managed closer to where it arises and contribute to reducing the overall distances waste is moved. This can in turn help promote local accessibility to waste facilities both for industry and individuals which will contribute to helping Merseyside and Halton residents taking responsibility for their waste in line with Government waste policy.

The vision also supports resource efficiency and seeks to manage waste in line with the waste hierarchy which supports minimisation, re-use, recycling, recovery and diversion of waste from landfill and lies at the heart of the Government sustainable waste management policy. The vision commits to creating economic prosperity by transforming waste into a resource. Treating waste as a resource will stimulate the development of a secondary materials economy which can lead to an enhanced image of the sub-region attracting new investment in the waste sector as well as promoting adoption of new waste technologies.

The vision has also been revised to include specific mention of enabling waste management in Merseyside and Halton to support mitigation and adaptation to climate change.

The vision also seeks to ensure that waste management does not lead to adverse effects on the natural environment as well as on human beings by ensuring the network of facilities is well sited and that site allocations are appropriate to the scale and type of waste management facilities proposed.

4.2 Strategic Objectives

To deliver the above proposed vision, the following strategic objectives are proposed:

- SO1 – To plan for sufficient waste management facilities to meet Merseyside and Halton’s identified waste management needs, and to accommodate the sub-regional apportionment of waste arisings as set out in RSS
- SO2 – To promote waste minimisation and optimise re-use and recycling of waste materials for both waste specific and non-waste planning applications.
- SO3 – To encourage waste management facilities which increase re-use, recycling and value/energy recovery of all waste types, including through the use of new waste management technologies where appropriate, and minimise final disposal, in order to meet national and regional and Merseyside and Halton’s waste targets.
- SO4 – For Merseyside and Halton as one of North West’s City regions, to be a leader in promoting transformation of waste to resource to encourage social, economic, environmental and employment gain from sustainable waste management.
- SO5 – To raise awareness in sustainable waste management amongst the people and business communities of Merseyside and Halton to reduce waste arisings and increase recycling rates, in particular given the low starting point in the sub-region in terms of recycling.
- SO6 – To minimise the adverse effects of waste management development (including transportation) on local amenity, and the natural environment of Merseyside and Halton.
- SO7 – To promote high quality development for waste management facilities, particularly given the urban nature of the sub-region.
- SO8 – For all new waste management facilities on Merseyside and Halton to take account of and contribute to reductions in greenhouse gas emissions and mitigate the effects of climate change.

The approach adopted in appraising the strategic objectives was to undertake a compatibility appraisal against the SA objectives in order to identify where there were potential conflicts or synergies between the two sets of objectives.

For the Compatibility Appraisal a simplified set of scoring symbols was used to determine the compatibility of the Strategic Objectives with the SA Objectives as shown below:

Table 4.1 Appraisal Scoring Symbols for Strategic Objectives

Symbol	Likely effect on the Sustainability Objective
+	Objective compatible
0	Objectives not related
X	Objectives incompatible
?	The objective relationship is unknown or is dependent on implementation

Table 4.2 Compatibility Appraisal Table

WLP Obj.	SA Obj.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
SO1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	0	0	0	0	0	0	0	0	0	0	0	0	0	+	0	0	0	
SO2		+	+	0	0	0	0	+	0	+	+	+	0	+	0	+	+	+	+	+	+	+	+	0	0	0	0	0	0	0	0	0	0	0	0	0
SO3		0	0	0	0	0	0	0	0	0	+	+	0	0	0	+	0	0	0	0	+	0	+	0	+	0	+	0	0	0	0	0	0	0	0	0
SO4		+	+	0	0	0	0	+	+	+	+	+	+	+	+	+	+	+	+	+	0	0	0	+	+	+	+	+	+	+	+	+	+	0	0	0
SO5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	
SO6		+	0	0	0	0	0	+	0	+	+	+	0	+	0	+	+	+	+	+	+	0	+	+	+	0	0	0	0	0	0	0	0	0	0	0
SO7		+	0	0	0	0	0	+	+	+	0	0	0	0	0	0	0	0	0	+	0	0	0	+	0	0	0	0	0	0	0	0	0	0	0	0
SO8		0	0	0	0	0		+	+	0	0	0	0	0	0	0	0	0		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	

Summary of Findings

Generally, the Waste Local Plan objectives were found to be compatible with the SA objectives. No incompatibility was found between the objectives although there were instances where there was no direct relationship between the Waste Local Plan objectives. This was the case for the following SA objectives:

- SA objective 3 on reducing health inequalities;
- SA objective 4 reducing waste related crime;
- SA objective 5 on improving safety for operators and the community;
- SA objective 6 on supporting voluntary and community networks;
- SA objective 32 on reducing community severance.

4.3 Overarching Strategic Approach for the Waste Local Plan

The Waste Local Plan seeks to adopt a Resource Recovery-led Strategy within the context of continuing to increase landfill diversion rates. This strategy has the following objectives:

- To seek to minimise waste arisings in the first place
- To maximise recycling, resource recovery and re-processing
- To ensure that secondary waste is minimised and processed in a way to provide feedstock for heat and power generation thereby:
- Minimising export of residual wastes for landfill disposal
- Minimising the need for new landfill/landraise and reserving capacity for the greatest disposal needs
- Balance the overall export of landfill tonnages with provision for treatment and recycling of imported waste tonnages of an equivalent amount.

The Resource Recovery-led approach was appraised against the SA framework and the findings are provided below. The Strategic Approach has two components:

- Management, for which the Resource Recovery-Led Strategy is the preferred option;
- Spatial Pattern, for which the Sub-Regional Sites Approach is the preferred option.

Resource Recovery-led Strategy – This approach supports sustainable waste management as it seeks to maximise recycling, resource recovery and re-processing thereby diverting waste from landfill. Reducing the amount of waste going to landfill has a positive effect of mitigating against climate change as it reduces methane emissions. The Resource recovery approach also supports waste minimisation which has an overall beneficial effect as it would lead to less waste needing treatment and management. It also supports SA objectives on reducing distances waste is moved as it seeks to minimise export of residual waste for landfill disposal and supports net-self sufficiency. It also promotes processing of secondary waste in a way that provides feedstock for heat and power generation which supports the SA objective on renewable energy. Overall, this approach supports key SA objectives and has the potential to lead to the delivery of sustainable waste management in Merseyside and Halton.

In order to determine the most sustainable option with regard to the spatial pattern of new waste management facilities, the Waste Local Plan considered three options which included:

- The waste arisings approach - this approach entails determining the spatial strategy by apportioning waste treatment capacity according to volumes of waste arising by district;
- The resource recovery approach - the spatial strategy would focus on the co-location of facilities on larger sites or groups of smaller nearby sites.
- The sub-regional site approach – identify strategic sites for sub-regionally significant facilities focusing on areas around existing clusters of waste management facilities.

These approaches were subjected to SA during the Spatial Strategy and Sites Report preparation process⁶⁶ and the Councils' adopted the Sub-Regional Site approach as their preferred option. This approach was further appraised and the findings of this appraisal are discussed below.

The **Sub-regional Site Approach** seeks to identify strategic sites for sub-regionally significant facilities focusing on areas around existing clusters of waste management facilities. This approach can help in delivering large facilities required for the efficient management of waste arising within the Merseyside sub-region. It can provide opportunities for co-location and therefore creation of synergies (similar benefits as the Resource Recovery Park Option), leading to better use of waste as a resource. Co-location with existing waste management uses presents opportunities for better use of land (especially where sites are on Brownfield land). It also presents opportunities for the production of renewable energy. This approach however could lead to negative cumulative effects depending on the specific location of sites, their existing uses and proximity to sensitive receptors such as housing and the type, size and nature of proposed facilities. It is therefore recommended that assessment of potential cumulative effects especially with regard to transport and traffic, air quality, noise, odour, landscape and other potential negative effects is required as part of this option to ensure further expansion/co-location does not lead to adverse effects on the surrounding environment and communities.

The principal change to the wording of the Strategic Approach following the Examination Hearings introduces more flexibility in the implementation of the strategy and clarifies its intent. However the extent of the changes proposed do not affect the conclusions of the appraisal originally presented in the SA Report.

4.4 Waste Local Plan Policies

4.4.1 Policy WM0

Policy WM0 is a new policy introduced following the Examination Hearings to bring the Waste Local Plan into conformity with national planning policy recently introduced in the NPPF. Whilst it may be expected that the policy would be beneficial, and could have synergistic effects with other policies in the Waste Local Plan, the actual effects are hard to predict as they will depend largely on how the policy is implemented in practice. No significant effects were identified.

⁶⁶ Further details on the findings of the SA of these options are contained in the SA report accompanying the Spatial Strategy and Sites Report which is available from the Merseyside Environmental Advisory Service (MEAS).

4.4.2 Policy WM1 Approach to site prioritisation

The proposed policy outlines the site prioritisation hierarchy and requires developers to consider allocated sites in the first instance, followed by sites within the areas of search and only consider non-allocated sites when they can demonstrate that allocated sites and sites within the areas of search are not suitable. Un-allocated sites will need to be justified through the Waste Local Plan site assessment process, SA, HRA, deliverability assessment and be compliant with other relevant policies.

Directing developers to allocated sites ensures that those sites that have already been adequately assessed as suitable locations for waste management facilities are prioritised for development. These sites have been through a rigorous site assessment process that ensures the protection of the built and nature environment, consideration of amenity issues, climate change and transport impacts. The areas of search have also been tested in terms of sustainability and deliverability and may be suitable for small-scale waste management facilities. Prioritising allocated sites and areas of search allows for the Councils' spatial strategy which has been tested against sustainability and deliverability criteria to be achieved. Where an unallocated site is brought forward, the justification process to be followed requires sites to be tested for sustainability and deliverability issues similar to the process followed for allocated sites and areas of search. This will ensure that development in unallocated areas does not lead to adverse effects and that mitigation measures are considered where adverse effects are likely. Overall, this policy is considered to be in line with sustainability principles.

4.4.3 Policy WM2 Sub-regional site allocations

Policy WM2 allocates 6 sites to provide facilities to meet sub-regional strategic needs. The appraisal findings for these sites are set out below:

Site Reference	Appraisal Findings and Mitigation measures
H1 – Widnes Waterfront	This site, which occupies previously developed land, is proposed for waste transfer, re-processing, primary treatment or RRP and has been granted planning permission for a primary treatment facility (MBT and IVC) since it was originally assessed. There are no sensitive receptors (schools, residential development, and hospitals) close to the site and so it is expected there will be no significant effects on amenity and on people (nearest receptors 500m-1km away). Transport impacts are likely due to increased traffic; however, the site is within 1km of the strategic road network, reducing impact on minor and unsuitable roads and potential adverse effects would have been considered during consenting of the primary treatment facility. The site also offers potential for use of rail – a disused railway sidings lie immediately to the south of the site. The proposed waste uses are in line with the waste hierarchy and would divert waste from landfill leading to better use of resources. Moving waste by road however will contribute to GHG emissions but the site is close to sources of arising and so it is expected that this will not lead to a significant increase in emissions. Potential impacts on nature conservation designations (Mersey Estuary, St Helen's canal) have been considered during consenting of the current permission, however, further development on this site may require consideration of potential impacts to minimise adverse cumulative impacts. Conclusions – No major environmental constraints restrict the use of this site for the proposed waste uses. However, potential impacts on transport and nature conservation, as well as cumulative effects, may need to be assessed in the event of further development of intensification of use.
K1–Butlers Farm	This site is allocated in the Knowsley UDP as suitable for class B1, B2 or B8 use although it has not been developed previously. The site is close to a local nature reserve, residential area

Knowsley Industrial Park	and an open public space. Mitigation measures would therefore be required to ensure potential negative effects on these receptors are avoided. A brook runs through the centre of the site and this will necessitate remedial work (possibly culverting) to reduce the risk of pollution. The site is at the edge of an existing industrial estate which creates opportunities for creation of synergies between different industries using waste as a resource. However, further expansion at the park should include assessing the potential cumulative effects to ensure further development does not lead to adverse effects. When originally assessed, the site had potential for use of rail as sidings lie less than 100m south of the site although they are now the subject of a separate proposal to develop an adjacent site. The site is some distance from the strategic road network and there is potential for increased HGV to lead to congestion, noise and emissions. Appropriate mitigation measures, including a traffic assessment and routeing proposals, would therefore need to be submitted in conjunction with a planning application to develop this site. Conclusions – Development at this site would require mitigation measures against adverse effects on biodiversity, the community (open space), water quality and on transport and access.
F1 – Alexandra Dock 1	Since it was originally assessed, planning permission has been granted for a medium-scale (ca, 135,000 tonnes) gasification facility that will process residues from the adjoining metal recycling facility. The location is considered not likely to have significant effects on sensitive receptors (residential dwellings are within 250-500m of the site and there are schools and a food processing plant within 500m-1km of the site). It is close to the Mersey Narrow pSPA but any potential impacts should have been addressed by HRA screening when the planning application was determined. This site is identified as previously developed land and is within a reasonable proximity of residential areas making it an accessible location for potential workers. It is also within a designated unemployment area and so new job opportunities here would have a positive effect. The site is also within 250-500m of the strategic road network for journeys which cannot be undertaken by water or rail, reducing the impact of transport on minor and unsuitable roads. The site is located within 100-250m of a Listed Building but, again, any adverse impacts should have been addressed when the application was determined. The site is protected by the dock flood mitigation measures and therefore at low risk, but it is within a controlled surface water zone and therefore the proposed development should ensure there are measures to reduce the risk of contamination of water sources, particularly as the adjacent working docks connect to the Mersey Estuary. However the size of the plot means that a site-specific flood risk assessment should have informed the determination decision, and impacts on the Estuary should have been considered by the HRA. Conclusion: This site offers a suitable location for the development of a reprocessing or thermal treatment facility subject to mitigation measures. All thermal treatment facilities are required to meet emission limits prescribed by the EC Directive on Waste Incineration and planning proposals would be required to show how potential pollutants will be dealt with. Potential traffic and heritage issues have already been considered during the permitting process for the current permission although new applications on intensification of use at this site may require some additional assessments depending on the scale and exact location of development within the site.
S1a Former Transco site, Pocket Nook	This site has been proposed as a replacement for S1, Land Southwest of Sandwash Close, Rainford. It occupies previously developed land, is proposed for waste transfer, re-processing, primary treatment or RRP. Planning permission has been granted on the entire site for a Resource Management Centre which included a Materials Recycling Facility (MRF) with a capacity to process 90,000tpa of Commercial and Industrial (C&I), although an earlier permission was granted for a similar facility with a capacity of 200,000tpa. There is also a 3 storey office building and a vehicle garage/workshop. However, although the site is in operation, the operator has not yet completed the development and the earlier permission indicates the potential contribution it could make to local capacity. There are no sensitive receptors (schools, residential development, and hospitals) directly

	adjacent to the site. Beyond are a number of sensitive receptors which should be considered as part of any future development including: the disused St.Helens Canal which links to a locally significant environmental site; a gas holder which is a Lower Tier COMAH site but is no longer in use; and a playing field which adjoins the south eastern boundary of the site. Office development is also situated to the west of the canal, and St.Helens Technology college campus is located approx 70m from the western boundary of site. The entrance is located on Pocket Nook Street which connects with the A58 Park Road approximately 300m from the site and forms part of the Primary Route Network. From this point the A58 provides a strategic north south route which connects St.Helens town centre with the A580 East Lancashire Road to the north (approx 3.2km) and the M62 motorway approx 6.7km to the south. Site S1a mainly comprises hard standing and man-made structures. The embankment which cuts through the middle of the site is vegetated with scrub and shrubs, and is the main green feature on site. In addition, the north, south and eastern boundaries of the site are planted with deciduous trees which provide screening for adjoining uses. In built up areas scrub and trees provide cover for birds therefore consider retention of these green features as part of any future development. Conclusion: Provided an appropriate level and range of mitigation is provided with reflects the specific uses it accommodates, the environmental constraints could be accommodated in the future waste use of this site. Notwithstanding, the principle of waste use has already been established.
L1 – Land off Stalbridge Road, Garston	The suggested waste uses at this site include a waste transfer station, a re-processing facility, primary treatment and a resource recovery park; however the site now has planning permission for an autoclaving (primary treatment) facility. The key environmental issues for this type of waste management including close proximity to sensitive receptors - residential areas, hospital and schools, potential impacts on Ramsar site, SSSI and SPA have been addressed through the planning application stage. However, any future proposal for intensification of use at this site may require some of these issues to be re-assessed to ensure that this does not lead to adverse impacts. The site is also within a controlled water zone and is well located close to the strategic road network. A key sustainability benefit is that it is adjacent to Garston Docks and a Freightliner terminal, providing an opportunity to use alternative transport modes. Conclusions – Any further development at this site may require assessment of potential impacts on nearby sensitive receptors (residential, hospital etc) as well as on nature conservation designations to ensure that such development does not lead to negative cumulative effects.
W1–Car park/storage area Campbelltown Road	This site is previously developed land having been part of the Cammell Laird shipyard. This site is within 1km of a designated Ramsar site, a SSSI and SPA. With considerate mitigation measures negative effects on this area of nature conservation significance can be reduced, recognising also that the surrounding land uses are predominantly industrial. The site is not located within close proximity to any cultural, historic and archaeological designations or any national or local landscape designations. The site is within 1km of local schools and 500m of defined residential areas. However, although judged as likely to have a negative effect, this will depend on the type and nature of facility developed, mitigation measures put in place and operational procedures applied to the site. The site is located within a minimum risk controlled water zone and the principal risk is washing of pollutants into the Estuary immediately to the east. A small part of the far southern edge of the site lies in flood risk zone 3 and therefore mitigation measures such as Sustainable urban Drainage Systems(SuDS) should be employed to ensure that no potential contaminants from the site get into controlled waters. The site is not within an operational distance of the railway sidings therefore there are no opportunities to reduce GHG emissions through a sustainable means of transport. The site is therefore dependent on the strategic road network. Although not a sustainability consideration at this stage, this site is within the 5-13km airport safeguarding zone, this will have a potential impact on the type of suitable waste facility suitable for the site (if site is progressed).

	Conclusion: With mitigation measures for potential effects on nature conservation, ground water and other sensitive receptor (residential area is 500m away); this site can provide a suitable location for a strategic waste management facility.
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Modifications to Policy WM2 following the Examination Hearings result from a change in the stance of the landowners of sub-regional sites S1, L1 and W1.

This policy has been changed so that sites L1 and W1 are excluded from the list of sites where planning permission will not normally be granted for any other use of the land that would prejudice its use as a waste management facility. The owners of these sites already have permitted development rights that would potentially be constrained by the unmodified policy. Both sites remain as sub-regional allocations but without the same restrictions on non-waste use that apply to other allocations.

Changes to the wording of this policy have been agreed in a collective Statement of Common Ground, which has been signed by the respective landowners of sites L1 and W1, and by Merseyside EAS on behalf of the six planning authorities. The Statement of Common Ground has been presented to the Inspector. Written support has been obtained from the owner and operator of site S1a.

The appraisal for site L1 concluded that any further development at the site “may require assessment of potential impacts on nearby sensitive receptors (residential, hospital etc) as well as on nature conservation designations to ensure that such development does not lead to negative cumulative effects”. The exclusion of this site would mean that the identified potential adverse effects would be avoided and may thus be considered beneficial overall.

Similarly, the appraisal of site W1 concluded that “with mitigation measures for potential effects on nature conservation, ground water and other sensitive receptor (residential area is 500m away); this site can provide a suitable location for a strategic waste management facility.” The exclusion of this site would therefore be considered to result in a neutral effect as mitigation measures, if implemented, are assumed to have offset any adverse effects.

In the event that either site was given over to other uses, relevant environmental protection legislation (notably the Habitats Regulations Assessment process) would still apply.

4.4.4 Policy WM3 District level sites

Policy WM3 allocates sites for waste management uses to meet district needs. The sites allocated in each district were appraised and the findings are outlined in the sections that follow.

Halton

Site Reference	Appraisal Findings
H2 – Eco-cycle Waste Ltd, Johns Land Widnes	This site is an operational MRF with scope for intensification of use. It has significant positive benefits when assessed against SA objectives on use of previously developed land and support for increasing recycling. Development here would also support the SA objectives on efficient use of resources, reducing the distance waste travels (assuming the waste managed here would be local), providing employment locally as well as improving access to recycling services locally. Intensification of use has potential for some negative effects with regard to increased traffic, noise, and other nuisance especially as the site is close to some sensitive receptors including houses and a school. However, potential negative effects can be adequately addressed through mitigation measures and planning conditions. The site is also

	close to the head of the Mersey Estuary and an area of special landscape value to the south. Mitigation measures against adverse effects on these designations would be necessary. With regard to transport, the site is close to the strategic road network. The site is close to the West Main coast main rail line as well as a canal and could potentially enable alternative transport modes to be used. The site is close to other waste management sites and could provide potential for synergies with other facilities. It is also in an industrial area and although intensification of use could lead to some adverse effects e.g. transport related, it is unlikely that development here will have significant negative effects as the area is well suited for industrial uses. Conclusion – This site offers potential for intensification of use. This has positive effects in terms of efficient use of land. However, the cumulative effects of increased activities at this site need to be assessed in detail especially with regard to transport, noise, nature conservation and landscape.
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Knowsley

Site Reference	Appraisal Findings and Mitigation measures
K2 – Image Business Park, Knowsley Industrial Park	This site is proposed for a waste transfer station or a primary treatment facility. It is a greenfield site insofar as it is unused open space within the former Kodak works. It is not in close proximity to any sites designated for nature conservation, and is within 100-250m of controlled surface water. It will be necessary to avoid or minimise any potential impacts at the planning application stage through, design, operation and other mitigation measures. The site is not near to other open space, rights of way, hospital grounds or school grounds, or food processing plants, although it is 500m-1km from the nearest residential area I Kirkby to the west, and is close to Green Belt land to the east. It is adjacent to a large chemical manufacturing plant to the south and which could offer synergy in terms of energy use. It is envisaged that potential negative effects on the community can be adequately mitigated against through the planning and permitting regimes. The site is not near any AQMAs and it is not in areas of high or medium flood risk, and thus will not increase the potential impacts of climate change. The Knowsley rail freight terminal is approximately 1km from the site, however as noted for site K1 that facility was the subject of a separate planning application at the time this report was finalised. The site is 100-250m of a high-frequency bus stop, providing some potential for sustainable travel for employees. It is also within an industrial estate, providing potential synergies with sources of waste and movement of certain waste streams between/among sites. Conclusion – This site is well located in sustainability terms but mitigation measures would be required to ensure there is no water pollution as the site is close to controlled surface waters.
K3 – Brickfields, Huyton Business Park	This site is on previously developed land. The site is not in close proximity to any sites designated for nature conservation. On-site development is thus not expected to have an adverse effect on biodiversity. The site is not expected to affect water resources as determined through groundwater SPZs or controlled surface waters. The site is not near to open space, PROWs, green belt, hospital grounds, or food processing plants, but is 250-500m of residential area and of school grounds, which could lead to potentially negative effects on the nearby community. However, any potential effects on the community are largely dependent on the type and nature of the operations on-site and negative effects can be mitigated at the planning application stage. The site is not in areas of high or medium flood risk, and thus will not increase the potential impacts of climate change. The site is within 100m of other operating waste sites, and within an industrial estate, providing potential for the creation of synergies. This site is not near to any Listed Buildings, Conservation Areas, Scheduled Monuments, World Heritage Sites or Registered Parks & Gardens, and thus is not expected to have an effect on the cultural heritage resource. The site is near to the strategic road network, a high-frequency bus stop and residential area, and is therefore likely to be accessible in terms of waste

	management services. Conclusion – Although site is generally well located, it is close to a residential area and school grounds and therefore mitigation measures against potential nuisance e.g. noise, odour, air quality and traffic would be required.
K4 – Former Pilkington glassworks, Huyton Business Park	The site is not within close proximity to any sites designated for nature conservation and therefore on-site development will not have an adverse effect on biodiversity. It is not located within flood zones 2 or 3 or other water sensitive designations, and therefore potential future development will need to focus on ensuring that there is no contamination of water courses. Residential dwellings, schools and public open space are located within 100-500m of the site resulting in an assessed negative effect. However, any potential effects on the community or workers are largely dependent upon the type and nature of operations on site. Negative effects can be mitigated through design measures and site buffer zones. This site is within an industrial estate and in close proximity to an existing waste site; it is also less than 1km from sources of waste arisings and is within a reasonable proximity of residential areas and the town centre and is accessible by public transport making it an accessible location for potential workers. With regard to climate change and climate mitigation this site is located outside of the identified flood zones. The site is within 250m of the strategic road network, reducing the impact of transport on minor and unsuitable roads. The site is not located within close proximity to any cultural, heritage, archaeological or landscape designations. Development at the site will therefore not have any adverse effects on these aspects of the environment or landscape designations. The site is within close proximity of a designated unemployment area. Conclusion – Although site is generally well located in sustainability terms, it is close to a residential area, schools and public open space and therefore mitigation measures against potential nuisance e.g. noise, odour, air quality and traffic would be required.

Liverpool

Site Reference	Appraisal Findings
L2 - Site off Regent Road	This site is proposed for a waste transfer station, re-processor or a primary treatment facility. This site is not in close proximity to any sites designated for nature conservation. On-site development is thus not expected to have an adverse effect on biodiversity. The site is 100-250m of controlled surface water, but there may be scope to avoid or minimise any potential impacts, depending on the specific use for the site (i.e. what type of waste management facility i), design, operation and other mitigation measures. The site is on Brownfield land, thus helping to preserve Greenfield land. It is not near to open space, PROWs, green belt, hospital grounds or school grounds, but it is 500m-1km of a food processing plant and also of residential area and therefore development here would require mitigation measures to be in place to alleviate potential effects. The site is in a low flood risk area and thus will not increase the potential impacts of climate change. It site is within 100m of a high-frequency bus stop, providing potential for sustainable transport of employees. It is also within 100m of a dock, which represents potential for sustainable transport of waste. The site is within 100m of other operating waste sites, and within a mixed industrial area containing several buildings of a scale similar to what might be brought forward on this site. Its development could provide synergies with other businesses although an assessment of cumulative effects of further development at the site needs to be considered at the planning application stage. The site is 300m from the nearest part of the World Heritage Site (to the south) and is within 100m of a Listed Building. The range of proposed waste uses should not result in a site with a stack and its small size should limit the scale of any building. Intervening buildings shield the site from the World Heritage Site which, at its nearest point is a road but not the buildings along it. Any potential effects should be addressed in detail through

	the planning application process once the nature and scale of waste use is clearer. Conclusion - This site is not severely constrained in sustainability terms and it provides a good location for a waste management facility subject to planning conditions that may be deemed necessary. These may be needed to ensure any new building on the site is similar in scale and design to those already occupying nearby plots; to avoid a form of waste management facility that would require a stack; and to adopt a traffic management approach that avoids access via that part of the nearby World Heritage Site.
L3- Waste Treatment plant, Lower Bank View	This site is an operational hazardous waste treatment and transfer facility in the industrial location of the North Liverpool docks. It is not close to any sites designated for nature conservation and therefore on-site development is not expected to impact biodiversity. The site is within 100m of controlled surface water, but there may be scope to avoid or minimise any potential impacts, depending on the specific use for the site design, operation and other mitigation measures. The site is 250-500m of a food processing plant, 250-500m of residential area, and 500m-1km of school grounds and mitigation measures to alleviate potential negative effects on sensitive receptors would be required at the planning application stage. The site is in a low flood risk area and should not be affected by the potential impacts of climate change. The site is 100-250m of a high-frequency bus stop, providing some potential for sustainable transport of employees. It is also within 100m of a dock, which represents potential for sustainable transport of waste. The site is within 100m of other operating waste sites, and within an industrial estate, providing potential for the creation of waste management synergies. Cumulative effects of further development at the park should however be considered to ensure potential adverse effects are mitigated. Conclusion – This site is close to a residential area, schools and a food processing plant therefore mitigation measures against potential nuisance and pollution e.g. noise, odour, air quality and traffic would be required.

Sefton

Site Reference	Appraisal Findings
F2-55 Crowland Street, Southport	This is an operational waste site currently used as an inert waste transfer station with some on-site aggregates reprocessing and open storage of materials. It is bordered to the east by a large drainage channel beyond which there is a local nature conservation designation. The site is also close to residential areas and public open space (to the west). This could have negative effects on the surrounding communities although the significance will depend on the nature of the operations on site and the mitigation measures put in place at the planning application stage. This site is close to the Green Belt and potential impacts on the landscape will need to be taken into account at the planning stage and mitigation measures put in place if they exceed those currently occurring on the site. It is close to other waste management sites and this provides potential for expansion of existing capacity although cumulative effects of such expansion should be taken into account at the planning stage to ensure that adverse effects are mitigated against. Conclusion: This site is close to residential areas, public open space and the Green Belt. Mitigation measures against potential adverse effects would therefore be required on noise, odour, air quality, transport, visual and landscape effects.
F3 –North of Farriers Way, Atlantic Business Park	This site classified as previously developed land; it is also part of an existing industrial estate. There are neither local character or landscape designations within 1km of the site nor historic or archaeological designations. This site is located over

	1km away from all nationally designated nature conservation sites (SSSI's, NNRs, SACs, SPAs and Ramsar sites). The site is within flood zone 1, and thus development here will not increase the risk of flooding. The site is located over 1km away from railway sidings limiting the opportunity for sustainable waste transport. This site is not located within close proximity to hospitals however residential dwellings and local schools are between 250m- 500m. Potential impacts on these receptors would need to be considered at the planning application stage. This site is within an area of high unemployment and development here has potential for positive impacts on the local economy through job-creation. Conclusion: There no major sustainability issues restricting this site from a waste management use. However, potential impacts on sensitive receptors (residential and local schools) should be considered at the planning application stage as well as potential impacts on the local wildlife site to mitigate against adverse effects.
F4 – 1-2 Acorn Way, Bootle	This site is already operating as an inert waste transfer station which includes open storage of materials and a small composting facility. It is proposed as suitable for further intensification of this role, possibly supplemented by a re-processing or primary treatment facility. There are neither local character or landscape designations within 1km of the site nor historic or archaeological designations. This site is located over 1km away from all nationally designated nature conservation sites (SSSI's, NNRs, SACs, SPAs and Ramsar sites). Also, it is over 250m away from locally designated sites (ancient woodland, LNRs, etc.). It is situated within flood zone 1, and thus will not increase the potential impacts of climate change. The site is located over 1km away from operational railway sidings reducing the opportunities to reduce GHG emissions through a sustainable means of transport. The strategic road network is located within close proximity (100m) which is not a sustainable form of transport but is the most suited potentially to this site. The Leeds Liverpool Canal forms the western boundary of the site but there are no facilities currently to allow transfer of waste to/from boats using it. The site is located within an industrial estate which accommodates other waste facilities. This site is not located within close proximity to hospitals however residential dwellings are between 100m – 250m and schools are within 500m. Potential impacts should be addressed at the planning application. Conclusion: This site scores well against the majority of the SA objectives. However, it is close to residential dwellings and mitigation measures would be needed to ensure there are no adverse effects with regards to potential nuisance issues e.g. noise, odour, air quality and traffic.

St Helens

Site Reference	Appraisal Findings
S2 – Land North of TAC, Abbotsfield Industrial Estate	The site is located on previously developed land and within an established industrial area which is occupied by other waste facilities. There is housing within 100m to the west, and schools within 1km. There are no constraints with respect to open space, public rights of way or greenbelt land close to the site. Any potential effects on the community or workers are largely dependent on the type and nature of operations at the site. The degree of the impact on local amenity and health is dependent upon the nature of operations and the type of facility developed on site. Any negative effects can be mitigated against through on site design measures and buffers to the site, and operation controls (depending on type of facility). The site is over 1km from operational railway sidings reducing the potential for the utilisation of a sustainable means of transport and the potential to contribute reductions in GHG emissions.

	There are no local character or landscape designations within 1km of the site or historic or archaeological designations. It is located over 1km away from all nationally designated nature conservation sites (SSSI's, NNRs, SACs, SPAs and Ramsar sites). Also over 250m away from locally designated sites (ancient woodland, LNRs and similar designations). It is situated within flood zone 1, and thus will not increase the potential impacts of climate change. It is situated within an area of nitrate vulnerability. It is not though within close proximity to other sensitive water receptors or controlled water or surface water protection areas. On site mitigation should be employed to ensure no negative impacts result. Conclusion – Although site is generally well located in sustainability terms, it is close to a residential area and schools and therefore mitigation measures against potential nuisance e.g. noise, odour, air quality and traffic would be required.
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Wirral

Site Reference	Appraisal Findings
W2 – Bidston MRF/HWRC, Wallasey Bridge Road	This site is currently one of the principal facilities for managing local authority collected waste in Merseyside, and it is also occupied by a municipal waste transfer station. It is not located close to any cultural, historic and archaeological designations or close proximity to any local, regional or national landscape designations. The site is classified as previously developed land, it is not within the designated AQMA or situated and is a largely urbanised area apart from the open space on the restored landraise site to the west (formerly Bidston Dock). Any potential effects on local amenity and health are largely dependent on the type and nature of the waste operation to be developed on site. There are residential properties between 250 – 500m from the site. The site is situated within flood zone 1 and an area of medium risk ground water protection zone. The potential for this location to maintain high and stable levels of employment and also to maximise opportunities for renewable energy is dependent on type of facility and technology provided. As stated above, this site is in an industrialised and urban area, meaning it is close to the source of waste arisings. The site is within 250m of railway sidings and within 100m of strategic roads routes for journeys which cannot be undertaken by rail, reducing the impact of transport on minor roads and unsuitable roads and reductions in GHG emissions from road transport. Conclusion – The site is close to a residential area and is within an area of medium risk for flooding and ground water protection. Development of a waste management facility here would therefore need to be accompanied by mitigation measures against potential negative adverse effects on the residential area and ground water.
W3 – Former good yard, Wallasey Bridge Road	This site is next door to site W2 and is currently occupied by a skip hire and waste transfer station facility. It is not close to any sites designated for nature conservation at the national, regional or local level or close to any heritage assets, local character or landscape designations. The site however within 250m of housing and there will be a need to avoid or minimise any potential negative health impacts, depending on the specific use of the site, design, operation and other mitigation measures. The site is within 100m of controlled surface water and lies within flood zone 1. On site mitigation measures should ensure that no potential contaminants from the future waste sites enter the water stream. The site is located within 100m of railway sidings, indicating a potential for waste to be transported by rail and reducing the associated negative impacts of road travel. This offers opportunities to reduce GHG emissions, through a sustainable form of transport. The site is not within the designated AQMA. The location of the strategic routes (within 100m) for journey's which cannot be undertaken by rail, reducing the impact

	of transport on minor roads and unsuitable roads. The site is within relative close proximity to waste arisings from residential properties (100-250m). The potential to maintain high and stable levels of employment will depend on the type of facility and technology provided and the likely potential of this to provide employment opportunities. The site is located within an area of unemployment. Conclusion – This site is generally well located as it is close to an industrial estate and existing waste sites therefore offering potential for synergies. However it is in close proximity to housing and controlled surface water. Development of a waste management facility here would therefore need to be accompanied by mitigation measures against potential negative adverse effects on these receptors.
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4.4.5 Policy WM4 Inert landfill

The Waste Local Plan Needs Assessment identifies that Merseyside and Halton will need significant new inert landfill capacity early in the Plan period. A search for suitable sites was undertaken and 2 sites have been identified and allocated in the Waste Local Plan. These have been subject to SA and the results are provided below.

Site Reference	Appraisal Findings
K5 - Cronton Claypit Knowsley	This site is proposed for inert landfill. It is currently in mixed use including an active pit and some agricultural land which includes land safeguarded for further mineral extraction. There are some sensitive receptors nearby (riding school and residential dwellings) but it is envisaged that potential nuisance impacts e.g. (odour, noise, traffic) can be mitigated against at the planning application stage. The planning application would need to show how these issues would be mitigated against e.g. through design measures and other on site buffer zones. The site is distant from all nationally and internationally designated nature conservation sites (NNRs, SACs, SPAs and Ramsar sites) although it is close to a local wildlife site. No historic, cultural or landscape designations have been identified within 1km of the site location. The site is within close proximity to high grade agricultural land and a nitrate vulnerable zone. Part of the site lie within flood risk zones 2 and 3 and the Environment Agency has therefore indicated that this constraint, together with its location in an inner groundwater source protection zone, mean that only inert wastes should be accepted.. This site is not within close proximity to railway sidings or other forms of sustainable transport although it is close to the strategic freight network. It is also close to sources of waste arisings. Landfilling non-inert waste has the high potential to increase greenhouse gas emissions. It is recommended that proposals for non-inert landfill include gas monitoring measures. This site is also within the aerodrome safeguarding zone. It is recommended that the potential impacts described above are investigated and mitigated against at the planning application stage to ensure the development of this site does not lead to detrimental environmental effects. Conclusion – Site is restricted to inert landfilling (it's within flood zone 3 and SPZ II). As discussed above, extension of this site should be accompanied by mitigation measures to offset potential adverse effects on the local community, riding school, local wildlife site and visual and landscape impacts (site is within Green Belt).
S3- Bold Heath Quarry, St. Helens	The site is not in close proximity to any sites designated for nature conservation and on-site development will not have an adverse effect on biodiversity. Although not located within flood zones 2 or 3 it is within a controlled surface water zone and a medium risk zone for a Source Protection Zone and therefore potential future development on site will be required to ensure that there is no contamination of water sources (The development proposal for the site is to re-start sandstone extraction, backfilling the current and new

	void with inert waste only.) Residential dwellings and an area of public open space are within 100m of the site which could lead to potential nuisance impacts like noise, odour etc. Negative effects can be mitigated through design measures and site buffer zones. With regard to climate change and climate mitigation this site is located outside of the identified flood zones. The site is in close proximity to a source of waste arisings. Although the site does not provide opportunities for use of sustainable transport modes, it is in close proximity to the strategic road network, reducing the impact of transport on minor and unsuitable roads. The site is not located within close proximity to any cultural, heritage or archaeological designations. Development at the site will therefore not have any adverse effects on these aspects of the environment or landscape designations. Conclusion – Site is in a sensitive location with relation to ground water resources and so would be restricted to accepting inert materials subject to mitigation measures being put in place to protect ground water and the underlying major aquifer. The site would also require mitigation measures against nuisance and pollution to protect the nearby residential area from potential adverse effects.
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4.4.6 Policy WM5 Additional small scale facilities

Policy WM5 requires additional sites required for waste related reprocessing facilities and other small-scale waste management facilities over and above those allocated for specific uses to be considered in the vicinity of cluster of sites which inherent in the allocations made in the Waste Local Plan. This policy supports sustainable waste management as it makes provision for re-processing activities which would lead to more waste being diverted from land fill and associated environmental effects including climate change mitigation. This option also provides certainty to industry which can lead to more growth in the waste sector resulting in creation of local employment opportunities. The option ensures that the additional sites are sited close to the allocations made in the Plan. This has both positive and negative effects in that co-location of sites can provide opportunities for synergies but intensification of use in those areas could also lead to negative cumulative effects for example with regard to traffic. The policy however requires an assessment of potential cumulative effects associated with proposed additional facilities.

4.4.7 Policy WM6 Additional HWRC requirements

Policy WM6 identifies the need for new or replacement HWRC facilities within the boundary of the City of Liverpool. These facilities should be well located relative to existing HWRCs in Liverpool and in other districts so as to allow for an even distribution of facilities reducing the distance travelled locally to any facility. This has positive impacts in reducing carbon emissions associated with waste transportation as well as other negative transport related impacts like congestion, and air pollution. Locating HWRCs close to the communities that need them is also likely to encourage further recycling locally, diverting waste from landfill and moving it up the waste hierarchy. The proposals for new HWRCs will be expected to comply with other Waste Local Plan policies an in particular policy WM12. This will ensure that potential negative impacts on the environment and amenity are addressed during the planning stage and mitigation measures put in place as appropriate. Overall, this policy is considered to be in line with sustainability principles.

4.4.8 Policy WM7 Protecting existing capacity

Policy WM7 seeks to protect existing and consented waste management facilities in order to maintain essential waste management capacity. Any change of use from waste management to another use will need to be justified, unless the waste use is located in an appropriate areas

and causing significant loss of amenity. When appraised against the SA objectives, this policy was found to generally be inline with sustainability principles. Protecting existing waste management infrastructure can reduce the need to use green field sites elsewhere in the sub-region. It can also help in meeting future waste management capacity.

Modifications to Policy WM7 clarify the policy in respect of extensions to existing landfills as this was not explicit in the original.

Under the modified policy, extensions to existing landfills would be allowed where the need within the Plan area can be demonstrated. If extensions were not allowed waste would have to be exported elsewhere leading to an increase in kilometres travelled unless further new local sites are brought forward in the future. Thus the modification is considered to be potentially beneficial in terms of reducing kilometres travelled.

The revised appraisal identifies no new significant effects.

4.4.9 Policy WM8 Waste prevention and resource management

Policy WM8 requires any development involving demolition and/or construction to consider waste prevention and resource management during design and construction phases thus raising awareness of the importance of the issue. When appraised against the SA objectives this policy was found to be inline with a number of objectives including on promoting efficient use of resources through encouraging re-use and recycling. Resource efficiency promotes mitigation against climate change – for example recycling and re-using CD&E waste can lead to virgin materials not being used which can save energy associated with their extraction and processing. Promoting re-use of materials on site has positive effects on managing waste close to source for arising reducing movement especially by road. This can have positive effects on SA objectives relating to nuisance (noise, amenity, air quality, transport) as well as climate change mitigation by reducing GHG emissions. Promoting SWMPs can help mitigate against fly tipping of CD&E arisings as well as help in raising awareness on sustainable waste management and improve environmental performance on sites.

4.4.10 Policy WM9 Sustainable design and layout

Policy WM9 seeks to promote sustainable waste management design and layout for new developments. Incorporating the measures outlined in policy WM9 can help influence adoption of sustainable waste management practices through provision of adequate storage and collection space thereby making it easier for residents to access and use on site facilities. Providing space for separate recyclable materials can encourage recycling and in turn improve recycling rates in the area. Good design and layout can also help reduce hazardous and risks to human health by ensuring adequate provision is made for waste segregation and storage. This can also lead to more safety for waste collectors, reduced cross contamination of waste as well as improved street scene and local environmental quality. This policy also encourages home composting as well as incorporation of low carbon combined heat and power to deliver energy security and long term economic benefit thereby supporting SA objectives on climate change as well as those supporting economic development.

4.4.11 Policy WM10 High quality design and operation

Policy WM10 requires all new waste management facilities to carefully consider the proposed design to ensure that they do not impact adversely on the surrounding environment. The policy

proposes that from 2016 to 2025, all new waste management facilities should achieve an excellent BREEAM rating (or equivalent). Well designed waste management facilities can enhance the local character of an area as well as respect surrounding land uses leading to better acceptance of waste management facilities close to where people live and work which in turn can help reduce the distances waste is transported.

Well designed facilities with high environmental performance rating are also likely to have reduced impacts such as noise, dust, odour, vibration and litter. They can also lead to reduction in health hazards resulting to improved health and safety for workers.

4.4.12 Policy WM 11 Sustainable waste transport

Policy WM11 promotes sustainable waste transportation and expects proposals for new waste management facilities to consider use of alternatives to road transport for both materials and employees, provide mitigation measures on local amenity from road transport, ensure adequate and safe access to and from the highway and reduce carbon emissions. Use of sustainable modes of transport (rail/water) can help reduce air pollution associated with road emissions and as well as reducing GHG emissions. It should be noted however that use of rail or water will require investment in necessary infrastructure and so this option is only likely to be implemented on large scale waste management sites. Road transport is likely to remain the primary method of waste movements for the majority of sites and so there is a need to ensure that where alternative modes of transport are not feasible, mitigation measures are in place to avoid adverse transport impacts on the environment and local communities.

4.4.13 Policy WM12 Criteria for waste management development

Policy WM12 requires all planning applications for new waste management development and alterations/amendments to existing facilities to include an evaluation of the proposed development and its likely impacts on the surrounding environment. Proposals will be required to consider social, economic and environmental impacts on the area, amenity impacts, traffic and transport impacts, heritage and nature conservation, carbon and energy management as well as water related issues.

When assessed against the SA objectives, policy WM12 was found to have positive effects on various SA objectives as the list of required criteria and evaluation of impacts supports objectives concerned with protecting and conserving the built and natural environment (e.g. nature conservation, heritage and amenity issues). It also supports climate change mitigation as the criteria include a requirement to provide information on the carbon and energy management performance of proposed developments. The strategy for dealing with emissions can encourage use of alternative means of transport further reducing GHG emissions. Other positive effects relate to potential to reduce or influence transport movements and ensuring that the most suitable routes and access points are used. Overall, the criteria are judged to support sustainable waste management.

4.4.14 Policy WM13 Applications on unallocated sites

Policy WM13 relates to planning applications for new built waste management facilities on unallocated sites. The policy requires the applicant to demonstrate that such sites have been taken through similar sustainability and deliverability tests as allocated sites and be in compliance with the rest of the Waste Local Plan policies.

This approach is supported by the SA as it will ensure that important sustainability issues are addressed in a robust manner similar to that followed for allocated sites, ensuring that development of unallocated sites does not lead to adverse effects on the environment and local

communities. Applying the site selection criteria, SA and HRA for built facilities will ensure that detailed assessment of issues such as impacts on biodiversity, landscape, amenity, archaeology, transport, climate change and human health are addressed at the appropriate stage and mitigation measures identified where appropriate.

Policy WM13 now provides clarity on the procedure for planning applications for new waste management facilities on unallocated sites. The clarification aims to explain how the site evaluation against criteria that directly reflect SA Objectives should be used to inform the planning application process, and specifically the information to be submitted to show environmental effects have been identified, assessed, and appropriate mitigation is proposed. The policy is to be applied in conjunction with WM12, which has not changed.

The revised appraisal identifies no new significant effects.

4.4.15 Policy WM14 Energy from waste

Policy WM14 relates to provision of Energy from Waste facilities. It does not allocate new sites for EfW for MSW and C&I waste as there is considered to be adequate existing consent and operational facilities within Merseyside and Halton. The modified policy now allows for EfW facilities on all scales where it can be demonstrated that this serves a local need, including the specific requirements of MRWA. Where a market need can be justified, proposals are also required to comply with policies WM12 and WM13.

Overall, this policy is considered to be in line with sustainability principles. The current situation of over-provision of capacity could lead to the importation of substantial amounts of both waste and Refuse Derived Fuel (RDF) into Merseyside and Halton in the event that all the consented facilities come into service. Assuming waste and RDF are transported mainly by road; this would have negative impacts on air quality, noise, congestion and increased carbon emissions. In the event that this capacity does not come into service, the policy provides for replacement capacity across a range of facility sizes which provided these serve a local need primarily. While transport of waste and RDF by road to these replacement facilities would have negative impacts on the factors mentioned previously, this is likely to be less severe than if over-provision resulted in the importation of substantial quantities of the same materials from a much wider catchment.

In both cases the policy could have some positive economic benefits in terms of investment in the area and job creation.

Making specific provision for small scale facilities allows for local needs (for example businesses that are significant energy users or District heating schemes) to be realised. Small scale facilities are less likely to attract waste from outside the area as they would be designed to meet local need using locally arising waste. Proposals for such facilities will be required to be in line with policies WM12 and WM13 of the Waste Local Plan ensuring that key sustainability issues are taken in to account at the appropriate stages and mitigation measures put in place where necessary.

Modifications to Policy WM14 are intended to ensure that the maximum provision for combined heat and power, consistent with provision of important waste infrastructure, is achieved. They also aim to provide scope for additional Energy from Waste facilities to come forward,

recognising that a surplus of permitted capacity currently exists, and provide flexibility to Merseyside Recycling and Waste Authority with regard to its procurement of a residual treatment solution for Local Authority Collected Waste.

Combined heat and power will be encouraged in new Energy from Waste facilities by requiring them provide it unless this requirement would prevent important waste infrastructure being brought forward for cost reasons, for example. This would also indirectly reduce greenhouse gas emissions.

However the provision of combined heat and power would depend on the number of new Energy from Waste plants that are consented, so, whilst this is a potentially significant effect, it is not certain to occur.

4.4.16 Policy WM 15 Landfill on unallocated sites

Policy WM15 relates to landfill on unallocated sites. The policy requires unallocated landfill sites being brought forward to be justified against the criteria used for the Waste Local Plan site selection process for landfill sites, comply with the Waste Local Plan vision, spatial strategy and policy WM12, be subject to SA and HRA and contribute to the identified need for residual landfill capacity.

This approach is supported by the SA as it would allow for the unallocated sites to undergo robust testing against key sustainability and deliverability issues consistent to that applied to allocated sites. The sustainability criteria includes environmental (natural and built environment) and amenity issues that are relevant when considering sites suitable for landfill and testing against these would ensure that potential adverse effects are identified and mitigated against as appropriate. Although landfilling is at the bottom of the waste hierarchy and does not support SA objective 20, it is acknowledged that some level of landfill will be required for residual waste that cannot be treated.

Allowing unallocated landfill sites to come forward provides an opportunity for former mineral works to be restored which can have positive effects on the landscape and surrounding environment. Overall, this policy is considered to be in line with sustainability principles apart from SA objective 20 which supports managing waste up the waste hierarchy (it is acknowledged that landfill has an important role to play in the management of waste that cannot be recycled or treated).

Policy WM15 now provides clarity on the procedure for planning applications for new landfills on unallocated sites and consistency with Policy WM13. As with Policy WM13, the clarification explains how the site evaluation should be used to inform the planning application process, and specifically the information to be submitted to show environmental effects have been identified, assessed, and appropriate mitigation is proposed. The policy is to be applied in conjunction with WM12, which has not changed.

The revised assessment is presented in Appendix A and it is considered that the modification has the potential to reduce the kilometres travelled by waste and would therefore be beneficial should new landfill capacity be brought forward in the Plan area in the future.

4.4.17 Policy WM16 Restoration and aftercare of landfill facilities

Policy WM16 seeks to ensure that sites are satisfactorily reclaimed following closure and that applicants submit a plan for the restoration and aftercare of land affected by proposals for landfill before planning permission is granted.

This option will ensure that former landfill sites are restored to beneficial uses and reduce the effect of blighting in areas where facilities are located. Restoration has positive effects on the environment as it will lead to improvement in visual and landscape impacts as well as reduce nuisance in cases where for example odour is a problem. Where there are opportunities for energy recovery, this can have positive effects on reducing the climate change impacts by capturing methane. This policy option will also provide a consistent approach across the sub-region.

4.5 Uncertainties and risks

Sustainability Appraisal is an inherently uncertain process that involves making predictions concerning environmental and sustainability conditions on the basis of often limited or inadequate data.

The main uncertainty arising from the appraisal relates to the nature of impacts likely to arise at sites developed for waste management (the symbol '?' has been used to denote uncertainty in the appraisal matrices -see Appendix 2).

The SA has defined the potential effects of developing waste management facilities but the eventual impacts to a large extent will depend on the scale of development, nature and type of operations and the location of development site in relation to sensitive receptors. This uncertainty is best addressed at the planning application and licensing stages through EIA and IPPC assessments.

These assessments (EIA/PPC) will ensure that mitigation measures put in place during the development of the site will help minimise significant adverse effects for example noise, visual effects and potential pollution of ground water resources. It is also expected that conditions on hours of working will help mitigate against traffic impacts associated with waste management operations.

The other source of uncertainty arises from the strategic nature of the proposed policies. Ultimately, the real effects of the Waste Local Plan will depend on how specific Waste Planning authorities interpret and implement the policies. Where it is judged that the impact of a policy depends on how it is implemented, this is clearly stated in the report.

5 Monitoring Measures

5.1 Introduction

In order to identify unforeseen adverse effects and to enable remedial actions to be taken, it is important to monitor the implementation of the Waste Local Plan. Monitoring some of the identified indicators will also enable gaps in the existing information to be filled providing a better impact prediction basis for future appraisals and revisions of the strategy.

The Joint Merseyside and Halton authorities have identified indicators which will provide a consistent basis for monitoring the performance of the Waste Local Plan against its vision and strategic objectives and key policies. In order to satisfy the requirements of the SEA Directive, further monitoring relating to the effects of the Waste Local Plan and the environmental baseline are proposed. It is recommended that wherever possible, these are monitored as part of the Waste Local Plan monitoring as the majority of baseline information required will be relevant to both the Plan and the SA.

5.2 Monitoring of Significant Effects

It is not necessary to monitor everything or to monitor an effect indefinitely. Effects monitoring has therefore been identified where it is judged that the effect could lead to a significant effect. This is considered for both adverse and beneficial effects.

Table 6.1 Proposed Effects for Monitoring

Policy/Option	Effects to be monitored	Proposed Indicators to be monitored
Sub regional approach	Focusing on areas around existing clusters of waste management facilities for the location of large facilities has the potential to negative cumulative effects depending on the specific location of sites, their existing uses and proximity to sensitive receptors such as housing. It is therefore recommended that assessment of potential cumulative effects especially with regard to transport and traffic, air quality, noise, odour, landscape and other potential negative effects is required as part of this option.	• Air Quality close to large clusters of waste management facilities • Noise levels • Traffic levels (Number of HGVs per day/year) • Odour
Waste Prevention and Resource management	The option supports the waste hierarchy and the requirement to prepare Site Waste Management Plans (SWMPs) presents beneficial effects in raising awareness amongst site workers on the importance of waste minimisation and sustainable waste management as well as moving waste up the waste hierarchy.	• Number of planning permissions requiring SWMPs

High Quality Design and Operation of New Waste Management Facilities	The policy proposes that from 2016 to 2025, all new waste management facilities should achieve an excellent BREEAM rating. This would have a significant positive effect in promoting sustainable construction.	Number of planning permissions for new waste management facilities which achieve an 'Excellent' BREEAM rating
Sustainable Transport	The proposal to incorporate measures to reduce and /or off set carbon and other greenhouse gas emissions by 10% in line with the Merton rule has potential to contribute significantly to reducing overall GHG emissions as well as raising awareness on the need to reduce emissions.	Number of waste management facilities incorporating measures to reduce and/or offset carbon

With regard to sites, a number of potential significant effects have been identified during the appraisal. These include impacts on:

- Ground water resources (major aquifers) and Source Protection Zones
- Effects on sensitive receptors e.g. dwellings, schools and other developments
- Potential effects on nature conservation designations
- Proximity to sources of waste arising (distance waste is moved)
- Potential to use sustainable modes of transport and proximity to strategic freight network

It is recommended that where development of a site is judged to have potential significant (adverse or beneficial effects), any planning permission should include a requirement to show how this will be mitigated against and where necessary attach monitoring conditions for example with regard to ground water, noise, traffic and air quality.

5.3 Baseline Indicator Monitoring

Monitoring selected baseline indicators can also help establish a causal link between implementation of the Waste Local Plan and the likely significant effects being monitored. Changes in the direction of indicators can be measured against the existing baseline position as well as against other comparable data (e.g. regional/national trend) to establish whether similar effects are occurring elsewhere. This is best achieved by establishing a common set of core indicators.

The Merseyside and Halton authorities have developed a set of core indicators to monitor the performance of the Waste Local Plan. To avoid duplication of effort and facilitate a cost-effective and efficient way of monitoring both the Waste Local Plan and the SA indicators, it is recommended that the SA monitoring is incorporated into the existing performance monitoring for the Waste Local Plan.

The following indicators (Table 6.2) were identified during the scoping stage and have been updated recently (2009). A comparison of status between 2006 and 2008 has also been made and comments are provided in the Table below.

Table 6.2 Comparison of Proposed Indicators and Targets (2006-2010)

Improvement or maintenance of good performance that is substantiated by monitoring data	Improved or maintained good performance that is inferred despite a lack of monitoring data	Minor adverse change or lack of detail which may need specific monitoring	Reduction in performance that is inferred due to a lack of monitoring data	Reduction in performance that is substantiated by monitoring data
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Where the 'Trend' box is shown in black, Merseyside EAS considers there are substantial problems in identifying a suitable, consistent, accurate source of these data, or obtaining it. Parameters shown with an "X" symbol are priorities for further work to collect data. Those shown with an "?" symbol either have a lower priority or they appear difficult or costly to populate with data. It is proposed that they are dropped from the monitoring programme and their requirement reviewed once the Waste Local Plan has been adopted. Columns to the right of the 'Trend' show which SA and Waste Local Plan objectives are measured by each indicator.

All Waste Local Plan objectives are addressed by at least one indicator. However the SA Objectives are consistent with those used by the five Merseyside authorities and Halton for their Local Development Frameworks and they therefore cover a much broader range of parameters which may be more relevant to housing policy, etc. A limited number of socio-economic SA Objectives have no corresponding indicator however it is not clear that the Waste Local Plan will affect them even indirectly and this is not considered a significant flaw.

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
Biodiversity	1	SO6	Number of waste developments that have impacted BAP priority habitats and/or species	Not recorded	2 - both were addressed by mitigation (financial and/or habitat creation)	None identified	
	1	SO6	Number of waste management facilities located within 2 km of sites covered by regional, county or local nature and earth science conservation designations	Not estimated originally	82 are within 2km of EU and UK designations; 221 are within 2km of local designations	Of the 11 new permissions that were granted subsequently, 3 are within 2km of EU sites and a further 6 are within 2km of local designations	? [see footnote ⁶⁷]
	1	SO6, (SO7)	Area of restored landfills supporting improved biodiversity	Not estimated originally	(16.6ha?)	Approx. 106ha. including ca. 80% of the Lyme & Wood Pits site that has been restored as a country park	

⁶⁷ Since the Merseyside sub-region is heavily urbanised, and since the parameter measures down to local designations, of which there are many, there is a very high probability that any new waste site will be situated close to a local nature reserve or site of local biological importance

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
Human health	(2), 9	SO6	Number of pollution incidents associated with waste development by waste facility type, severity, pollutant, water/soil/air impact	2002-2005: around 40 incidents per year of which about 10%-12% were significant and the rest of minor impact ⁶⁸	2006: 16 incidents of which 2 (13%) were major and the rest minor		TO CHECK
	4	SO1, SO2, SO3, SO4	Percent of residents living within 3 km of HWRC	Not measured at the time	48% ranging from 27% in Liverpool to 77% in St Helens	No current data but will not have changed significantly as no HWRCs have opened or shut	
	4, 9	SO1, SO 6	Number and type of fly tipping events	13,864 excluding Liverpool and Halton – 83% were on in back alleys and 7% on council land – total cost (again excluding Liverpool) of £812,000 or £59 per incident	14,026 excluding Liverpool only - regional trends show 48% on back alleys; 29% on highways and footpaths; 13% on council land – total cost (again excluding Liverpool) of £975,000 or £69 per incident	Not yet determined, though the figures will not be directly comparable as Liverpool has now adopted the reporting process used by the rest of the country	TO COLLECT
	5	(SO6)	Numbers of people killed/seriously injured in traffic accidents involving waste management vehicles	Not measured at the time	No information source currently	No formal data source currently	?
	5	(SO6)	Number and type of reported accidents involving staff of, or visitors to, waste management facilities	Not measured at the time	No information source currently	No formal data source currently. There were 2 fatal accidents involving 3 deaths of contractors working at the Sonae wood reprocessing facility in Kirkby in early 2011	?
Quality of surroundings	9	SO6, (SO7)	Proportion of residents living near waste facilities who are dissatisfied with their immediate environment	Not measured at the time	No information source currently	No formal data source currently ⁶⁹	?

⁶⁸ Analysis is restricted to EA records of substantiated pollution incidents in categories 1 (major impact), 2 (significant impact) and 3 (minor impact). Category 4 impacts are assumed to relate to nuisance and tend to be short-term with no lasting impact and can be difficult to corroborate.

⁶⁹ It may be possible to collect this data from LDF annual monitoring processes which measure this parameter but it is not evident that the collected data can be mapped against a home address to create this statistic.

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
	9	SO6, SO7	Number of new waste facilities constructed to high quality design principles	Not measured at the time	No information source currently	No data source currently but Merseyside EAS provides appropriate, supportive advice to local planning authorities regarding achievement of at least "very good" BREEAM performance routinely	?
Amenity	9	SO6, (SO7)	Number of complaints about disturbance (noise, dust, light, vermin, odour) due to waste management facilities	Not measured initially. The first indicator above under Human Health monitors substantiated complaints about these amenity problems based on reports to the EA and to local authorities. Therefore it may be appropriate to remove this parameter			
Water resources	10	(SO6)	Water quality (chemical & biological) classification of rivers, canals, estuaries and coastal waters impacted by waste developments	% in good/fair condition ranged from 89% (Sefton) to 14% (Wirral)	Little evidence of good chemical or biological quality or improvement of those rivers which previously suffered from poor quality		TO COLLECT
Land and soil	11	(SO6), (SO7)	Area of grade 1, 2 and 3a agricultural land taken by new waste development	Not measured at the time but likely to be zero	None	None	
	11, 12	(SO6), (SO7)	Proportion of new waste development on previously developed, derelict or under-utilised land	Not measured at the time	1 on greenfield site which was nevertheless already allocated for Class B land uses	10 recent facilities have been built on brownfield sites or result from intensification of existing waste uses. The other is a landfill site which will backfill a sandstone quarry that will shortly re-commence extraction	
Air quality	13	SO6, (SO7), SO8	Annual quantity of emissions from waste management facilities	Not measured at the time	NO _x : approx. 380 tonnes (approx. 13% of emissions reported by PPC-regulated sites) Dioxins: approx. 50 kilograms (approx. 30% of emissions) CO ₂ : see next section		TO COLLECT

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
	9, 13	SO6, SO8	Number of waste management facilities located within Air Quality Management Areas	None	None	65	? [see footnote ⁷⁰]
	13	SO6, SO8	Waste-related traffic volumes (annual average daily and peak hour) on roads	Not measured at the time	Not measured	Not measured	X
Climate change	14	(SO6), (SO7)	Number of waste management facilities situated in high flood risk areas	Not measured at the time	11 facilities have some of their area in Flood Risk Zone 3: 8 recycling facilities or transfer stations; 2 treatment facilities; 1 open composting site	1 new facility at Widnes has <1% of its area in Flood Risk Zone 3 but the site has been subject to a site-level risk assessment as part of the permitting process	[see footnote ⁷¹]
	14	(SO6), (SO7)	Number of waste planning permissions proceeding against EA advice to avoid flood risk areas	Not measured at the time	None identified. However it may be appropriate to delete this parameter as it is not clear that any waste facility would be granted planning permission if the EA was not satisfied with respect to flood risk		?
	13, 15	(SO6), SO8	Estimated greenhouse gas emissions by sector	Not measured at the time	CO ₂ : 185,500 tonnes (approx. 6% of emissions from PPC-regulated facilities in Merseyside and Halton)		TO COLLECT
	(4), 9, 15	(SO6), SO8	Emissions of landfill gas from landfill sites	Not measured at the time	No information source currently	No information source currently	
	15, (20), 22, 24	(SO3), SO4	Quantity of renewable and alternative energy generated from waste management activities	Not measured at the time but estimated at 16-17MW	Estimated at 28MW of which 19.5 is from landfill and the rest from incineration	31MW – 3MW has been provided by additional landfill gas engines at Lyme & Wood Pits landfill	? [see footnote ⁷²]
Transport	16, 17	(SO1), (SO2), (SO6),	Kilometres travelled by waste a) during collection, and b) from bulking to treatment and/or	Not measured at the time	Not possible to measure currently but assumed to be similar to 2005/6 and	Not possible to measure currently but assumed to be similar to 2005/6 and	[see footnote ⁷³]

⁷⁰ This change has occurred because the whole Liverpool City Council area was declared an AQMA in 2010, not as a result of locations chosen for new waste facilities.

⁷¹ The 21 allocations in the Publication Waste Local Plan include 5 sites that have some area in Flood Risk Zone 3. One of them is referred to in the comment on the 2009/2010 position. Two others have very small areas in the medium/high risk zones and a further site is a landfill that has been restricted to accepting inert waste only. However this means that if all the allocations are taken up then the proportion of waste sites within the sub-region that are partially in high flood risk areas will diminish over time.

⁷² This quantity should begin to accelerate in the next 3-4 years as new thermal treatment capacity comes into operation.

⁷³ At present there is limited scope for significant change in this figure, and it is likely to increase in the near future as additional food collection rounds are added to those for residual and green wastes, and recyclables. The figure will also be inflated by the use of Arpley Landfill in Warrington for the disposal of residual MSW. The eventual award of the MWDA residual waste PFI will not change this situation as the remaining bidders have proposed solutions based on taking waste to North Cheshire or to Teeside by rail.

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
		SO8	disposal		therefore limited change	therefore limited change	
	16, 17	(SO6), SO8	Proportion of waste transported other than by road by waste stream	Not measured at the time but likely to be limited to small quantities of hazardous and C&I wastes	Not possible to measure currently but assumed to be similar to 2005/6 and therefore limited change	Still not measured but again the quantity is believed to be extremely small	[see footnote ⁷⁴]
	(9), 17	SO8	Number of new waste development sites for which a travel plan has been prepared	Not measured at the time	At least 50% - travel plans are generally for medium and large sites	Required for 5 of the 8 new sites that have been permitted	
Historic environment	(9), 18	SO6	Number of waste facilities located within 2 km of scheduled monuments, registered parks and gardens and other major heritage or cultural assets	Not measured at the time	30 within 1km of the World Heritage Site (42 within 2kms); 20 within 1 km of a SAM (63 within 2km); 34 within 1km of park/garden (105 within 2km)	WHS: no further sites SAM: no further sites Parks: 3 more within 1km; 4 more within 2km	
Landscape and townscape	(9), 18	SO6	Number of waste management facilities located within 500 m of conservation areas	Not measured at the time	51 (22%)	None of the new permissions is within this distance of a conservation area	? [see footnote ⁷⁵]
	(9), (19)	SO6	Area of publicly accessible open space and green space permanently lost as a result of new waste management facilities	Not measured but estimated as zero	1 site of 2.1ha (poor quality habitat) and 1 of 6.6ha (good quality) in the last year	None of the new permissions has taken designated open or greenspace. Several will result in improvement of under-utilised (and in some cases, contaminated) land	
	19	SO6	Number of new waste development in areas of designated landscape value (including AONBs, Green Belt, AGLVs etc.)	Not measured but known to include 1 landfill site in the Green Belt which opened in 2003	20 <u>existing</u> sites – no new facilities	1 Green Belt site – this is an open windrow composting facility which is appropriate development in such a location	

⁷⁴ The Waste Local Plan aims to manage more of Merseyside & Halton's waste close to its source. In many cases this is likely to make road transport the most efficient and cost-effective solution and this parameter may not change significantly in the near future.

⁷⁵ The relatively high number of sites reflects the clustering of the existing waste management facilities, with some groups close to a conservation area. This situation suggests there is limited scope to improve performance in the future and the main priority is to avoid these locations where possible. Unfortunately the existing clusters are considered to be appropriate locations for additional waste facilities.

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
	19	SO6	Number of waste facilities situated in tranquil areas as designated by the Local Authority or Natural England	Not measured at the time	No information available at present	No definite information is available but it is estimated that 4 facilities fall into this category, all of them open windrow sites	?
Sustainable waste management	20, (21), 22	SO1, SO2, SO3	Total annual volume of waste generated by waste stream	MSW – 900,000te C&I – 1,490,000te CD&E – 2,543,000te (forecast) Haz. – 177,000te (forecast)	MSW – 907,000te C&I – 1,430,000te (estimate) CD&E – 2,450,000te (estimate) Hazardous – 164,000te (estimate)	MSW – 836,000te C&I – 1,110,000te (estimate) CD&E – 2,300,000te (estimate) Hazardous – 160,000te	? [see footnote ⁷⁶]
	20	SO1, SO2, SO3	Municipal waste collected per head	440kg	438kg	379kg to 423kg in Merseyside; 519kg in Halton ⁷⁷	
	20	SO1, SO2, SO3	Cost of MSW collection per household	Mostly in the range £38-£44, which is in line with the national average. Wirral had the lowest cost of £26	£42.40 (figure for Halton only), Merseyside figure not published)	This statistic is no longer published following changes to the suite of national indicators	X
	20, 22	SO1, SO2, SO3, (SO8)	Volume and % of waste disposed to landfill by waste stream	MSW – 710,000te (79%) C&I – 840,000te (55%) CD&E – 1,095,000te (44%) Hazardous. – 57,000te (31%)	MSW - 620,000te (68% - 69% for Halton) C&I - 547,000te (38%) (MEAS estimate) CD&E - 1,019,000te (42%) (MEAS estimate) Hazardous - 17,000te (9%)	MSW – 65% C&I – 38% CD&E – 34% Hazardous - 23%	[see footnote ⁷⁸]
	20, (21),	(SO2), SO3,	Volume and % of waste recycled/composted by waste	MSW – 190,000te (21%) C&I – 447,000te (32%)	MSW - 206,000te (32%) C&I – 414,000te (29%)	MSW – 35% C&I – 59% CD&E – 66%	

⁷⁶ The reduction in waste quantities is significantly affected by recession which has particularly hits CD&E and industrial wastes. Reduction of MSW may partly reflect the first impacts of awareness campaigns on waste awareness and reduction.

⁷⁷ The statistic for Halton refers to collection and disposal costs, whereas those for the Merseyside districts are for collection only. The corresponding figure for MWDA, which will incorporate disposal costs, was 522kg. Note that the slight reduction in quantities is most likely to reflect the effect of recession on household budgets and therefore on waste creation rates, rather than the direct effect of initiatives on waste reduction. This parameter has been given an orange shading because the North West region has the second highest kg/household rate in England, and most of the highest levels in the region are in Merseyside.

⁷⁸ There are known improvements (in the case of MSW) as reported statistics show increased recycling and composting rates; whereas national and regional surveys – checked against opinions of the local waste management industry – have indicated improvement in recycling rates above the levels previously estimated, and with limited alternative management options this indicates a reduction in landfill rates. Note that the CD&E figure includes a substantial quantity of waste spread on land for landscaping and other purposes, though this quantity is expected to fall in the next 2-3 years.

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
	22	SO4, SO5	stream and by method of disposal ⁷⁹	CD&E – 1,145,000te (47%) Hazardous - 18,800te (10%)	CD&E – 1,155,000te (50%) Hazardous – 28,000te (17%)	Hazardous – 44%	
	16, 17, 20, 22, 27	SO1, (SO2), (SO3), (SO6), SO8	Percentage of the three main waste streams which are managed outside Merseyside ⁸⁰	MSW: approx. 50% (estimate) C&I: approx. 65% (estimate) CD&E: not known but likely to be very small Hazardous: 71% (2005 data)	MSW: 100% from 4Q08 onwards C&I: unlikely to have changed much since 2005/6 CD&E: as for C&I Hazardous: 75% (2007 data)	MSW: 65%	[see footnote ⁸¹]
Sustainable use of resources	22, 24	SO7, SO8	Number of waste facilities using renewable or recovered energy	None known	None known	One, which also provides heat to an adjoining logistics facility	[see footnote ⁸²]
	23	(SO7)	Percent of secondary aggregates used in new waste facilities	Not measured	Not measured	Not measured (and it is not clear this can be measured)	X
	23	SO7, SO8	Proportion of new development meeting appropriate standards: a) BREEAM 'good' or similar (energy conservation); b) SUDS, grey water harvesting or similar	Not measured	Not measured	BREEAM – 4 out of 7; SuDS – 5 out of 7; rainwater harvesting – 1 out of 7 ⁸³	?
	22, 24	SO1, SO3, SO7, SO8	Number of existing renewable energy and energy recovery schemes (by type) in the waste sector and quantity of electricity generated from each	None	None operational yet but consented generating capacity is 163MW of which 150MW will be eligible for Renewables Obligation Credits	Unchanged, although the previous estimate over-estimates how much of the fuelstock would qualify for ROCs. There is a single energy recovery scheme in operation	

⁷⁹ If these percentages are summed with the corresponding landfill figure in the previous indicator and subtracted from 100% the remainder is the proportion of the stream which is diverted to treatment. In the case of CD&E waste this remaining quantity is material beneficially used for landscaping and engineering purposes on landfill sites. Note also that this parameter has been changed to show recycling and composting performance, not recycling and disposal as stated previously.

⁸⁰ This parameter has changed slightly. Previously it was described as the percentage leaving for treatment or re-use. The aim of the parameter is to estimate the level of self-sufficiency, and therefore has been reworded so that it applies to all levels in the waste hierarchy.

⁸¹ The previous figures shown for MSW are incorrect. That for 2005/6 is too low whereas the figure quoted for 2007/8 refers to residual waste only and ignored what was recycled or composted locally.

⁸² This parameter is scored positively because it will take time to bring EfW facilities into service, and the situation will be considerably improved in 3-4 years when several of the consented plants of this type are expected to be in service.

⁸³ In two instances the facilities occupied existing structures, which provided limited scope to apply these design criteria. In three other cases (one landfill site; one HWRC; one open composting facility) provide no realistic scope to apply them. This parameter is marked in yellow as there is scope for further improvement once the Waste Local Plan is adopted and built developments can be directed towards the site allocations and appropriate design requirements applied through its policies.

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
Sustainable economic growth	20, (25), 26	SO1, SO4, SO5	Number of new businesses involved in waste management at different levels of the waste management hierarchy	Not measured	Reprocessing and recycling: 3 Treatment: 4	3 of the new permissions are expansions of existing businesses. Of the rest: recycling/composting: 4 recovery:4 (although some of these facilities contribute to recycling by extracting material prior to treatment)	
	20, 22	SO1	Waste planning applications submitted by type and position in the waste hierarchy	No mechanism for measurement at the time	See above	Recycling / composting: 6 Recovery: 4 (but note comment in the cell above) Disposal: 1	
	20, (25)	SO1	EA permits for waste management issued	Not measured	Not possible to measure at present but assumed be same as above	Not possible to measure at present but assumed be same as above	
	20, 22	(SO1), (SO2)	Cost of LATS penalties	None. Landfill tax costs of £11.9m for 2004/5	None	None, although MWDA has bought £3.4m of LATS credits covering the period to 2012 implying landfill performance is above target	
	12	(SO6)	Proportion of new waste development on previously developed, derelict or under-utilised land	(Previous versions of this table stated this was not measured but likely to be very low. That statement now appears to be wrong as many of the existing permitted facilities are known to be on brownfield, former industrial sites, and greenfield sites are the exception)		100% - this includes new built facilities, a reactivated landfill co-located with a quarry, and a new compost facility on under-used land within a farm	
Employment	26, 29, (30)	SO4	Number and type of personnel employed in waste management sector in Merseyside classified according to waste hierarchy	Not measured	No data source identified at present	No data source identified at present	?
Access to services	(4)	(SO1), SO4	Number of users of HWRCs	Not measured	Not currently published by MWDA	Not currently published by MWDA	X
Public involvement	33	SO5	Level of involvement in consultation process by medium	No consultation undertaken at that time	120 responses to Issues & Options consultation (1Q07);	Preferred Options 1 (Spring 2010) – ca.200 respondents;	[see footnote ⁸⁴]

⁸⁴ The apparent increase in response rates is spurious. In both cases local opposition to a particular site allocation resulted in a large number of responses that commented on a single issue in the whole plan, skewing the results. If these abnormal elements are excluded then the response rates remain disappointingly low. Note that a similar situation has been experienced during public consultation on the revised Joint Municipal Waste Management Strategy in Summer 2011, which is potentially less controversial than the Waste Local Plan as it does not propose any site allocations.

SA Topic	SA Obj.	WLP Obj.	Proposed Indicator	Position in 2005/2006	Position in 2007/2008	Position in 2009/2010	Trend
					ca. 190 to the Spatial Strategy & Sites consultation (4Q08/1Q09)	Preferred Options 2 (Spring 2011) – ca.2800 respondents	
	(34)	-	Awareness of waste hierarchy	-	No way of measuring this parameter at present	No way of measuring this parameter at present	X

6 What happens next?

6.1 Commenting on the Sustainability Appraisal

In order to take account of the views of the community and other stakeholders there will be a period of formal consultation on the Publication Waste Local Plan. The Sustainability Appraisal can be read alongside the Waste Local Plan document to inform consultation responses. If you wish to comment on the SA Report, you can do this on line at merseysideideas-consult.limehouse.co.uk or email waste.dpd@sefton.gov.uk.

You can also write by sending a completed representation form to:

Merseyside Environmental Advisory Service

1st Floor, Merton House

Stanley Road

Bootle

Merseyside

L20 3DL

6.2 The SEA Statement

Once the Waste Local Plan has been adopted the Councils will be required to provide the public and the Consultation Bodies with information on how sustainability considerations highlighted through the SA process, as well as consultation responses, are reflected in the plan or programme and how its implementation will be monitored in the future.

Technical Appendix 1 – Appraisal Matrices

A site scoring approach was used by Merseyside EAS to select the most sustainable sites during the preparation of the Waste Local Plan. The scoring criteria were developed to act as a spatial proxy for the SA Objectives.

The site assessments for Policy WM2 and WM3 presented in the SA Report summarise the extensive work carried out by Merseyside EAS during the selection of sites.

The following table provides an explanation to the symbols used in the appraisal.

Symbol	Likely effect on the SA Objective
++	The option is likely to have a very positive impact
+	The option is likely to have a positive impact
0	No significant effect / no clear link
?	Uncertain or insufficient information on which to determine impact
-	The option is likely to have a negative impact
--	The option is likely to have a very negative impact
I	The option could have a positive or a negative impact depending on how it is implemented

Appraisal of the Vision

Proposed Vision

By 2027, the Waste Local Plan will have facilitated the development of a network of sustainable and modern waste management facilities which serve the needs of the local communities of Merseyside and Halton, enabling them to be as sustainable and self sufficient as possible in terms of waste management. The communities of Merseyside and Halton will have taken responsibility for their waste, and through effective resource management, create economic prosperity by transforming waste into a resource. This network of facilities will be sited to minimise negative impact on health and the natural environment, with site allocations being appropriate to the scale and type of waste management facility.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	+	The vision promotes locating facilities in a way that minimises negative impacts on the human and natural environment. The development of a network of sustainable and modern facilities can contribute reduced deprivation and exclusion through creation of new job opportunities although the significance of this impact will depend on the specific location of sites relative to deprived areas.
2). To improve the health of the community and workers	+	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	+	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	0	

5) To improve safety for operators and the community	0	
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	The vision proposes locating facilities in a way that respects the local environment.
8) To develop and market the image of Merseyside	+	Development of sustainable and modern facilities can help improve the image of Merseyside making it an attractive place to work and live as well and as encouraging investment.
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	As objective 7 above
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	+	
11) To protect, manage and restore land and soil quality	+	
12) To use previously developed land where practicable	+	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	
14) To mitigate and adapt to climate change including flood risk	+	Although the vision promotes sustainable waste facilities which is assumed would limit contribution to climate change as well as adapting to its effect, it is recommended that the vision specifically includes the need to combat climate change.
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	

16) To reduce the kilometres travelled by waste	+	The vision seeks to locate sites in ways that minimise environmental impact which would normally include transport related environmental effects.
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	+	As objective 7 above
19) To protect, enhance and manage the local character of the landscape across the sub-region	+	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	+	The vision promotes sustainable waste management as well as resource efficiency. However, it does not specifically mention managing waste in line with the waste hierarchy which directly supports minimisation, re-use, recycling and recovery as well as diversion of waste from landfill.
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	+	The vision promotes resource efficiency
23) To promote sustainable design for both new and existing waste management facilities	+	The vision proposes ensuring site allocation are appropriate to the scale and type of waste management facility
24) To maximise opportunities for renewable energy production and heat recovery from waste	+	As objective 22 above
25) To improve the competitiveness and productivity of business	+	As objective 8

26) To exploit the growth potential of new business and new technologies for waste	+	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	+	As objective 8
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	+	As objective 8
30) Maintain high and stable levels of employment and reduce long-term unemployment	+	
31) To improve local accessibility of goods, services and amenities for all groups	+	The vision promotes self sufficiency in waste management meaning the majority of waste arising would be managed within the sub-region enabling easy access to facilities for both industry and individuals
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

The proposed vision promotes sustainable waste management and is in line with most of the SA objectives. It supports self-sufficiency which would lead to waste being managed closer to where it arises and reducing the overall distances waste is moved. This can in turn help promote local accessibility to waste facilities both for industry and individuals which will contribute to helping Merseyside and Halton residents take responsibility for their waste in line with Government waste policy. The vision also supports resource efficiency although it does not explicitly mention the waste hierarchy which supports minimisation, re-use, recycling, recovery and diversion of waste from landfill and lies at the heart of the Government sustainable waste management policy. The vision commits to creating economic prosperity by transforming waste into a resource; treating waste as a resource will stimulate the development of a secondary materials economy which can lead to an enhanced image of the sub-region attracting industry as well as adoption of new waste technologies. Although the vision seeks effective resource management, it does not specially refer to the issue of climate change which is a major threat and which is central to the Government's Sustainable Development policy agenda. However, the vision seeks to ensure that waste management does not lead to adverse effects on the natural environment as well as on human beings by ensuring the network of facilities is well sited and that site allocations are appropriate to the scale and type of waste management facilities proposed.

Appraisal of Overarching Strategic approach and Spatial Strategy

Overall Strategic Approach

(a) Management strategy: the Resource Recovery-Led Strategy (RRL)

Amend the wording of the Strategy for meeting Merseyside and Halton's Waste Management Needs, as follows:

The overarching approach for the Waste DPD Local Plan will be a Resource Recovery-led strategy with the following objectives:

1. To seek to minimise waste arisings.
2. To maximise recycling, resource recovery and re-processing
3. To ensure that residual waste is minimised and then processed in a way that seeks to:
 - Maximise the economic and environmental benefits to local communities and businesses;
 - Minimise export of residual wastes for landfill disposal; Minimising the need for new landfill / landraise and reserving capacity for the greatest disposal needs; and,
 - Balance the overall export of landfill tonnages with provisions for and recycling of imported waste tonnages of an equivalent amount to ensure that Merseyside and Halton are as self sufficient as possible in waste management capacity.

(b) Spatial strategy: the Sub-Regional Site Approach (SRS)

The Spatial Strategy identifies an appropriate number of large sites suitable for sub-regionally significant facilities of more than 4.5 hectares in area. There is one sub-regional site located in each of the districts, and they are spatially distributed across the plan area taking account of matters such as proximity to waste arisings and infrastructure. These sites are located in the vicinity of existing clusters of waste management facilities where these have been shown to be sustainable. The sites were selected using robust site selection criteria based on constraint and opportunity mapping.

District sites are identified to accommodate smaller-scale local facilities taking into account specific local needs, such as proximity to waste arisings, and to ensure that sufficient small sites are also available to meet the short to medium-term needs of the Waste Local Plan Strategy.

The areas around the existing clusters of waste management facilities have been defined as Areas of Search. Other small sites will be most easily identified within the Areas of Search.

Two inert landfill sites are identified. Due to technical constraints there are limited opportunities for landfill within the sub-region, and the sites are the most sustainable and spatially appropriate for this type of activity.

Sustainability Objectives	<u>Resource Recovery led strategy</u>	<u>Sub-regional site approach</u>	
1). To protect, enhance and manage biodiversity	?	?	
2). To improve the health of the community and workers	0	0	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	0	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	0	0	

5) To improve safety for operators and the community	0	0	.
6) To support voluntary and community networks	0	0	
7) To protect and improve local environmental quality	?	?	The impact on local environmental quality will depend on the type, nature and size of facilities built at specific sites, proximity to sensitive receptors and mitigation measures put in place.
8) To develop and market the image of Merseyside	0	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	?	?	
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	?	?	
11) To protect, manage and restore land and soil quality	?	?	
12) To use previously developed land where practicable	?	?	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	?	?	
14) To mitigate and adapt to climate change including flood risk	+	?	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	++	?	Resource recovery led strategy would divert waste from landfill

16) To reduce the kilometres travelled by waste	+	?	Resource Recovery approach seeks to minimise the export of waste.
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	?	The sub-regional site approach could lead to increased transport impacts due to clustering but it is assumed that transport assessments would be required prior to planning permission being granted.
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	0	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	++	+	Resource recovery approach seeks to maximise recycling, resource recovery and reprocessing.
21) To reduce the amount and hazardous properties of hazardous waste	0	0	
22) To use energy, water and mineral resources prudently and efficiently	+	+	
23) To promote sustainable design for both new and existing waste management facilities	0	0	
24) To maximise opportunities for renewable energy production and heat recovery from waste	+	+	Resource Recovery approach encourages heat and power generation
25) To improve the competitiveness and productivity of business	+	?	

26) To exploit the growth potential of new business and new technologies for waste	+	+	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	?	?	Impact on this objective will depend on the nature of sites and facilities delivered by any of the options and whether they provide economic opportunities that can provide jobs in the sub-region and beyond
28) To maximise opportunities for urban and rural regeneration through waste management activities	?	?	Impact on this objective will depend on the exact location of site in relation to areas needing regeneration in Merseyside
29) To secure economic inclusion	?	?	As objective 27 above
30) Maintain high and stable levels of employment and reduce long-term unemployment	?	?	The type and number of jobs is highly dependent on the type and scale of facilities delivered
31) To improve local accessibility of goods, services and amenities for all groups	?	+	
32) To reduce community severance	0	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	0	
34) To provide opportunities for waste education and awareness raising	0	0	

Summary

Resource Recovery – led Strategy – This approach supports sustainable waste management as it seeks to maximise recycling, resource recovery and re-processing thereby diverting waste from landfill. Reducing the amount of waste going to landfill has a positive effect of mitigating against climate change as it reduces methane emissions. The Resource recovery approach also supports waste minimisation which has an overall beneficial effect as it would lead to less waste needing treatment and management. It also supports SA objectives on reducing distances waste is moved as it seeks to minimise export of residual waste for landfill disposal and supports net-self sufficiency. It also promotes processing of secondary waste in a way that provides feedstock for heat and power generation which supports the SA objective on renewable energy. Overall, this approach supports key SA objectives and is judged to be likely to lead to the delivery of sustainable waste management in Merseyside and Halton.

The Sub-regional site Approach seeks to identify strategic sites for sub-regionally significant facilities focusing on areas around existing clusters of waste management facilities as well as identifying smaller-scale facilities taking into account specific local need. This approach can help in delivering facilities (both large and small) required for the efficient management of waste arising within the sub-region. Because it seeks to identify such sites around existing clusters of waste management facilities, this approach can provide opportunities for co-location and therefore creation of synergies, leading to better use of waste as a resource. Co-location with existing waste management uses presents opportunities for better use of land (especially where sites are on Brownfield land). It also presents opportunities for the production of renewable energy. This approach however could lead to negative cumulative effects depending on the specific location of sites, their existing uses and proximity to sensitive receptors such as housing. It is therefore recommended that assessment of potential cumulative effects especially with regard to transport and traffic, air quality, noise, odour, landscape and other potential negative effects is required as part of this option.

Policy Appraisal

Policy WM 0: Presumption in Favour of Sustainable Development

When considering waste development proposals a positive approach will be taken that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. Work will always be undertaken proactively with applicants to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Planning applications that accord with the policies in this Waste Local Plan (including other Local Plan documents and, where relevant, with policies in Neighbourhood Plans) will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then permission will be granted by the Local Planning Authority unless material considerations indicate otherwise – taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or
- Specific policies in that Framework indicate that development should be restricted.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	?	
2). To improve the health of the community and workers	?	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	?	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	?	
5) To improve safety for operators and the community	?	
6) To support voluntary and community networks	?	
7) To protect and improve local environmental quality	?	

8) To develop and market the image of Merseyside	?	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	?	
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	?	
11) To protect, manage and restore land and soil quality	?	
12) To use previously developed land where practicable	?	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	?	
14) To mitigate and adapt to climate change including flood risk	?	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	?	
16) To reduce the kilometres travelled by waste	?	
17) To minimise the impacts of waste-related transport and encourage sustainable transport	?	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	?	

19) To protect, enhance and manage the local character of the landscape across the sub-region	?	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	?	
21) To reduce the amount and hazardous properties of hazardous waste	?	
22) To use energy, water and mineral resources prudently and efficiently	?	
23) To promote sustainable design for both new and existing waste management facilities	?	
24) To maximise opportunities for renewable energy production and heat recovery from waste	?	
25) To improve the competitiveness and productivity of business	?	
26) To exploit the growth potential of new business and new technologies for waste	?	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	?	
28) To maximise opportunities for urban and rural regeneration through waste management activities	?	
29) To secure economic inclusion	?	

30) Maintain high and stable levels of employment and reduce long-term unemployment	?	
31) To improve local accessibility of goods, services and amenities for all groups	?	
32) To reduce community severance	?	
33) To enable groups and communities to contribute to decision-making for waste planning	?	
34) To provide opportunities for waste education and awareness raising	?	

Summary

Policy WM0 reiterates NPPF policy concerning the need to plan positively for sustainable development. Whilst it may be expected that the policy would be beneficial, and could have synergistic effects with other policies in the Waste Local Plan, the actual effects are hard to predict as they will depend largely on how the policy is implemented in practice.

Policy WM1 – Approach to site prioritisation

Developers should be directed to sites allocated in the Waste Local Plan in the first instance, and should only consider alternatives to allocated sites, if allocated sites have already been developed out, or are not available for the waste use proposed by the industry, or can be demonstrated as not being suitable for the proposed waste management operation. There will be presumption in favour of waste management development on allocated sites subject to compliance with other policies within the Waste Local Plan and relevant Core Strategy. This applies to both allocations for built facilities and inert landfill. If allocated sites are not available, then the waste industry should seek sites within the areas of search. These areas are suitable for small-scale waste management activity, such as waste transfer stations, re-processing activity or displacement of existing waste management uses. The applicant should demonstrate why an allocated site is not suitable for the specific proposed use as part of the justification. Developers must demonstrate that both allocated sites and areas of search are not suitable before unallocated sites will be considered. These will need to be justified as follows:

- That the Waste Local Plan site assessment method is applied, including site selection scoring criteria shown in Boxes X & Y;
- Sustainability Appraisal;
- HRA screening;
- Deliverability Assessment; and,
- Compliance with the criteria based policy and other relevant policies.

Sustainability Objectives		
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1). To protect, enhance and manage biodiversity	+	The proposed approach would ensure that biodiversity issues are taken into account for non-allocated sites (similar to allocated sites and areas of search) and would ensure that sites are well sited away from sensitive biodiversity receptors and where there is likely to be adverse effects, these are mitigated against.
2). To improve the health of the community and workers	+	Proposed approach would ensure that the possibility of adverse health impacts is minimised when considering unallocated sites. This issue has been considered for allocated sites and areas of search.
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	?	The site selection criteria include assessing proximity of sites to unemployment areas. This could have a positive effect on SA objective 3.
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+	Policy requires proposals to be in compliance with other policies. Policies WM9 and 10 require good design and layout for waste management facilities which can help reduce hazards and risks to human health associated with waste management when considering allocated sites, sites within areas of search and non-allocated sites.
5) To improve safety for operators and the community	+	Requiring compliance with other relevant policies especially on design can potentially lead to improved safety with regard to workers as well as those residing near waste facilities.
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	For non allocated sites, application of the site selection criteria and the need for SA can help to ensure that sites are well located relative to sensitive receptors. These issues have been considered for allocated sites and areas of search.
8) To develop and market the image of Merseyside	0	

9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	For allocated sites and areas of search, issues relating to amenity have been considered through the site selection process and SA. For non-allocated sites, application of the site selection criteria and SA would ensure that sites are well located relative to sensitive receptors. This can have a positive effect on protecting amenity and the local environment.
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	+	For allocated sites and areas of search, the issues relating to SA objectives 12, 13, 14 and 15 have been addressed through the site selection process and SA and mitigation measures suggested where appropriate.
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	For non-allocated sites, application of the site selection criteria and SA would ensure that sites brought forward take in to account issues such as efficient use of land, potential for air pollution, climate mitigation and adaptation as required by SA objectives 12, 13, 14 and 15. The site selection criteria includes proximity to alternative routes and locating sites close to sources of waste arisings which would have a positive impact on reducing potential transport related negative effects.
14) To mitigate and adapt to climate change including flood risk	+	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	
16) To reduce the kilometres travelled by waste	+	The site selection criteria includes consideration of proximity to sources of waste arising as well as opportunities to use sustainable transport and was applied to allocated sites and areas of search. Applying the criteria and SA would ensure these issues are considered for non-allocated sites as well.
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	+	For allocated sites and areas of search, issues relating to the cultural and historical heritage, archaeological receptors and landscape have been considered through the site selection process and SA and mitigation measures proposed as appropriate. For non-

19) To protect, enhance and manage the local character of the landscape across the sub-region	+	allocated sites, application of the site selection criteria and SA would ensure that sites are well located relative to sensitive heritage/archaeological/landscape receptors.
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0	
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	+	Policy requires proposals to be in compliance with other policies. Policies WM9 and 10 require good design and layout for waste management facilities. These can help reduce hazards and risks to human health by providing dedicated areas for waste management when considering development in allocated sites, areas of search and in non-allocated sites.
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	

29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	
31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

The proposed policy outlines the site prioritisation hierarchy and requires developers to consider allocated sites in the first instance, followed by sites within the areas of search and only consider non-allocated sites when they can demonstrate that allocated sites and sites within the areas of search are not suitable. Un-allocated sites will need to be justified through the Waste Local Plan site assessment process, SA, HRA, deliverability assessment and be compliant with other relevant policies.

Directing developers to allocated sites ensures that those sites that have already been adequately assessed as suitable locations for waste management facilities are prioritised for development. These sites have been through a rigorous site assessment process that ensures the protection of the built and nature environment, consideration of amenity issues, climate change and transport impacts. The areas of search have also been tested in terms of sustainability and deliverability and may be suitable for small-scale waste management facilities. Prioritising allocated sites and areas of search allows for the Councils' spatial strategy which has been tested against sustainability and deliverability criteria to be achieved. Where an unallocated site is brought forward, the justification process to be followed requires sites to be tested for sustainability and deliverability issues similar to the process followed for allocated sites and areas of search. This will ensure that development in unallocated areas does not lead to adverse effects and that mitigation measures are considered where adverse effects are likely. Overall, this policy is considered to be in line with sustainability principles.

Policy WM5 – Areas of Search for Additional Small-Scale Waste Management Operations and Re-Processing Sites

Additional sites that are required for waste-related re-processing activities and other small scale waste management facilities over and above those allocated for specific waste management uses will be considered favourably in the vicinity of allocated clusters of sites. There will be a presumption in favour of planning applications for waste re-processing and other small-scale waste management activities in these areas subject to assessment of cumulative effects on local amenity and the continued viability of existing employment areas for a full range of appropriate uses and the tests identified in policy WM1.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0	
2). To improve the health of the community and workers	0	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	0	
5) To improve safety for operators and the community	0	
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+/?	One of the requirements set in the policy wording will be the need to undertake an Environmental and amenity assessment. Reference will also need to be made to the criteria used for site selection by the Council. This will facilitate protection of the local environmental quality although the actual effects are also dependent on other factors e.g. proposed mitigation measures
8) To develop and market the image of Merseyside	0	

9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+/?	Application of the site selection methodology and criteria will facilitate protection of the local environmental quality although the actual effects are also dependent on other factors e.g. proposed mitigation measures
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	0	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	
14) To mitigate and adapt to climate change including flood risk	0	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	An assessment of traffic impacts will be required as well an environmental assessment. Sites with access to alternative modes of transport will be considered positively
16) To reduce the kilometres travelled by waste	?	An assessment of traffic impacts will be required Sites close to the Strategic road network will be considered positively although the reduction in distance waste travels depends on the proximity of site in relation to sources of arisings
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	An assessment of traffic impacts will be required. Sites with access to alternative modes of transport will be considered positively
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	

20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste		
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	0	
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	+	Consideration of unallocated sites provides opportunities for investors as development will not be restricted to allocated sites
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	

31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM5 requires additional sites required for waste related reprocessing facilities and other small-scale waste management facilities over and above those allocated for specific uses to be considered in the vicinity of cluster of sites which inherent in the allocations made in the Waste Local Plan. This policy supports sustainable waste management as it makes provision for re-processing activities which would lead to more waste being diverted from land fill and associated environmental effects including climate change mitigation. This option also provides certainty to industry which can lead to more growth in the waste sector resulting in creation of local employment opportunities. The option ensures that the additional sites are sited close to the allocations made in the Plan. This has both positive and negative effects in that co-location of sites can provide opportunities for synergies but intensification of use in those areas could also lead to negative cumulative effects for example with regard to traffic. The policy however requires an assessment of potential cumulative effects associated with proposed additional facilities.

Policy WM6 – Additional HWRC Requirements

Areas of Search for new or replacement HWRCs within the boundary of the City of Liverpool should not be in close proximity to the existing HWRC at Otterspool or to existing HWRCs in other districts which are located close to the city boundary, and will be informed by the following criteria:

- Population density
- Travel time from an existing HWRC; and
- Travel distance to an existing HWRC.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	+	Proposals for new HWRCs will be expected to comply with other policies in the Waste Local Plan. Policy WM12 requires consideration of environmental impacts and so proposals will be expected not to have adverse effects on environmental receptors including on biodiversity.
2). To improve the health of the community and workers	+	Proposals for new HWRCs will be expected to comply with other policies in the Waste Local Plan. Policy WM12 requires consideration of amenity impacts which can indirectly minimise potential for negative health impacts on the community

3) To reduce health inequalities (including poverty, social deprivation and exclusion)	?	Not sure there is an issue here but perhaps you need to explain the uncertainty
4) To reduce waste related crime, fear of crime, and hazards and risk to health	0	
5) To improve safety for operators and the community	+	Policy WM10 requires waste management facilities to be of high quality design. Well designed facilities can improve safety on site by for example ensuring there is adequate access, storage areas etc
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	Policy WM12 requires consideration of environmental impacts and so proposals will be expected not to have adverse effects on local environmental quality.
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	Policy WM12 requires consideration of environmental impacts and so proposals will be expected not to have adverse effects on local amenity, water and soil resources. Close proximity between HWRCs and sensitive receptors (ca.100m) can be allowed subject to adequate mitigation measures.
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	+	
11) To protect, manage and restore land and soil quality	+	
12) To use previously developed land where practicable	?	

13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	Policy WM12 requires consideration of environmental impacts and so proposals will be expected not to have adverse effects on air quality. Policy WM12 also requires consideration of overall sustainability including carbon and energy management which has potential to mitigate against climate change.
14) To mitigate and adapt to climate change including flood risk	+	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	
16) To reduce the kilometres travelled by waste	++	Policy WM6 seeks to reduce the distance travelled to access HWRCs. This can help to minimise the impacts of waste transportation on the transport network as well as reduce carbon emissions.
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	+	Policy WM12 requires consideration of environmental impacts and so proposals will be expected not to have adverse effects on Merseyside's cultural/historic/archaeological and landscape designations. With adequate mitigation measures, HWRCs can be located close to sensitive receptors.
19) To protect, enhance and manage the local character of the landscape across the sub-region	+	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	+	Provision of HWRC to serve the identified needs in Liverpool has the potential to increase recycling rates in the area moving waste up the waste hierarchy
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	0	

23) To promote sustainable design for both new and existing waste management facilities	0	
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	+	New HWRC facilities in the City of Liverpool would provide local employment opportunities
31) To improve local accessibility of goods, services and amenities for all groups	+	Making local provision will ensure that recycling services are available to all locally and are easily accessible (within 3km)
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	

34) To provide opportunities for waste education and awareness raising	0	
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Summary

Policy WM6 identifies the need for new or replacement HWRC facilities within the boundary of the City of Liverpool. These facilities should be well located relative to existing HWRCs in Liverpool and in other districts so as to allow for an even distribution of facilities reducing the distance travelled locally to any facility. This has positive impacts in reducing carbon emissions associated with waste transportation as well as other negative transport related impacts like congestion, and air pollution. Locating HWRCs close to the communities that need them is also likely to encourage further recycling locally, diverting waste from landfill and moving it up the waste hierarchy. Close proximity between HWRCs and sensitive receptors (ca.100m) can be allowed subject to adequate mitigation measures. The proposals for new HWRCs will be expected to comply with other Waste Local Plan policies. This will ensure that potential negative impacts on the environment and amenity are addressed during the planning stage and mitigation measures put in place as appropriate. Overall, this policy is considered to be in line with sustainability principles.

Policy WM7 - Protecting Existing Waste Management Sites

Existing and consented waste management facilities will be expected to remain in waste management use in order to maintain essential waste management capacity. For Built Waste Management Facilities: Any change of use from waste management will only be allowed in exceptional circumstances, and will need to be justified by the developer by demonstrating that the waste use is:

- Located in an inappropriate area;
- Causing significant loss of amenity;
- That the lost capacity has been made up for elsewhere, or can be provided through existing site allocations.

One or more of the above criteria must be met for a change of use to be acceptable.

For Existing Operational Landfill Capacity: Extensions of time will be granted for the use of existing operational landfill capacity subject to:

- The design of the site being capable of accommodating the type of waste proposed;
- There still being a demonstrable need for landfill capacity in the Plan area;
- There being no ongoing significant cumulative impacts on amenity and environmental quality. Such an assessment will be based against the criteria in policy WM12 and appropriate and relevant criteria in Box 1, and;
- Evidence being submitted in support of the planning application to demonstrate that the projected completion date of land filling operations is realistic and achievable.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0	
2). To improve the health of the community and workers	0	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	

4) To reduce waste related crime, fear of crime, and hazards and risk to health	0	
5) To improve safety for operators and the community	0	
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	The option will consider allowing change of use where a waste use is causing significant loss of amenity
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	The option will consider allowing change of use where a waste use is causing significant loss of amenity
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	+	Protecting existing waste sites enhances the use of PDL
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	
14) To mitigate and adapt to climate change including flood risk	0	

15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	0	
16) To reduce the kilometres travelled by waste	+	Extensions to existing landfills would only be allowed where the need within the Plan area can be demonstrated. If extensions were not allowed waste would be exported elsewhere leading to an increase in kilometres travelled.
17) To minimise the impacts of waste-related transport and encourage sustainable transport	0	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0	
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	0	
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	0	

26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	+	Change of use will be considered where it is considered that waste management use is causing significant loss of amenity – this can enhance regeneration activities
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	
31) To improve local accessibility of goods, services and amenities for all groups	+	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM7 seeks to protect existing and consented waste management facilities in order to maintain essential waste management capacity. Any change of use from waste management to another use will need to be justified, unless the waste use is located in an appropriate areas and causing significant loss of amenity. When appraised against the SA objectives, this policy was found to generally be inline with sustainability principles. Protecting existing waste management infrastructure can reduce the need to use green field sites elsewhere in the sub-region. It can also help in meeting future waste management capacity.

Policy WM8 Waste Prevention and Resource Management

Any development involving demolition and/or construction should implement measures aimed at the efficient use of resources, taking particular account of: Construction and demolition methods that minimise waste production and encourage re-use and recycling materials, as far as practicable on-site; Designing out waste by using design principles and construction methods that prevent and minimise the use of resources and make provision for the use of high-quality building materials made from recycled and secondary sources; Use of waste audits or site waste management plans (SWMP), where applicable, to monitor waste minimisation, recycling, management and disposal. Written evidence demonstrating how this will be done must be submitted with the development proposals.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0	
2). To improve the health of the community and workers	0	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+/-0	Promote use of SWMPs can lead to reduced incidences of fly tipping. Not having a waste minimisation policy and especially the requirement for SWMPs can lead to flytipping of CD&E waste. However, SWMPs are required under separate regulations for developments of an estimated value of 300,000 or more and
5) To improve safety for operators and the community	0	
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	Promoting re-use of materials on site can help reduce waste movements and associated transport impacts while not having a policy on re-using materials on site can lead to materials being removed leading to traffic related impacts including congestion, air pollution and ghg emissions
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	0	

10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	0	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)		See objective 7 above
14) To mitigate and adapt to climate change including flood risk	0	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	Minimising resource use and reducing waste production can lead to a reduction in ghg emissions. On site re-use can also lead transport related emissions.
16) To reduce the kilometres travelled by waste	+	Promoting re-use of materials on site can help reduce waste movements and associated transport impacts while not having a policy on re-using materials on site can lead to materials being removed leading to traffic related impacts including congestion, air pollution and ghg emissions
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	Promoting re-use of materials on site can help reduce waste movements and associated transport impacts while not having a policy on re-using materials on site can lead to materials being removed leading to traffic related impacts including congestion, air pollution and ghg emissions
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	

20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	+	Waste minimisation and re-use lie at the top of the waste hierarchy and promoting them is in line with sustainable development.
21) To reduce the amount and hazardous properties of hazardous waste	+	Use of SWMP can help identify hazardous arisings and ensure they are managed sustainably
22) To use energy, water and mineral resources prudently and efficiently	+	The preferred option focuses on efficient use of waste materials
23) To promote sustainable design for both new and existing waste management facilities	+	The preferred option promotes sustainable design
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	+	Promoting re-use of materials on site can lead to cost savings
26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	

30) Maintain high and stable levels of employment and reduce long-term unemployment	0	
31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM8 requires any development involving demolition and/or construction to consider waste prevention and resource management during design and construction phases thus raising awareness of the importance of the issue. When appraised against the SA objectives this policy was found to be inline with a number of objectives including on promoting efficient use of resources through encouraging re-use and recycling. Resource efficiency promotes mitigation against climate change – for example recycling and re-using CD&E waste can lead to virgin materials not being used which can save energy associated with their extraction and processing. Promoting re-use of materials on site has positive effects on managing waste close to source for arising reducing movement especially by road. This can have positive effects on SA objectives relating to nuisance (noise, amenity, air quality, transport) as well as climate change mitigation by reducing GHG emissions. Promoting SWMPs can help mitigate against fly tipping of CD&E arisings as well as help in raising awareness on sustainable waste management and improve environmental performance on sites.

Policy WM9 –Sustainable waste management design and layout for new developments

The design and layout of new built developments and uses should provide measures as part of their design strategy to address the following:

- Facilitation of collection & storage of waste, including separated recyclable materials;
- Provide sufficient access requirements to enable waste and recyclable materials to be easily collected and transported for treatment;
- Accommodation of home composting in dwellings with individual gardens;
- Facilitate incorporation of small scale, low carbon combined heat and power in major new employment and residential schemes, where appropriate.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0	
2). To improve the health of the community and workers	0	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+	Good design and layout for waste storage and management can help reduce hazards and risks to human health by providing dedicated areas for waste management
5) To improve safety for operators and the community	+	Good design and layout can potentially lead to improved safety with regard to waste collectors as well as the residents
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	The preferred option can lead to improved urban design and street scene thereby improving the local environmental quality
8) To develop and market the image of Merseyside	0	

9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	The preferred option can lead to improved local environmental quality by making sufficient provision for waste storage and collection potentially reducing nuisance issues e.g. odour and vermin
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	0	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	
14) To mitigate and adapt to climate change including flood risk	0	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	0	The preferred option will require incorporation of low carbon combined heat and power to deliver energy security and long term economic benefits
16) To reduce the kilometres travelled by waste	0	
17) To minimise the impacts of waste-related transport and encourage sustainable transport	0	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	+	

20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	++	A policy on design and layout can lead to increased levels of recycling and recovery by ensuring waste storage and collection areas are well provided for within developments
21) To reduce the amount and hazardous properties of hazardous waste	+	Good design and layout can encourage better segregation and storage of waste including hazardous materials leading to less cross contamination and amount of total hazardous waste arising
22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	+	The preferred option is concerned with design and layout of development to facilitate sustainable waste management
24) To maximise opportunities for renewable energy production and heat recovery from waste	+	The preferred option will require incorporation of low carbon combined heat and power to deliver energy security and long term economic benefits
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	

31) To improve local accessibility of goods, services and amenities for all groups	+	Well designed storage and collection areas within residential and commercial developments can improve access to better waste segregation facilities for residents
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM9 seeks to promote sustainable waste management design and layout for new developments. Incorporating the measures outlined in policy WM9 can help influence adoption of sustainable waste management practices through provision of adequate storage and collection space thereby making it easier for residents to access and use on site facilities. Providing space for separate recyclable materials can encourage recycling and in turn improve recycling rates in the area. Good design and layout can also help reduce hazardous and risks to human health by ensuring adequate provision is made for waste segregation and storage. This can also lead to more safety for waste collectors, reduced cross contamination of waste as well as improved street scene and local environmental quality. This policy also encourages home composting as well as incorporation of low carbon combined heat and power to deliver energy security and long term economic benefit thereby supporting SA objectives on climate change as well as those supporting economic development,

Policy WM10 – High Quality Design and Operation of Waste Management Facilities:

All proposals for waste management facilities should ensure that the proposed design and environmental performance does not adversely impact on the locality and achieves the best performance possible. Proposals must demonstrate that: Environmental performance and sustainable design has been incorporated from the design stage, with the aim of achieving a minimum BREEAM rating of "very good" or equivalent standard for industrial buildings up to 2016. From 2016 to 2027, it is expected that all new waste management facilities should be achieving an "excellent" BREEAM rating or equivalent standard for industrial buildings; The design and appearance of the building takes account of its proposed location and its likely visual impact on its setting within the townscape or landscape; That unacceptable impacts on amenity are avoided.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0	
2). To improve the health of the community and workers	0	

3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+	Good design and layout for waste storage and management can help reduce hazards and risks to human health by providing dedicated areas for waste management
5) To improve safety for operators and the community	+	Good design and layout can potentially lead to improved safety with regard to waste collectors as well as the residents
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	The preferred option can lead to improved urban design and street scene thereby improving the local environmental quality
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	The preferred option can lead to improved local environmental quality by ensuring operations on site are to a high standard potentially reducing nuisance issues e.g. odour and vermin
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	0	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	

14) To mitigate and adapt to climate change including flood risk	0	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	0	The preferred option will require incorporation of low carbon combined heat and power to deliver energy security and long term economic benefits
16) To reduce the kilometres travelled by waste	0	
17) To minimise the impacts of waste-related transport and encourage sustainable transport	0	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	+	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	++	A policy on design and layout can lead to increased levels of recycling and recovery by ensuring waste storage and collection areas are well provided for within developments
21) To reduce the amount and hazardous properties of hazardous waste	+	Good design and layout can encourage better segregation and storage of waste including hazardous materials leading to less cross contamination and amount of total hazardous waste arising
22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	+	The preferred option is concerned with design and layout of development to facilitate sustainable waste management
24) To maximise opportunities for renewable energy production and heat recovery from waste	+	The preferred option will require incorporation of low carbon combined heat and power to deliver energy security and long term economic benefits

25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	
31) To improve local accessibility of goods, services and amenities for all groups	+	Well designed storage and collection areas within residential and commercial developments can improve access to better waste segregation facilities for residents
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM10 requires all new waste management facilities to carefully consider the proposed design to ensure that they do not impact adversely on the surrounding environment. The policy proposes that from 2016 to 2025, all new waste management facilities should achieve an excellent BREEAM rating (or equivalent). Well designed waste management facilities can enhance the local character of an area as well as respect surrounding land uses leading to better acceptance of waste management facilities close to where people live and work which in turn can help reduce the distances waste is transported. Well designed facilities with high environmental performance rating are also likely to have reduced impacts such as noise, dust, odour, vibration and litter. They can also lead to reduction in health hazards resulting to improved health and safety for workers.

Policy WM11 Sustainable Waste Transport

All proposals for new waste management facilities (or extensions to an existing waste management facility) will be expected to meet the following criteria:

Make use of alternatives to road transport for movement of wastes (such as water & rail transport and, where appropriate, use of pipelines and conveyors to neighbouring sites), wherever possible. Ensure there are sustainable choices of travel for its employees (such as, walking, cycling, and public transport). Provide mitigation for the effects of road transport on local amenity include use of screening, sound insulation and time tabling traffic movements. Ensure safe and adequate access to and from the public highway. Reduce the impact of transport on climate change and carbon emissions. Where the applicant is not pursuing any of the requirements of the policy, then the planning proposal must detail why not

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0	
2). To improve the health of the community and workers	0	
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	0	
5) To improve safety for operators and the community	0	.
6) To support voluntary and community networks	0	

7) To protect and improve local environmental quality	+	Use of non-road based transport could have positive effects on environmental quality by reducing noise and air pollution
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	0	
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	0	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	Use of non-road based transport could have positive effects on environmental quality by reducing air pollution
14) To mitigate and adapt to climate change including flood risk	+	Option 1 will also help reduce emissions by encouraging use of alternative transport modes
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	
16) To reduce the kilometres travelled by waste	?	
17) To minimise the impacts of waste-related transport and encourage sustainable transport	++	

18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0	
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	+	
23) To promote sustainable design for both new and existing waste management facilities	0	
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	+	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	

29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	
31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM11 promotes sustainable waste transportation and expects proposals for new waste management facilities to consider use of alternatives to road transport for both materials and employees, provide mitigation measures on local amenity from road transport, ensure adequate and safe access to and from the highway and reduce carbon emissions. Use of sustainable modes of transport (rail/water) can help reduce air pollution associated with road emissions and as well as reducing GHG emissions. It should be noted however that use of rail or water will require investment in necessary infrastructure and so this option is only likely to be implemented on large scale waste management sites. Road transport is likely to remain the primary method of waste movements for the majority of sites and so there is a need to ensure that where alternative modes of transport are not feasible, mitigation measures are in place to avoid adverse transport impacts on the environment and local communities.

Policy WM12 -Criteria for Waste Management Development

All proposals for new waste management development (including landfill) and alterations/amendments to existing facilities will be expected to submit a report covering the general details of the proposed development and a written assessment and mitigation of the short, medium, long-term and cumulative impacts on its neighbours and the surrounding environment in terms of the:

- Social, economic and environmental Impacts on the area;
- Amenity Impacts;
- Traffic (& transport) Impacts;
- Heritage & Nature Conservation Impacts;
- Overall Sustainability of the proposals (including carbon and energy management performance);
- Hydrogeological/Hydrological/Geological Impacts (for landfill and open windrow composting only).

Applications should refer to Box 1 which lists the general information that must be submitted with all waste applications and criteria which should be included in the assessment of impacts.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	++	
2). To improve the health of the community and workers	+	Criteria include consideration of amenity issues.
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	+	The criteria includes assessment of social and economic issues
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+	Criteria includes consideration of amenity issues
5) To improve safety for operators and the community	0	
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	++	
8) To develop and market the image of Merseyside	0	

9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	++	
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	+	Criteria includes consideration of hydro geological and hydrology issues
11) To protect, manage and restore land and soil quality	+	
12) To use previously developed land where practicable	0	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	
14) To mitigate and adapt to climate change including flood risk	++	Carbon performance of the project will be required
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	
16) To reduce the kilometres travelled by waste	+	
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	++	
19) To protect, enhance and manage the local character of the landscape across the sub-region	++	

20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	?	
21) To reduce the amount and hazardous properties of hazardous waste	?	
22) To use energy, water and mineral resources prudently and efficiently	+	Energy performance of development is required.
23) To promote sustainable design for both new and existing waste management facilities	+	
24) To maximise opportunities for renewable energy production and heat recovery from waste	?	
25) To improve the competitiveness and productivity of business	+	An economic assessment will be required
26) To exploit the growth potential of new business and new technologies for waste	+	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	+	
28) To maximise opportunities for urban and rural regeneration through waste management activities	+	
29) To secure economic inclusion	+	
30) Maintain high and stable levels of employment and reduce long-term unemployment	+	

31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM12 requires all planning applications for new waste management development and alterations/amendments to existing facilities will be required to include an evaluation of the proposed development and its likely impacts on the surrounding environment. Proposals will be required to consider social, economic and environmental impacts on the area, amenity impacts, traffic and transport impacts, heritage and nature conservation, carbon and energy management as well as water related issues.

When assessed against the SA objectives, policy WM12 was found to have positive effects on various SA objectives as the list of required criteria and evaluation of impacts supports objectives concerned with protecting and conserving the built and natural environment (e.g. nature conservation, heritage and amenity issues). It also supports climate change mitigation as the criteria include a requirement to provide information on the carbon and energy management performance of proposed developments. The strategy for dealing with emissions can encourage use of alternative means of transport further reducing GHG emissions. Other positive effects relate to potential to reduce or influence transport movements and ensuring that the most suitable routes and access points are used. Overall, the criteria are judged to support sustainable waste management.

Policy WM13 – Planning Applications for New Waste Management Facilities on Unallocated Sites

Planning permission will only be granted for additional waste management facilities on unallocated sites where the applicant has provided written evidence to demonstrate:

- That a suitable allocated site is not available or suitable for their proposed use;
- That the proposed site has been assessed against the criteria for built facilities used in the site selection process for allocated sites shown in Table to be added];
- The site will be sustainable in terms of its social, economic and environmental impacts and this has been demonstrated through project-level Sustainability Appraisal and Habitats Regulations Assessment Screening;
- That a deliverability assessment has been completed for the proposed site;
- The proposal complies with the vision and spatial strategy for the Waste Local Plan and satisfies criteria in policy WM1 and WM13.

Full details of the criteria and scores used as part of the site assessment process for allocated sites are shown in the Waste Local Plan. Reference should be made to this to ensure that the correct criteria are being applied consistently. For this reason, it is important that early pre-application discussions are held with the local planning authority, and that the method used and results of the assessment should be submitted with the application.

Sustainability Objectives		
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1). To protect, enhance and manage biodiversity	+	The proposed approach would ensure that biodiversity issues are taken into account when assessing additional waste management facilities by applying the built facility site selection process, SA and HRA.
2). To improve the health of the community and workers	+	Proposed approach would help minimise the risk to human health as non-allocated sites would be required to assess this issue in detail and mitigation measures put in place where adverse effects are likely.
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	?	The site selection criteria for built facilities include assessing proximity of sites to unemployment areas. This could have a positive effect on SA objective 3 when considering non-allocated sites.
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+	Policy requires proposals to be in compliance with the rest of the Waste Local Plan policies. Policies WM9 and 10 require good design and layout for waste management facilities. These can help reduce hazards and risks to human health associated with waste operations.
5) To improve safety for operators and the community	+	Requiring compliance with other relevant policies especially on design can potentially lead to improved safety with regard to workers as well as those residing near waste facilities.
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	Application of the built facility site selection criteria and the need for SA and HRA can help to ensure that sites are well located relative to sensitive receptors. This can have a positive effect on protecting local environmental quality when considering non-allocated sites.
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	Application of the built facility site selection criteria and SA would ensure that additional sites are well located relative to sensitive receptors. This can have a positive effect minimising impacts on local amenity.
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	

11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	+	Application of the built facilities site selection criteria and SA would ensure that sites brought forward take in to account issues such as efficient use of land, air pollution and climate mitigation and adaptation as required by SA objectives 12, 13, 14 and 15
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	
14) To mitigate and adapt to climate change including flood risk	+	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	
16) To reduce the kilometres travelled by waste	+	The built facility site selection criteria includes consideration of proximity to sources of waste arising as well as opportunities to use sustainable transport. Applying the criteria and SA would ensure these issues are considered for non-allocated sites.
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	+	For non-allocated sites, application of the site selection criteria and SA would ensure that sites are well located relative to sensitive heritage/archaeological/landscape receptors and where necessary adequate mitigation measures are put in place.
19) To protect, enhance and manage the local character of the landscape across the sub-region	+	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0	
21) To reduce the amount and hazardous properties of hazardous waste	0	

22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	+	Policy requires proposals to be in compliance with other policies. Policies WM9 and 10 require good design and layout for waste management facilities. These can help reduce hazards and risks to human health associated with waste management operations.
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	
31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	

33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM13 relates to planning applications for new built waste management facilities on unallocated sites. The policy requires the applicant to demonstrate that such sites have been taken through similar sustainability and deliverability tests as allocated sites and be in compliance with the rest of the Waste Local Plan policies.

This approach is supported by the SA as it will ensure that important sustainability issues are addressed in a robust manner similar to that followed for allocated sites, ensuring that development of unallocated sites does not lead to adverse effects on the environment and local communities. Applying the site selection criteria, SA and HRA for built facilities will ensure that detailed assessment of issues such as impacts on biodiversity, landscape, amenity, archaeology, transport, climate change and human health are addressed at the appropriate stage and mitigation measures identified where appropriate.

Policy WM14 -Energy from Waste

1. All proposals for EfW facilities will be assessed in relation to operational and consented capacity within the Plan area and the requirement for new facilities. Planning applications for such proposals must demonstrate that existing operational and consented capacity cannot be accessed to meet the identified need or in the case of Local Authority Collected Waste that it is not suitable for the purposes of MRWA. Account must be taken of:
 - The contractual position for Local Authority Collected Waste and the outcome of any MRWA procurement process to meet the treatment needs of the Plan area;
 - Operational EfW capacity within the Plan area, and;
 - Existing consents for EfW within the Plan area and availability of that consented capacity to meet the needs of the Plan area.
2. EfW proposals must meet the waste management needs of the Plan area and will be required to provide combined heat and power unless it can be demonstrated that this requirement would prevent important waste infrastructure being brought forward.
3. All proposals for EfW must comply with policies WM12 and WM13.

Small Scale Energy from Waste Facilities

Applications for small scale EfW facilities, up to a maximum of 75,000-80,000 tpa treatment capacity or up to a maximum of 10MW heat and power output, which can be demonstrated to serve an identified local need, such as providing an existing business with significant energy requirements, or a District heating scheme to provide affordable warmth, will be considered subject to compliance with policies WM12 and WM13..

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0/+	Facilities will be required to be in line with Waste DPD policies including policy WM12 which requires consideration of environmental issues.
2). To improve the health of the community and workers	0/+	Facilities would be required to take this issue in to account through policy WM12.

3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0/?	District heating systems might supply affordable and social housing schemes, however this is not certain as it depends entirely when, where and if small-scale energy systems are proposed
4) To reduce waste related crime, fear of crime, and hazards and risk to health	0/+	Policies WM9 and 10 require good design and layout for waste management facilities. These can help reduce hazards and risks to human health.
5) To improve safety for operators and the community	0/+	Requiring compliance with other relevant DPD policies especially on design can potentially lead to improved safety with regard to workers as well as those residing near waste facilities.
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	0/+	Facilities will be required to be in line with Waste DPD policies including policy WM12 which requires consideration of environmental issues.
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	0/+	Facilities will be required to be in line with Waste DPD policies including policies WM12 and WM 13 which requires consideration of local amenity issues.
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	0	
12) To use previously developed land where practicable	0/+	Facilities will be required to be in line with Waste DPD policies including policy WM12 and 13 which require consideration of overall sustainability of sites.

13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	Making further EfW provision in Merseyside and Halton could lead to import of substantial amounts of waste and if transported by road this could have negative impacts on air quality. Restricting further provision supports SA objective 13. Air quality issues will need to be considered in line with policies WM12 and 13. However, it should be noted that these facilities will be fed by locally-arising waste therefore reducing the distances travelled and potential air pollution.
14) To mitigate and adapt to climate change including flood risk	0/+	Facilities will be required to be in line with Waste DPD policies including policies WM12 and 13 which require consideration of overall sustainability of sites.
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	? / ++	Making further EfW provision in Merseyside and Halton could lead to import of substantial amounts of waste and if transported by road this would lead to increased carbon emissions. Restricting further provision supports SA objective 15. Carbon emission issues will need to be considered in line with policy WM12. However, it should be noted that these facilities will be fed by locally-arising waste therefore reducing the distances travelled and potential ghg emissions. Combined heat and power will be encouraged in new EfW facilities unless there are exceptional reasons for not providing it, possibly related to cost or lack of nearby users. This would also indirectly reduce greenhouse gas emissions.
16) To reduce the kilometres travelled by waste	+	Making further EfW provision in Merseyside and Halton could lead to import of substantial amounts of waste from outside the area which as identified previous could lead to increase in air pollution and carbon emissions. It would also have potential for congestion on the road network. Restricting further provision supports SA objectives 16 and 17.
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	Transport issues will need to be considered in line with policy WM12 and 13. However, it should be noted that these facilities will be fed by locally-arising waste therefore reducing the distances travelled.
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	+	Potential impacts on the built heritage/archaeology and landscape character will need to be considered in line with policy WM12 and 13.

19) To protect, enhance and manage the local character of the landscape across the sub-region	+	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	+	Will improve provision of CHP with EfW facilities
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	+	Design issues will need to be considered in line with policies WM9 and 10.
24) To maximise opportunities for renewable energy production and heat recovery from waste	? / ++	Combined heat and power will be encouraged in new EfW facilities by requiring them provide it unless this requirement would prevent important waste infrastructure being brought forward.
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	+	The policy provides for energy from waste facilities which can be demonstrated to serve a local need.
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	

30) Maintain high and stable levels of employment and reduce long-term unemployment	+	The existing consented and available EfW capacity can lead to the creation of jobs in Merseyside.
31) To improve local accessibility of goods, services and amenities for all groups	+	The policy provides for energy from waste facilities which can be demonstrated to serve a local need.
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM14 relates to provision of Energy from Waste facilities. It does not allocate new sites for EfW for MSW and C&I waste as there is considered to be adequate existing consent and operational facilities within Merseyside and Halton. The modified policy now allows for EfW facilities on all scales where it can be demonstrated that this serves a local need, including the specific requirements of MRWA. Where a market need can be justified, proposals are also required to comply with policies WM12 and WM13.

Overall, this policy is considered to be in line with sustainability principles. The current situation of over-provision of capacity could lead to the importation of substantial amounts of both waste and Refuse Derived Fuel (RDF) into Merseyside and Halton in the event that all the consented facilities come into service. Assuming waste and RDF are transported mainly by road; this would have negative impacts on air quality, noise, congestion and increased carbon emissions. In the event that this capacity does not come into service, the policy provides for replacement capacity across a range of facility sizes which provided these serve a local need primarily. While transport of waste and RDF by road to these replacement facilities would have negative impacts on the factors mentioned previously, this is likely to be less severe than if over-provision resulted in the importation of substantial quantities of the same materials from a much wider catchment.

In both cases the policy could have some positive economic benefits in terms of investment in the area and job creation.

Making specific provision for small scale facilities allows for local needs (for example businesses that are significant energy users or District heating schemes) to be realised. Small scale facilities are less likely to attract waste from outside the area as they would be designed to meet local need using locally arising waste. Proposals for such facilities will be required to be in line with policies WM12 and WM13 of the Waste Local Plan ensuring that key sustainability issues are taken in to account at the appropriate stages and mitigation measures put in place where necessary.

Policy WM15 – Landfill on Unallocated Sites

Planning permission will only be granted for additional landfill on unallocated sites where it is demonstrated that:

- The proposal has been assessed against the criteria used for the Waste Local Plan site selection process for landfill sites shown in Table 5.2 and the criteria in WM12 and Box 1. Significant adverse impacts should be avoided. Where adverse impacts are unavoidable, measures to mitigate the impact should be adopted.
- That the proposal complies with vision and spatial strategy for the Waste Local Plan;
- Project-level Sustainability Appraisal and Habitats Regulation Assessment have been undertaken and any negative effects can be satisfactorily mitigated, and;
- That it contributes to meeting identified needs for residual landfill capacity within the Plan area.

Full details of the criteria used as part of the site assessment process for allocated landfill sites can be found in Table 5.2 and Box 1. Reference should be made to this to ensure that the correct criteria are being applied consistently. For this reason, it is important that early pre-application discussions are held with the local planning authority, and that the method used and results of the assessment should be submitted with the application.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	+	The proposed approach would ensure that biodiversity issues are taken into account when assessing unallocated landfill sites by applying the site selection process for landfill sites, SA and particularly HRA
2). To improve the health of the community and workers	+	Proposed approach would ensure that the risk of adverse health impacts is limited as non-allocated sites would be required to assess this issue in detail and mitigation measures put in place (particularly for air quality and ground water impacts).
3) To reduce health inequalities (including poverty, social deprivation and exclusion)	?	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+	Policy requires proposals to be in compliance with the vision and spatial strategy. Policies WM9 and 10 require good design and layout for waste management facilities. These can help reduce hazards and risks to human health associated with waste management operations.
5) To improve safety for operators and the community	+	Requiring compliance with other relevant policies especially on design can potentially lead to improved safety with regard to workers as well as those residing near waste facilities.
6) To support voluntary and community networks	0	

7) To protect and improve local environmental quality	+	Application of the site selection criteria and the need for SA and HRA can help to ensure that landfill sites are well located relative to sensitive receptors.
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	Application of the site selection criteria, SA and HRA would ensure that impacts on local amenity are considered and mitigation measures included as appropriate.
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	+	Where proposals satisfy the requirements in policy WM12 and WM16
11) To protect, manage and restore land and soil quality	+	Where proposals satisfy the requirements in policy WM12 and WM16
12) To use previously developed land where practicable	+	The landfill site selection criteria include consideration of whether sites have been previously developed.
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	+	The landfill site selection criteria include assessing the proximity of sites to sensitive receptors (and requirement for HRA) which can help mitigate against potential adverse air quality impacts
14) To mitigate and adapt to climate change including flood risk	+	The landfill site selection criteria include checking if sites lie within the indicative floodplain so as to minimise potential flooding risk.
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	The landfill site selection criteria include assessing the proximity of sites relative to sources of waste arising. This will allow for consideration of distances travelled and ways of mitigating against increased carbon emissions.
16) To reduce the kilometres travelled by waste	+	The site selection criteria include consideration of proximity to sources of waste arising as well as opportunities to use sustainable transport. Applying the criteria and SA would ensure these issues are

17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	considered for non-allocated landfill sites too so as to minimise impact of waste transportation on the environment and on the road network.
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	+	Application of the landfill site selection criteria and SA would ensure that sites are well located relative to sensitive heritage/archaeological/landscape receptors.
19) To protect, enhance and manage the local character of the landscape across the sub-region	+	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	-	Provision for landfill although acknowledged to be necessary does not lead to efficient use of waste as a resource.
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	?	Landfilling can have beneficial impacts where it leads to land restoration.
23) To promote sustainable design for both new and existing waste management facilities	+	Policy requires proposals to be in compliance with other policies. Policies WM9 and 10 require good design and layout for waste management facilities. These can help reduce hazards and risks to human health by providing dedicated areas for waste management when considering both allocated and non-allocated sites.
24) To maximise opportunities for renewable energy production and heat recovery from waste	0	
25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	0	

27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	+	Landfill facilities when provided can lead to creation of local jobs (albeit on a small scale compared to other types of waste management facility).
31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM15 relates to landfill on unallocated sites. The policy requires unallocated landfill sites being brought forward to be justified against the criteria used for the Waste Local Plan site selection process for landfill sites, comply with the vision, spatial strategy and policy WM12, be subject to SA and HRA and contribute to the identified need for residual landfill capacity.

This approach is supported by the SA as it would allow for the unallocated sites to undergo robust testing against key sustainability and deliverability issues consistent to that applied to allocated sites. The sustainability criteria includes environmental (natural and built environment) and amenity issues that are relevant when considering sites suitable for landfill and testing against these would ensure that potential adverse effects are identified and mitigated against as appropriate. Although landfilling is at the bottom of the waste hierarchy and does not support SA objective 20, it is acknowledged that some level of landfill will be required for residual waste that cannot be treated.

Allowing unallocated landfill sites to come forward provides an opportunity for former mineral works to be restored which can have positive effects on the landscape and surrounding environment. Overall, this policy is considered to be in line with sustainability principles apart from SA objective 20 which supports managing waste up the waste hierarchy (it is acknowledged that landfill has an important role to play in the management of waste that cannot be recycled or treated).

Policy WM16 - Restoration and Aftercare of landfill facilities

The Local Planning Authority will require applicants to submit a plan for the restoration and aftercare of land affected by proposals for landfill before planning permission is granted. The plan must include the following information:

- Details of the proposed after-use and landscaping of the site;
- Demonstration that pre-application consultation has taken place with the community in which the site is located;
- Details of the type of material to be used for filling and that the degree of compaction is compatible with the proposed after-use;
- Scaled drawings of existing and finished contours including pre & post settlement contours;
- How the landfilling scheme contributes to the landform and landscape quality on completion in accordance with the landscape character assessment;
- Timescales for both operational and restoration phases of landfill and details of phased restoration;
- Suitable provision for aftercare and monitoring including, where appropriate, long term management of leachate and gas emissions;
- Energy recovery proposals (where technically feasible);
- Protocols outlining how damage to restoration caused by subsidence or access to gas and other infrastructure can be addressed, such as interim restoration;
- Details of long term funding mechanism for realising the aftercare and restoration proposals including legal agreements or through financial provision agreement with the Environment Agency);
- Long term environmental management and ecology plan.

Sustainability Objectives		
1). To protect, enhance and manage biodiversity	0	
2). To improve the health of the community and workers	+	Ensuring proper restoration and after care can help ensure that former waste sites do not present a health hazard to the community

3) To reduce health inequalities (including poverty, social deprivation and exclusion)	0	
4) To reduce waste related crime, fear of crime, and hazards and risk to health	+	Ensuring proper restoration and after care can help ensure that former waste sites do not present a health hazard to the community
5) To improve safety for operators and the community	0	.
6) To support voluntary and community networks	0	
7) To protect and improve local environmental quality	+	Ensuring proper restoration and after care can help improve environmental quality e.g. visual and landscape quality
8) To develop and market the image of Merseyside	0	
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	+	Restoration and aftercare can help in reducing negative impacts e.g. dust, odour and vermin.
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	
11) To protect, manage and restore land and soil quality	+	
12) To use previously developed land where practicable	0	
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	?	

14) To mitigate and adapt to climate change including flood risk	?	
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	?	
16) To reduce the kilometres travelled by waste	?	
17) To minimise the impacts of waste-related transport and encourage sustainable transport	?	
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	
19) To protect, enhance and manage the local character of the landscape across the sub-region	+	
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0	
21) To reduce the amount and hazardous properties of hazardous waste	0	
22) To use energy, water and mineral resources prudently and efficiently	0	
23) To promote sustainable design for both new and existing waste management facilities	0	
24) To maximise opportunities for renewable energy production and heat recovery from waste	+	This option seeks to encourage energy recovery

25) To improve the competitiveness and productivity of business	0	
26) To exploit the growth potential of new business and new technologies for waste	0	
27) To reduce the disparities of sub-regional and regional economic performance in relation to waste	0	
28) To maximise opportunities for urban and rural regeneration through waste management activities	0	
29) To secure economic inclusion	0	
30) Maintain high and stable levels of employment and reduce long-term unemployment	0	
31) To improve local accessibility of goods, services and amenities for all groups	0	
32) To reduce community severance	0	
33) To enable groups and communities to contribute to decision-making for waste planning	0	
34) To provide opportunities for waste education and awareness raising	0	

Summary

Policy WM16 seeks to ensure that sites are satisfactorily reclaimed following closure and that applicants submit a plan for the restoration and aftercare of land affected by proposals for landfill before planning permission is granted. This option will ensure that former landfill sites are restored to beneficial uses and reduce the effect of blighting in areas where facilities are located. Restoration has positive effects on the environment as it will lead to improvement in visual and landscape impacts as well as reduce nuisance in cases where for example odour is a problem. Where there are opportunities for energy recovery, this can have positive effects on reducing the climate change impacts by capturing methane. This policy option will also provide a consistent approach across the sub-region.

Sites Appraisal – Strategic Sites

	F1 – Alexandra Dock, Bootle	H1 - Widnes Waterfront	K1 – Butler's Farm, Knowsley Industrial Pk	L1 – Stalbridge Road, Garston	S1a - Former Transco site, Pocket Nook	W1 – former car park, Campbeltown Road
<u>Sustainability Objectives:</u>						
1) To protect, enhance and manage biodiversity	0	0	–?	?	0	–?
2) To improve the health of the community and workers	?	0	– –?	–?	0	–?
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	?	0	– –?	–?	0	–?
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	–/?	0	– –?	–?	0	–?
11) To protect, manage and restore land and soil quality	0	0	0	0	0	0
12) To use previously developed land where practicable	+	0	++?	+	+	+
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0/?	+	0	?	0	0
14) To mitigate and adapt to climate change including flood risk	+	0	++?	++	0	++?
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	++	+	++?	+	0	++?
16) To reduce the kilometres travelled by waste	++	+/?	++?	++?	+	++?
17) To minimise the impacts of waste-related transport and encourage sustainable transport	++	+	++?	++	0	++?
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	-	++	0	0	0	0
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	0	–?	0	0	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	+	0	0?	+	0	0?

	F1 – Alexandra Dock, Bootle	H1 - Widnes Waterfront	K1 – Butler's Farm, Knowsley Industrial Pk	L1 – Stalbridge Road, Garston	S1a - Former Transco site, Pocket Nook	W1 – former car park, Campbelltown Road
Sustainability Objectives:						
22) To use energy, water and mineral resources prudently and efficiently	++	++	0?	0?	0	0?
24) To maximise opportunities for renewable energy production and heat recovery from waste	+	++	0?	0?	0	0?
26) To exploit the growth potential of new business and new technologies for waste	+	0	?	?	0	?
30) Maintain high and stable levels of employment and reduce long-term unemployment	++?	++?	++?	++?	+	++?
31) To improve local accessibility of goods, services and amenities for all groups	+	+	0?	++?	0	++?

Sites Appraisal – District Sites

SEFTON

Sustainability Objectives:	F3 – Farriers Way, Atlantic Business Pk	F4 - 1-2 Acorn Way, Bootle	F2 – 55 Crowland St, Southport
1) To protect, enhance and manage biodiversity	0	0	0
2) To improve the health of the community and workers	--?	--?	--?
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	--?	--?	--?
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	--?	--?
11) To protect, manage and restore land and soil quality	0	0	0
12) To use previously developed land where practicable	+	--?	--?

Sustainability Objectives:	F3 – Farriers Way, Atlantic Business Pk	F4 - 1-2 Acorn Way, Bootle	F2 – 55 Crowland St, Southport
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	0	0
14) To mitigate and adapt to climate change including flood risk	++?	++?	++?
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	++?	++?	++?
16) To reduce the kilometres travelled by waste	++?	++?	++?
17) To minimise the impacts of waste-related transport and encourage sustainable transport	++?	++?	++?
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	0	0
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	0	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0?	0?	0?
22) To use energy, water and mineral resources prudently and efficiently	0?	0?	0?
24) To maximise opportunities for renewable energy production and heat recovery from waste	0?	0?	0?
26) To exploit the growth potential of new business and new technologies for waste	?	?	?
30) Maintain high and stable levels of employment and reduce long-term unemployment	+++	+++	0
31) To improve local accessibility of goods, services and amenities for all groups	+++	+++	0?

HALTON

Sustainability Objectives:	H2 – Ecocycle Lrd, Johnson's La, Widnes
1) To protect, enhance and manage biodiversity	0
2) To improve the health of the community and workers	0
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	?
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0
11) To protect, manage and restore land and soil quality	0
12) To use previously developed land where practicable	++
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	?
14) To mitigate and adapt to climate change including flood risk	0
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+/-
16) To reduce the kilometres travelled by waste	+
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0
19) To protect, enhance and manage the local character of the landscape across the sub-region	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	++
22) To use energy, water and mineral resources prudently and efficiently	++
24) To maximise opportunities for renewable energy production and heat recovery from waste	++
26) To exploit the growth potential of new business and new technologies for waste	+
30) Maintain high and stable levels of employment and reduce long-term unemployment	+
31) To improve local accessibility of goods, services and amenities for all groups	+

KNOWSLEY

Sustainability Objectives:	K4 – Former Pilkington's site, Huyton Bus. Park	K3 – Brickfields – Huyton Business Park	K2 – Image Business Park, Kirkby
1) To protect, enhance and manage biodiversity	0	0	0
2) To improve the health of the community and workers	--	--?	--?
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	--	--?	--?
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	0	0	--?
11) To protect, manage and restore land and soil quality	0	0	0
12) To use previously developed land where practicable	-	+	-
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	0	0
14) To mitigate and adapt to climate change including flood risk	+	++?	+++?
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	++	++?	++?
16) To reduce the kilometres travelled by waste	++	+++?	++
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	++?	++?
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	0	0
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	0	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0?	0?	0
22) To use energy, water and mineral resources prudently and efficiently	0?	0?	0
24) To maximise opportunities for renewable energy production and heat recovery from waste	0?	0?	0
26) To exploit the growth potential of new business and new technologies for waste	0?	?	?
30) Maintain high and stable levels of employment and reduce long-term unemployment	+	++?	++?
31) To improve local accessibility of goods, services and amenities for all groups	0	+++?	++?

LIVERPOOL

Sustainability Objectives:	L2 – Site at Regent Road / Bankfield Road	L3 – waste facility, Lower Bank View
1) To protect, enhance and manage biodiversity	0	0
2) To improve the health of the community and workers	–?	– –?
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	–?	– –?
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	–?	–?
11) To protect, manage and restore land and soil quality	0	0
12) To use previously developed land where practicable	+	+
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	0
14) To mitigate and adapt to climate change including flood risk	++?	++?
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+?	+?
16) To reduce the kilometres travelled by waste	++?	++?
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+?	+?
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	– –?	–?
19) To protect, enhance and manage the local character of the landscape across the sub-region	0	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0?	0?
22) To use energy, water and mineral resources prudently and efficiently	0?	0?
24) To maximise opportunities for renewable energy production and heat recovery from waste	0?	0?
26) To exploit the growth potential of new business and new technologies for waste	?	?
30) Maintain high and stable levels of employment and reduce long-term unemployment	++?	++?
31) To improve local accessibility of goods, services and amenities for all groups	++?	++?

ST. HELENS

Sustainability Objectives:	S2 – Land north of TAC, Abbotsfield T. A.
1) To protect, enhance and manage biodiversity	0
2) To improve the health of the community and workers	--?
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	--?
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	-?
11) To protect, manage and restore land and soil quality	0
12) To use previously developed land where practicable	+
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0
14) To mitigate and adapt to climate change including flood risk	+
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+
16) To reduce the kilometres travelled by waste	++?
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0
19) To protect, enhance and manage the local character of the landscape across the sub-region	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0?
22) To use energy, water and mineral resources prudently and efficiently	0?
24) To maximise opportunities for renewable energy production and heat recovery from waste	0?
26) To exploit the growth potential of new business and new technologies for waste	?
30) Maintain high and stable levels of employment and reduce long-term unemployment	+
31) To improve local accessibility of goods, services and amenities for all groups	++?

WIRRAL

Sustainability Objectives:		W3 – Former goods yd, Wallasey Bridge Road	W2 – Bidston MRF / HWRC
1) To protect, enhance and manage biodiversity		0	0
2) To improve the health of the community and workers		– – ?	–?
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)		– – ?	–?
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters		–?	–?
11) To protect, manage and restore land and soil quality		0	0
12) To use previously developed land where practicable		+	++?
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)		0	0
14) To mitigate and adapt to climate change including flood risk		++?	+++?
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation		++?	++?
16) To reduce the kilometres travelled by waste		+++?	+++?
17) To minimise the impacts of waste-related transport and encourage sustainable transport		++?	++?
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features		0	0
19) To protect, enhance and manage the local character of the landscape across the sub-region		0	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste		0?	0?
22) To use energy, water and mineral resources prudently and efficiently		0?	0?
24) To maximise opportunities for renewable energy production and heat recovery from waste		0?	0?
26) To exploit the growth potential of new business and new technologies for waste		?	?
30) Maintain high and stable levels of employment and reduce long-term unemployment		+++?	+++?
31) To improve local accessibility of goods, services and amenities for all groups		+++?	+++?

Sites Appraisal – Landfill Sites

Sustainability Objectives:	S3	K5
1) To protect, enhance and manage biodiversity	0	0
2) To improve the health of the community and workers	- -	0
9) To minimise the impacts on local amenity (noise, dust, light, vermin, odour)	- -	0
10) To protect, improve and where necessary, restore the quality of inland, estuarine, coastal and ground waters	- -	0
11) To protect, manage and restore land and soil quality	0	-
12) To use previously developed land where practicable	-	+?
13) To prevent air pollution or limit it to levels which do not damage natural systems (including human health)	0	0
14) To mitigate and adapt to climate change including flood risk	+	0?
15) To reduce greenhouse gas emissions from waste management facilities, process and transportation	+	0
16) To reduce the kilometres travelled by waste	+	0
17) To minimise the impacts of waste-related transport and encourage sustainable transport	+	0
18) To preserve, enhance and manage Merseyside's rich diversity of cultural, historic and archaeological buildings, areas, sites and features	0	0
19) To protect, enhance and manage the local character of the landscape across the sub-region	-	0
20) To abide with the waste hierarchy and to minimise waste production whilst increasing reuse, recycling and recovery of waste	0?	0?
22) To use energy, water and mineral resources prudently and efficiently	0?	0?
24) To maximise opportunities for renewable energy production and heat recovery from waste	0?	0?
26) To exploit the growth potential of new business and new technologies for waste	0?	?
30) Maintain high and stable levels of employment and reduce long-term unemployment	?	0?
31) To improve local accessibility of goods, services and amenities for all groups	0	0?

Technical Appendix 2 – Alternatives

CONSIDERING ALTERNATIVES DURING THE PLAN PREPARATION PROCESS

The Waste Local Plan (WLP) has presented alternative policy options at three stages of consultation as it has been developed. These were:

- Issues & Options (I&O, Spring 2007) – consultation on alternatives for addressing key policy issues;
- Spatial Strategy & Sites (SS&S, Winter 2008) – consultation on initial preferred options for the Vision, Objectives and Spatial Strategy which were derived from responses and the assessments undertaken at the I&O stage, together with consultation on alternatives for other more technical policy issues. Alongside this, the consultation also introduced the initial proposals for site allocations for built facilities and identified a range of current, completed and historical landfill sites;
- Preferred Options (PO1, Summer 2010) – formalised the preferred options for the Vision, Objectives and Spatial Strategy and presented preferred positions on the other issues which were introduced at the SS&S stage. Consultation responses, developments in District LDDs, etc. meant that there was still some uncertainty about the exact direction that should be taken by some policies and therefore further alternatives were presented at this stage to refine the WLP. This consultation also presented a revised list of site allocations for built facilities and allocations for two inert landfill sites.

A second Preferred Options consultation (PO2, Summer 2011) was restricted to alternative sub-regional and district sites for built facilities and was necessitated by changes made to the list of allocations during the PO1 consultation. Finally, the proposed draft Submission version of the WLP was subject to public consultation (Winter 2011) with representations restricted to matters of legal compliance and soundness.

Each consultation process has been supported by a library of documents that has enabled consultees to identify for themselves the consultation responses and the results of SA/SEA, HRA and other assessments made at the preceding stage. Supporting text in the consultation reports have clarified the reasons for selecting a preferred option and have quoted relevant recommendations from the SA/SEA evaluation at the preceding stage to demonstrate how the choice of preferred option and the way it has been cast, have responded to the assessment process.

This revision of the SA/SEA Environmental Report is supported by an Appendix which documents the assessment of policy alternatives which have been provided by consultants as the WLP has been developed. It identified the key conclusions and proposals to take forward or reject alternatives, and how the plan preparation process has acted on the recommendations with specific reference to where the relevant text now appears in the WLP.

Assessment of Policy Alternatives

The chain of conformity demonstrating how assessments and responses to consultations at one stage have been taken forward to, and informed, the next stage of plan development has been maintained throughout the process. Table 1 overleaf shows how the policies in the submitted WLP have influenced the subsequent development of preferred options and draft policies. Policies are listed in the order they appear in the WLP and therefore the table should be read from right to left. Light grey cells containing text in italics show where policy alternatives were evaluated by consultation and the SA/SEA process.

Tables 2, 3 and 4 summarise the principal issues and recommendations from the assessments and identifies the extent to which the SA/SEA supported alternatives assessed at each consultation stage. These tables only refer to those policies where there was further evaluation of alternatives and they do not include those policies where a preferred option had been identified. Each table also documents how the implications of the assessment were taken forward into the subsequent stages of plan preparation.

Table 1: Evolution of Policies in the Submitted Waste Local Plan

ISSUES & OPTIONS	SPATIAL STRATEGY & SITES	PREFERRED OPTIONS	SUBMITTED PLAN
<i>STRATEGIC FRAMEWORK</i>			
<i>Vision & Objectives were influenced by all the issues evaluated at this stage, but particularly by K11 – Waste Minimisation; K12 – Self-Sufficiency; K17 – Transport of Waste; and K18 – Layout & Design in New Development</i>	Vision	Vision	Vision
	Strategic Objectives	Strategic Objectives	Strategic Objectives
<i>As above, but with particular influence by K11 – Waste Minimisation; K12 – Self-Sufficiency; K15 – Treatment & Disposal Options; K16 – Hazardous Waste Management</i>	Proposed Strategy	Proposed Strategy	Proposed Strategy
<i>As above, but with particular influence by K14 – Spatial Pattern/Distribution of Facilities; K17 – Transport of Waste</i>	Spatial Strategy	Spatial Strategy	Spatial Strategy
<i>CORE POLICIES</i>			
<i>K14 – Spatial Pattern/Distribution of Facilities</i>	[Not addressed in a specific policy but evident in the spatial strategy]	[Not addressed in a specific policy but evident in the spatial strategy]	WM1 – Guide to Site Prioritisation
Core policies WM2, WM3 and WM4 identified the allocations for sub-regional built facilities, district-level built facilities, and landfill respectively. Evaluation of alternative sites was undertaken through an initial evaluation of more nine hundred sites. Around 45 sites were proposed as allocations for built facilities at the Spatial Strategy & Sites consultation stage, falling to around 20 by the Preferred Options stage, although the identity of the allocations has varied as a result of changes in support from landowners and local authorities, and other limitations. All allocated sites, including those which have now been withdrawn have been assessed at least once against the SA/SEA objectives. The results of this process are documented in the respective interim Environmental Reports.			
<i>K14 – Spatial Pattern/Distribution of Facilities; K17 – Transport of Waste</i>	Areas of Opportunity	<i>PO8 – Spatial Pattern for Additional Small-Scale & Re-Processing Facilities</i>	WM5 – Areas of Search for Additional Small-Scale Waste Management Operations and Re-processing Sites

ISSUES & OPTIONS	SPATIAL STRATEGY & SITES	PREFERRED OPTIONS	SUBMITTED PLAN
<i>KI4 – Spatial Pattern/Distribution of Facilities</i>	[Not addressed in intermediate report]	PO9 – Additional HWRC Requirements	WM6 – Additional HWRC Requirements
<i>KI2 – Self-Sufficiency</i>	<i>Safeguarding</i>	PO13 – Protecting Existing Waste Management Sites	WM7 – Protecting Existing Waste Management Capacity
<i>KI1 – Waste Minimisation</i>	[Not addressed in intermediate report]	<i>PO1 – Waste Prevention and Resource Management</i>	WM8 – Waste Prevention and Resource Management
<i>KI1 – Waste Minimisation; KI8 – Layout & Design of New Developments</i>	[Not addressed in intermediate report]	<i>PO2 – Sustainable Waste Management Design & Layout in New Development</i>	WM9 – Sustainable Waste Management Design and Layout in New Development
<i>KI8 – Layout & Design of New Developments</i>	[Not addressed in intermediate report]	<i>PO3 – High Quality Design & Operation of New Waste Management Facilities</i>	WM10 – High Quality Design & Operation of Waste Management Facilities
<i>KI4 – Spatial Pattern/Distribution of Facilities; KI7 – Transport of Waste</i>	[Not addressed in intermediate report]	<i>PO4 – Sustainable Waste Transport</i>	WM11 – Sustainable Waste Transport
<i>KI2 – Self-Sufficiency; KI6 – Hazardous Waste Management</i>	[Not addressed in intermediate report]	PO5 – Net Self-Sufficiency	[The requirement to demonstrate need for the facility is not addressed by a single policy but is referred to in the Vision and Strategic Objectives, and in policies WM7, WM13, WM14 and WM15]
	[Not addressed in intermediate report]	PO12 – Applications for Open Windrow Composting Facilities	[Unnecessary as no additional need was forecast and only option was to repeat national policy. Any proposals would be assessed with regard to WM13]
<i>KI5 – Waste Management Treatment & Disposal Options</i>	[Approach taken to site allocations and waste management functions assigned to them]	[Approach taken to site allocations and waste management functions assigned to them]	[Approach taken to site allocations and waste management functions assigned to them]

ISSUES & OPTIONS	SPATIAL STRATEGY & SITES	PREFERRED OPTIONS	SUBMITTED PLAN
<i>DEVELOPMENT MANAGEMENT POLICIES</i>			
KI3 – Identifying Sites for New Waste Management Facilities	Site Selection Approach	PO10 - Dealing With Planning Applications For New Waste Management Facilities Outside Allocated Sites & Areas Of Search	WM13 – Planning Applications for New Waste Management Facilities on Unallocated Sites
[The technology was not addressed specifically but subsequent policy was influenced by KI3 – Identifying Sites for New Waste Management Facilities; KI5 – Waste Management Treatment & Disposal Options]	<i>Energy from Waste</i>	PO6 – EfW Provision for Commercial & Industrial Wastes	WM14 – Energy from Waste
		<i>PO7 – EfW Provision for MSW</i>	
KI3 – Identifying Sites for New Waste Management Facilities; <i>KI5 – Waste Management Treatment & Disposal Options</i>	Site Selection Approach	PO11 – Dealing With Planning Applications for Landfill On Unallocated Sites	WM15 – Landfill On Unallocated Sites
<i>KI5 – Waste Management Treatment & Disposal Options and KI9 – Criteria Based Development Management Policies</i>	[Not addressed in intermediate report]	<i>PO14 – Restoration and Aftercare Of Landfill Sites</i>	WM16 – Restoration and Aftercare of Landfill Facilities

Table 2 – Assessment of Key Policy Issues at the Issue & Options Consultation Stage

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
KI1. Waste minimisation	1A – Adopt specific policies to be effective across all sectors	Supported but with no specific recommendation	While 1A is supported there is actually limited scope for the WLP to implement it through the range of policies and allocations that it contains. As a result reliance still has to be placed on other mechanisms such as municipal waste strategies, industry initiatives (eg. Courtauld Commitment), etc. However, because WLP has limited impact on waste creation in homes and businesses, and therefore its influence mainly affects development sites and part of the recommendation for 1B is taken forward in Policy WM8. To reiterate, although 1A was recommended it was not practicable to address it through the policies in the WLP
	1B – Do nothing, relying on other mechanisms	Not consistent with national policy and moving waste up the Waste Hierarchy, especially on development sites	
KI2. Self-Sufficiency	2A – Continue to export the majority of waste produced locally	Not supported but, if ensure there is ongoing consultation with other sub-regions if further export is needed	Not taken forward because it is not compliant with PPS10 or RSS. However the recommendation for ongoing consultation was taken forward with regard to export of non-inert waste to landfill once work at the subsequent consultation process made clear that local capacity could not be provided. This is not directly reflected in a subsequent policy but in the approach taken to plan development which can now be seen as compliant with the Duty To Cooperate
	2B – Provide capacity to manage all locally produced waste except where this needs specialised facilities	Supported equally with 2C in that it delivers jobs, reduces waste transport, and mitigation should limit any environmental impacts	The Plan responds to both options. Option 2B is more realistic as it recognises that inter-authority movement of wastes will continue to some extent. However the WLP adopts a position of providing capacity equivalent to that produced locally and to reducing future dependence on external capacity, reducing the overall movement of waste over long distances. The exception is movement of waste to external non-inert landfills which is necessary due to a lack of local capacity, a situation that had not been identified at the time of this assessment
	2C – Provide capacity equivalent to that forecast to arise locally	Supported - same comments as 2B as the capacity may be used to offset the export of waste to other authorities	

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	2D – As 2C but also provide capacity to take waste from elsewhere in the region which cannot provide capacity to meet local needs	Not clearly supported by SA/SEA due to potentially significant local impacts and an implied increase in transport of waste	Not taken forward on the grounds of no evident need; potential increase in road movements; and the likelihood that the Plan area would become a net importer of waste, an outcome that was clearly unacceptable based on responses to consultation on the Issues & Options
KI3. Site selection and appraisal	3A – Proactively identify specific sites for waste facilities, using a criteria-based evaluation process	Supported - identify all available land appropriate for waste facilities then filter using relevant social, environmental and economic factors	The site selection process developed subsequent to this early assessment uses a range of criteria that directly reflect the SA Objectives except where social and economic factors have no obvious spatial expression. The process was applied to an initial 'long list' of >900 sites from which initial allocations were drawn
KI4. Spatial Distribution to Serve Local Communities	4A – Spread a full range of facilities at local level throughout the Plan area (Diffuse model)	Neutral, reflecting uncertainty about the viability and impacts of a large number of small facilities scattered across the sub-region	Not taken forward because of potential difficulties of finding enough land for a full range of waste management facilities in each District separately
	4B – Develop a limited number of large centralised facilities serving the whole sub-region (Centralised model)	Qualified support as it involves some separation of facilities from waste sources. This will increase transport impacts but reduce the number of locations close to a network of smaller local facilities	Not taken forward though the principal constraint is not the issues raised by the assessment, but the competition for larger plots of land from other land uses with waste management use being low down the list of developers' priorities, and a reluctance to use CPO powers. One other problem is that any constraint on supply of plots would inherently undermine the viability of the Plan and, if local land is unavailable, might result in export of wastes.
	4C – Develop a network of strategically located clusters of mixed waste uses serving local communities and businesses while recognising the need to bulk some material to be sent to re-processing or treatment facilities that may be local (Cluster model)	Supported – clearly the best performing option which offers scope to optimise transport of wastes and scale of facility. The assessment notes the need to consider the cumulative effects of co-locating facilities	4C was taken forward because this also represents the best fit with the current situation (cf. 4D) and provides most flexibility in being able to secure plots of different sizes in different locations in order to ensure a supply of land for the defined waste need. When taken in parallel with the response to KI3 (development of a site filtering approach) the evaluation tended to cluster the best performing sites (in sustainability terms) in the same general locations. The

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	4D – Take forward the current situation which combines the other three options	Consultants undertaking the assessment were uncertain about the likelihood that social, economic and environmental benefits could be delivered. It would need to apply the same sustainability and design principles irrespective of the size of the facility	preferred option also enables a “package” of sites to be assembled within each district which may serve only local needs or that of the wider sub-region. This is both a more equitable outcome and also contributes flexibility if it allows some waste facilities to be developed closer to waste sources. However the final recommendation in the summary of the 4D assessment is taken forward as the Spatial Strategy insofar as none of the policies in the submitted Plan varies sustainability or design principles according to the size of the development
KI5. Treatment & Disposal Options	5A – Allocate sites for a specific type of waste facility	Qualified support: benefits of greater certainty to the industry are offset by limited flexibility particularly as the waste sector evolves during the Plan period. Technology restrictions could limit introduction of beneficial but lower cost solutions in the future	The principal constraint is planning guidance in PPS10 which advises against being over-prescriptive, mainly to allow the industry to deploy new technology to move waste up the Hierarchy. As a result this option would have required careful justification if taken forward
	5B – Allocate sites for a variety of facilities	Strongly supported. Flexible in terms of what is delivered when and where. Assessment notes that it may self-regulate, as developers will avoid proposals for high impact facilities in more sensitive locations	Both solutions are compliant with PPS10 in a way that 5A is not and the subsequent policy position takes them both forward. The site profiles identify certain waste uses which are not considered suitable on the basis of specific constraints which include the likelihood the site will generate excessive traffic movements on local roads (eg. a waste transfer station) or where high flood risk precludes certain uses (ie. landfill and hazardous waste management). The WLP takes forward the issue of strategic facilities by ensuring there are sufficient land plots of land that can accommodate large individual facilities or facilities co-located as a resource recovery park with, in both cases, the capacity serving the sub-regional need
	5C – Nominate specific uses for some sites but not for others	Strongly supported also. Has the virtue that certain sites would be implicitly nominated for key, strategic facilities	
	[see overleaf]	[see overleaf]	[see overleaf]

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	5D – Rely on criteria-based policies to identify appropriate waste uses	Qualified support in terms of its flexibility but 5B and 5C imply that an allocation and its uses are already deemed suitable, increasing the deliverability of a site	Land use pressures and the need to deliver new waste capacity quickly make this unacceptable. The WLP directs development to sites which have been determined as appropriate for waste use, increasing the likelihood that capacity will be provided on them. Criteria-based policies do not provide the same certainty, but it has to be included in the Plan (Policy WM13) in order so that land that subsequently becomes available and is proposed for waste use can be assessed the same way as allocated sites
	5E – WLP will allocate specific sites for future landfill including possible extensions	Qualified support though the allocation may limit developers' choice. Assessment recognised local limitations and suggests nominating areas of search rather than specific sites	Taken forward for inert landfills following a call to industry to propose suitable locations. Not taken forward for non-inert landfill because the scarcity of potential, deliverable sites suggests it is prudent not to restrict the search to certain locations
	5F – Rely on criteria-based policies to allow developers to bring forward sites	Supported but with the proviso that flexibility is offset by uncertainty that the site will be acceptable to a landowner or the local council and community. Again the assessment proposed nominating areas of search	Taken forward in Policy WM15, with acceptance that this may affect deliverability but acknowledging the supply of sites may be limited by the lack of empty holes to be filled and a resistance among the local authorities to further landfill sites. Areas of search were not nominated for the same reason as in option 5E
	Retaining or licensing ancillary facilities at operational or closed landfills	Limited support and assessment proposed different approaches for closed sites and operational ones, which should be addressed separately. It might reduce transport impacts but this may be offset by cumulative impacts from co-location	Although partially encouraged by the assessment, this option was not taken forward. The principal constraint, which emerged subsequently, is the lack of deliverable sites for landfills. Any potential sites will entail amenity issues and the option as proposed could raise concerns about cumulative impacts that could affect deliverability of strategically important capacity. However Policy WM16 addresses the need for continued operation of leachate and gas management facilities at closed landfills

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
KI6. Hazardous waste management	6A – Allocate sufficient capacity to manage all locally arising hazardous wastes and all management needs	Not supported. Environmental benefits of waste facilities close to sources are offset by uncertainty about the economic viability of local-only sites and amenity concerns. Addressing the economic issue with larger sites could increase the risk of waste imports	Neither option appears realistic in the light of the structure of the existing hazardous waste management sector. Local facilities are already part of the regional and national network of plants (option 6B) and the analysis of waste movements shows there is a close balance between imports and exports. Also, hazardous wastes generally arise in small quantities, apart from those resulting from large-scale industrial processes (eg. chemical processing) and several companies in Merseyside have their own facilities for managing the wastes they create. It is unlikely to be economically feasible to provide a full range of treatment and disposal facilities for a wide range of hazardous wastes, most of which arise in only small quantities locally is unlikely. The option preferred by the assessment (6C) is consistent with an already mature management system but provides scope for the local waste industry to provide further capacity in appropriate locations if it is needed in the future
	6B – Allocate sites to accommodate certain management needs which support the national / regional network of hazardous waste facilities, helping to make the Plan area more self-sufficient	Limited support because some waste could be treated closer to source but the WLP actively plans to stimulate import of waste to facilities nominated for a specific purpose	
	6C – Do not make specific provision for hazardous facilities and rely instead on the waste industry to propose sites	Supported while recognising there is less certainty about where the facilities should be located and the nature of the use could affect determination of applications as a result of amenity issues. The WLP could identify areas where facilities should not be located	Taken forward. Subsequent assessment did not identify a need for additional capacity, though this is difficult to calibrate given the very specialised nature of the wastes and how they have to be managed. However, given the existing contribution made to the national management network, it was prudent to include an allocation for an additional site in the WLP. The approach adopted is consistent with the option. No individual site is nominated. Site profiles identify those locations that are inappropriate for this use due to flood risk concerns but otherwise any proposal will be dealt with through criteria-based policies in the WLP. Note also that the areas of search (policy WM5) contain virtually all of the sub-region's existing hazardous waste facilities and therefore a proposal for development on an unallocated site in one of these locations should be easier to bring forward than one elsewhere

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
KI7. Transport of waste	7A – Do not encourage use of other modes to move wastes and rely instead on policies in other Local Plans to secure this outcome	Not supported as this is the ‘do nothing’ option that is expected to continue reliance on road without encouraging modal shift and this could result in conflict with other plans in the future, such as AQMAs and LTPs	Not taken forward because of obvious sustainability implications and the subsidiary concern that it would not be a sufficiently positive form of planning
	7B – Encourage new waste facilities to be established at locations that enable more sustainable transport options to be exploited	Qualified support though the assessment proposes use of short-term financial incentives. It also proposes weighting the site selection process in favour of sites that offer this prospect	Taken forward and reflected directly in the purpose and wording of policy WM11, though use of financial incentives lies outside the scope of the WLP and cannot be taken forward. Proximity to alternative modes is included in the site selection criteria and scoring process, with proximity to railheads and canals/wharves both generating separate scores. Although it is a matter that is addressed by option 7C, the site selection criteria also prioritised development on sites that are readily accessible from the strategic road network and sites which had good access to high frequency rail and bus links
	7C – Require all planning applications to submit a transport assessment	Supported and require that the applications are subject to SA	This is a separate mechanism from that proposed by 7A / 7B. It is reflected in the WLP as policy WM11 provides for transport assessments to be submitted in support of all applications regardless of whether the site is allocated or not
KI8. Layout and Design for Sustainable Waste Management	8A – Include specific policies to address the issue	Supported as it has the potential to deliver benefits across all three sustainability dimensions.	Taken forward in policies WM9 and WM10 which extend the agenda from just sustainable consumption to provision of small scale low carbon energy systems which also address energy security. The latter retains reference to BREEAM, the Code for Sustainable Homes and Schedule L of the Build Regulations in order to foster appropriate design requirements in waste facilities

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	8B – Inform and rely on policy to be delivered in other planning documents	Not supported because there is a risk that those design issues relating specifically to waste might be lost and there might be differences between how the requirement is translated into policy in different authorities	Not taken forward. Building and design requirements, including BREEAM, Code for Sustainable Homes, and Schedule L of the Building Regulations already provide ‘umbrella’ requirements that apply to all development and which subsumes the need for separate, varied, local policies. Policies WM9 and WM10 refer to design requirements specific to waste management facilities while also addressing the need for infrastructure in development that supports efficient waste management (eg. for storage and collection of residual waste and recyclables)
	8C – Design must not adversely impact the local area, promote sustainable waste management, and protect the surrounding environment	Supported as the standard that should be expected for good design in all development	A self-evident requirement which permeates the text of policies WM8, WM9, WM12, WM13 and WM15. The WLP also takes this forward to apply it to operational facilities. Policy WM7 aims to safeguard such capacity but allows facilities to be replaced by non-waste uses where there is evidence they are causing loss of amenity and, by implication, potential environmental harm
	8D – Assess proposals on a case by case basis without reference to a policy	Not supported because it would mean the WLP would give insufficient prominence to an important matter	At the time the assessors evaluated the Issues & Options document this was the ‘do nothing’ scenario but the inclusion of a wider range of good design policies in local authorities’ DPDs or SPDs means this is no longer the case. For this reason it is no longer considered an appropriate position to take
KI9. Criteria-Based Policies	9A – Include criteria-based policies to deal with applications on unallocated sites	Supported provided the criteria are consistent with the SA Objectives	Policies WM13 and WM15 explicitly require applications on un-allocated sites to be assessed using the same processes that have been applied for the allocations, namely the site evaluation approach, SA and project-level HRA where applicable. The site evaluation criteria directly reflect the SA Objectives as far as possible except where social and environmental objectives have no spatial context

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	9B – Do not include criteria-based policies and rely on other mechanisms in individual authorities' DPDs to assess applications on unallocated sites	Not supported although this was the 'do nothing' situation at the time of the assessment. The assessment suggests taking this forward would necessitate working with each authority separately to ensure there was a seamless fit between the WLP policies and those in local DPDs and SPDs	Not taken forward for two reasons. First, the working with each authority appears unduly laborious and the need to provide a good fit with six different WPDs could make the policy text unduly complex. Second, the WLP has been developed in order to provide a level playing field and common approach to dealing with applications across all six authorities, and option 9A is a far more elegant and efficient way of achieving this outcome

Table 3 – Assessment of Key Policy Issues at the Spatial Strategy & Sites Consultation Stage

Several items included in this table were not subject to the assessment of alternatives, notably the Vision, Objectives and Spatial Strategy. These are included in the table below because of their significance to the Plan as a whole. Several other areas of policy were addressed with a preferred option for which no alternative was proposed. These policies are not included in this table for that reason but still underwent assessment as preferred options rather than as alternatives.

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
The Vision for the Waste DPD	No alternatives assessed – proposed as initial Preferred Option	Supported most of the SA objectives, being effective at supporting sustainable waste management and efficient use of resources. However it does not refer to the Waste Hierarchy or to climate change	The modified Vision, presented at the Preferred Options stage, incorporates appropriate statements addressing the omissions identified by the SA/SEA
The Strategic Objectives for the Waste DPD	No alternatives assessed – proposed as initial Preferred Option	Supported. There were no instances where the Plan and SO objectives were in conflict. It proposed that SO4 would be modified to refer to social gain and SO6 should refer to protection of human health	The modified Objectives, presented at the Preferred Options stage, incorporates appropriate statements in SO4 and SO6 which respond to the recommendations of the SA/SEA
The Strategy	No alternatives assessed – proposed as initial Preferred Option	Supported. The SA/SEA focused on the issue of self-sufficiency as other aspects of the strategy are addressed by the assessments of the Vision and Strategic Objectives. Specific benefits referred to are contributing to reduced carbon emissions and employment creation	Taken forward by the Preferred Option as far as was feasible. However the search for local landfill sites was incomplete at the time of this assessment and it later indicated a lack of deliverable sites, necessitating continued reliance on external capacity until such time as further local capacity is brought forward
The Spatial Strategy	1 – The Sub-Regional Site Approach	Supported as it provides scope to bring forward large scale facilities to serve the whole sub-region. Sites must be close to arisings, the strategic road network and/or alternative modes of transport, and it will be necessary to consider cumulative impacts with waste and other land uses	The Preferred Option is based on the Sub-Regional site approach, recognising that the optimal approach strikes a balance which does not unduly centralise or disperse waste capacity. Consequently there is a difference between the Sub-Regional approach which still provides scope for smaller facilities that serve only a local need, and the Resource Recovery Park approach which would concentrate most of the new capacity delivered by the Plan into a limited number of
	[see overleaf]	[see overleaf]	

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	2 – The Waste Arisings Option	Not supported because it is likely to result in a scattered network of sites and this could lead to inefficient movement of waste by road, raising the level of carbon emissions. There was also a concern that it may prove difficult to find investment to bring forward small-scale facilities	larger locations. The Waste Arisings option was rejected because it would lead to fragmentation and deny the sub-region the chance to exploit synergies offered by larger scale facilities. A further problem with the Resource Recovery Park option is that intense competition for land resource within the sub-region is likely to limit the number of available plots and this might have meant that the Spatial Strategy would be undeliverable. Notwithstanding, Resource Recovery Parks can offer the benefits identified by the SA/SEA and therefore were included as one of the waste management options appropriate on the identified sub-regional sites which are large enough to accommodate two or more facilities
	3 – The Resource Recovery Park Option	Limited support because it will help to bring forward a mixture of facilities of different sizes and types and co-location of facilities can result in efficient use of land resource and reduce movement of wastes. However there are issues of cumulative impact and it is not clear what spatial criteria would be used to prioritise appropriate locations	
Energy from Waste	1 – Energy from Waste for all major new development	Qualified support for both options but advised there should be a clearer definition of major development for Option 1, and a clarification of the range of land uses which would be caught by Option 2. The SA/SEA recommended an assessment of the sub-regional scope for zero and low-carbon energy sources should be undertaken and its findings should inform the Plan. This would need to be integrated with other aspects of the Plan, including the spatial strategy, which seek to limit carbon emissions, eg. by limiting distances waste is moved by road.	The SA/SEA recommendations were superseded by events within the sub-region. In the period following this consultation stage, several medium and large scale EfW facilities were granted planning permission within the Plan area. Each facility had the potential to provide heat and/or power with the result that the local waste management sector already offered a significant potential contribution to renewable energy generation. The scale of permissions meant there was a surplus of capacity and a concern that this could lead to the import of wastes and that any benefits from energy recovery would be offset by increased emissions from road movements over long distances. The main issue addressed by the Preferred Options report was whether the Plan should support new proposals for EfW facilities, recognising that MWDA was still in the midst of a procurement for treating LACW which was expected to require additional EfW capacity locally
	2 – Energy from Waste for major non-residential development only		

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
Site Selection Methodology	No alternatives assessed – proposed as initial Preferred Option	Supported, because the use of different criteria (Exclusionary, Discretionary, Supplementary and Positive) allows the assessment against the full practicable range of SA Objectives. The criteria allow consideration of the fundamental issues of protection of the natural environment and human health. The SA/SEA found no instances of conflict between the SA and Plan objectives, recognising that some of the former have no spatial extent and therefore cannot be assessed.	The site selection approach has been taken forward, albeit with 4 new criteria which reflected additional natural environment designations and the proximity of sites to potential energy customers. All sites assessed at the Spatial Strategy & Sites stage were re-assessed using the expanding range of criteria prior to consultation on the Preferred Options and proposed allocations for built waste management facilities
Areas of Opportunity	No alternatives assessed – proposed as initial Preferred Option	Supported provided that proposals are assessed using the site selection criteria presented in the report	Taken forward at the Preferred Options stage. There was some further clarification of the extent of certain areas of search prior to submission of the WLP
Opportunities for Sites for Landfill and Landraise	A separate exercise identified more than 15 operational, closed and historic landfill and mineral extraction sites	These sites were not assessed at this stage because they were not presented as allocations, only as an indication of the location of past and current facilities	This consultation stage coincided with a call to the waste industry to propose landfill sites. These were evaluated prior to consulting on the Preferred Options and the SA/SEA assessments were included in the interim Environmental Report presented at that stage
Safeguarding	1 – Safeguard all allocated sites >4.5ha with phased release of those that are no longer required after 5 years	Supported Options 1 and 3 due to likely pressures on larger sites and the need to maintain a supply of land for future waste use. The lack of safeguarding for smaller sites offered by Option 1 was a weakness. The SA/SEA recommended that Options 1 and 3 should be taken forward as one. The SA/SEA did not support Option 2 as it considered the others were more flexible in terms of allowing review and release of land, though this appears to be a slight misinterpretation of the scope of Option 2	The Preferred Option combines Options 1 and 3, although the reference to limited safeguarding of smaller sites was not retained because this was felt to weaken the impact of the policy insofar as the release of land from the safeguarding requirement should be driven by need not by size. In practice there will be a greater need to protect larger sites because of the pressure for use of major plots from other land uses. Smaller sites (eg. transfer stations) are widespread across the Plan area and the loss of a single allocation is less likely to compromise the delivery of sufficient capacity than if a larger sub-regional site is lost
	2 – Safeguard all allocated sites with phased release of those that are no longer required after 5 years		
	3 – Safeguard all allocated sites >4.5ha with limited safeguarding of smaller sites		

Table 4 – Assessment of Key Policy Issues at the Preferred Options Consultation Stage

To reiterate, this appendix addresses only the evaluation of alternatives, not the assessment of all preferred options and policies. The Vision, Strategic Objectives, Proposed Strategy and Spatial Strategy were consulted on, and re-assessed under SA/SEA, but no further alternatives were considered and therefore they are not included below. Other more specific areas of policy that were too specific for the Issues & Options stage, and which lay outside the scope of the Spatial Strategy & Sites stage, were introduced, specifically in some aspects of development management. An alternative (identified as AO in the table below) was tested and respondents were invited to propose further options.

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
PO1 - Waste Prevention & Resource Management	PO – all developments should consider waste prevention and resource management during design as well as construction. Emphasis should be placed on maximising recycling and favouring use of secondary materials where feasible. These matters should be coordinated through use of Site Waste Management Plans	Supported – as it promotes resource efficiency, re-use and therefore, implicitly, moving management up the Waste Hierarchy. Indirectly the policy can address potential nuisance impacts of development, and support for SWMPs can address fly-tipping indirectly also	Taken forward as the preferred option. The submitted document retained a reference to using SWMPs for developments costing >£300,000 and waste audits for others below this threshold. Subsequently Defra has announced it intends to scrap SWMPs and consequently the requirement for a waste audit would apply to all development <u>and</u> the information could be sought at the determination of the application, providing better information about CD&E wastes, and therefore addressing a key area of poor information about waste management
	AO – rely solely on Site Waste Management Plans	Limited support because it relies on SWMPs and therefore does not address all development in the same way	Rejected and, in the light of Defra's change of heart as referred to above, this option would have necessitated a main change to the plan if it had been taken forward as the preferred option
PO2 – Sustainable Waste Management Design & Layout in New Development	PO – regardless of size and type, all new development should incorporate facilities for storage and collection of residual waste and recyclables and make provision for home composting where appropriate. Designs should incorporate small-scale low carbon heat and power generation facilities	Supported as it encourages recycling while limiting risks to health and amenity if there is provision for storage of residual waste and recyclables. Better facilities can also deliver health and safety benefits for waste collectors and limit adverse visual impact on the street scene and wider public realm	Taken forward as specified in the preferred option

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	AO – rely on District Core Strategies or other DPDs incorporating a policy with the same purpose	Not assessed explicitly as reliance on local planning documents had been rejected already at the initial consultation	Not taken forward. The Waste Local Plan aims for a consistent approach across all Districts and therefore it should prescribe a common approach rather than devolving this responsibility.
PO3 – High Quality Design & Operation of New Waste Management Facilities	PO – waste facilities should achieve a minimum “very good” BREEAM rating as applied to industrial buildings prior to 2016 and an “excellent” rating thereafter. External appearance should be designed to minimise visual impact on the surroundings	Supported particularly in terms of mitigating the visual impact of development on the surroundings	Taken forward with additional requirement to avoid visual impact on the surroundings and preventing adverse impact on local amenity. The reference to achievement of BREEAM standards has been modified to refer to achieving any alternative level of performance which applies to industrial buildings, acknowledging forthcoming changes to the Building Regulations
	AO – incorporate equivalent requirements into corresponding District plans	Not assessed explicitly as reliance on local planning documents had been rejected already at the initial consultation	Not taken forward. The Plan aims for a consistent approach across all Districts and therefore it should prescribe a common approach rather than devolving this responsibility. This approach might be a feasible alternative since all Districts are likely to adopt a common approach regardless in order to comply with other planning legislation
PO4 – Sustainable Transport	PO – use of non-road movement of wastes should be pursued where appropriate. Proposals should promote sustainable travel for employees and generally contribute to mitigating the road transport effects created by the waste industry	Supported due to its beneficial impact on reducing emissions and improving air quality. The assessment considered it was only realistic for larger waste facilities as modal shift was likely to entail significant cost and therefore it was unlikely to be practicable or commercially viable for smaller facilities. Impacts on the road network should be addressed through S.106 agreements	Taken forward as the preferred option, both in promoting modal shift for the movement of wastes and the requirement for travel plans for waste facilities. While the issue regarding infrastructure cost was noted this should not be an absolute constraint but the policy requires the developer to demonstrate why use of other transport modes is not feasible, and excessive cost would be an acceptable reason if evidence can be provided. The Plan does not specifically prescribe use of S.106 agreements in order to give the local planning authority flexibility in choosing how the necessary mitigation should be secured

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	AO – rely on corresponding policies in District planning documents, recognising that many of these exist already and are directly applicable to applications for waste facilities	Limited support though mainly because DPDs were at an early stage of development, making it difficult to assess how effective this alternative might be	Not taken forward
The policy area of Energy from Waste (EfW) was introduced at the Spatial Strategy & Sites consultation. The policy position taken then and advanced subsequently was informed by consultation responses at that stage and at Issues & Options with respect to the broader issue of self-sufficiency and whether the sub-region might also plan for additional infrastructure to manage wastes from elsewhere. Consultation responses were resoundingly opposed to an approach of attracting imported wastes. By the time Preferred Options consultation was reached there was a clear surplus of consented thermal treatment capacity in the sub-region, though none of it was under construction at the time. This raised the prospect that the existing capacity had the potential to attract waste from elsewhere. Putting these matters together, it was considered appropriate to adopt a policy position that limited further proliferation of merchant EfW capacity and therefore unnecessary to test the alternative of allowing further speculative development which was have attracted even more external waste, contrary to the clear steer given by opinions expressed at previous consultation stages. However, providing for the management of local residual waste from household and other municipal sources required further evaluation.			
PO6 – Energy from Waste for C&I Waste	PO – there is no need to identify any further merchant EfW capacity to manage this stream locally and need will be serviced by what is already permitted locally and other capacity in the rest of the North West region	Supported because it reduces the risk of over-provision of capacity and can contribute to more efficient use of land resources. Over-provision could stimulate increased import of wastes to the sub-region and this would have adverse carbon impacts as a result of increased emissions from transport	Taken forward as a general principle in the submitted Plan, in that the policy stated there was no further need for medium and large-scale EfW facilities, though there was support for smaller facilities, and a requirement that any should provide combined heat and power. Representations were received on the draft Plan that expressed concern that the policy depended on the delivery of currently permitted but unbuilt capacity although the policy intention was that availability of a capacity surplus would be checked through the plan monitoring process. Subsequently the Plan has been amended so that emphasis on the existing permitted capacity is maintained but there is scope for other speculative proposals to come forward to meet specific needs
PO7 – Energy from Waste for MSW	PO – the WLP will not allocate any sites for this purpose and will rely on what is already permitted locally and on other capacity in the rest of the	Not supported although the option would contribute to more efficient use of land resource if it avoids over-allocation. The	About 3 months after the end of consultation, MWDA announced the 2 remaining bidders for the Resource Recovery Contract (RRC) procurement, both of which were proposing solutions that would be EfW capacity outside the

POLICY AREA	ALTERNATIVES EVALUATED	SA / SEA RECOMMENDATION	HOW THE PLAN RESPONDED
	North West region	Plan should make local provision as this will help to reduce the distance that waste moves while recognising the difficulties that have been experienced trying to find a suitable site	Plan area. As a result the need to provide specifically for local needs was reduced except for the need to provide a contingency in the event that the RRC procurement was re-started. This situation necessitated a change to the policy in the submitted document and was then subject to further change following the Examination Hearings. As a result the revised policy wording now provides scope for local delivery of the capacity as proposed by the SA assessment
PO14 – Restoration and Aftercare of Landfill Sites	PO – the WLP will require restoration and aftercare of landfills compliant with the Environmental Permit for the site, which will be required once operations have ceased	Supported as it can deliver positive effects in terms of visual improvement and amenity. Opportunities for energy recovery (from landfill gas) should be continued as this also helps to reduce the climate change impact of the site	Taken forward as stated in the Preferred Option
	AO – the WLP will not include a policy on this matter and will instead rely on policies in individual District DPDs	Limited support, citing the lack of current examples of how other planning documents were dealing with this matter	Not taken forward. There is a risk that the approach would differ from one District to another, although the limited number of sites means this is a marginal problem. However District LDSs are being prepared on the understanding that policies on matters directly related to waste management and waste infrastructure will be addressed in the Waste Local Plan, and therefore policy on this issue should not be devolved back to District DPDs

Assessment of Site Alternatives

The site assessment for the WLP began with a 'long list' of more than 900 sites each of which was evaluated using a comprehensive set of criteria that reflect most of the SA Objectives. Some social and economic objectives have no clear spatial expression and it was not possible to assess the sites against them, but the criteria were not exclusively environmental constraints. Consequently, the site score resulting from this evaluation was taken to be an indication of the relative sustainability credentials of each site. Once this stage was complete the search for the more appropriate allocations could focus on a limited number of the better-scoring sites.

The initial allocation proposals were presented at the Spatial Strategy & Sites consultation stage and comprised 45 sites. However, even at this stage it was not possible to identify alternatives in the same way as for policy areas. This is because national planning guidance (specifically, Planning Policy Statement 10) advises that plans should not be over-prescriptive about the waste management uses they could support.

Table 5 (overleaf) summarises the situation. The initial review of potential uses identified six different generic waste management uses (excluding landfill). Virtually all the sites were suitable for at least 3-4 of these uses, and the larger ones were capable of supporting 5-6. At this consultation stage, the needs assessment identified a requirement for at least 11 built facilities covering the six generic uses referred to above. Consequently most of the 45 allocations proposed at this stage were alternatives for each of these 11 requirements. Looking at it another way, 43 of the 45 sites were suitable as locations for the single reprocessing facility which needed to be provided for.

For this reason it is not possible to tabulate the comparisons in the same way as for the policies. Nevertheless Table 5 identifies the original set of allocations and indicates why certain sites were withdrawn subsequently. In most cases this resulted from a district reconsidering whether it supported use of the site for waste management functions (possibly because of recent development on adjacent sites), or because land was no longer available for redevelopment. Some sites were withdrawn for other planning reasons. These frequently resulted from difficulty in identifying or contacting the landowner to determine whether the site was available, or other specific planning issues relating to matters such as road safety concerns, which led to the site being withdrawn as suitable alternatives were available locally.

This situation illustrates the different position with respect to site alternatives. The earlier evaluations considered all the sites were potentially suitable for the intended waste management uses, and the withdrawals were made for reasons not directly related to the SA/SEA assessment.

All the sites listed in the table underwent SA/SEA assessment in addition to the original SA-based site evaluation of the 'long list'. All replacement allocations brought

forward at subsequent stages of developing the Plan also underwent SA/SEA assessment at least once. The interim Environmental Reports produced at the Spatial Strategy & Sites and Preferred Options consultation stages detail the assessment of the set of site allocations which were proposed at each stage. A short addendum report was also prepared detailing the assessment of the two additional sites brought in at the Preferred Options 2 stage.

Other documents in the WLP document library provide complete details of the scoring assessment of all sites in the 'long list' referred to above, and the reasons for not taking them forward as allocations initially and at subsequent stages of plan development.

Table 5 – Alternative site allocations proposed at the Spatial Strategy & Sites stage

	Original site code	Household waste site	Waste transfer station	Re-processing facility	Primary treatment (incl. composting)	Thermal treatment	Resource recovery park	
SUB-REGIONAL SITES	F1024	X	X	X	X			Reason for withdrawal (blank where the site is allocated in the Waste Local Plan)
	H2309		X	X	X	X	X	Prioritised for other uses and support of the landowner was unclear
	H2295		X	X	X	X	X	Historic landfill site which raised contamination issues as well as proximity to wildlife sites
	K2322	X	X	X	X		X	Permission granted for non-waste uses therefore lacked landowner support
	L1297	X	X	X	X	X	X	Council advised no longer suitable for waste use and earmarked for other requirements
	L1198	X	X	X	X		X	Withdrawn by Council following later consultation due to access issues and proximity to housing
	S1885		X	X	X		X	Landowner opposed to waste use as site is within wider Wirral Waters regeneration area
	W0360		X	X	X		X	Revision of district land use priorities and waste use inappropriate given regeneration of the area
	W0808	X	X	X	X		X	
	W0343		X	X	X	X	X	
DISTRICT LEVEL SITES	F0726	X	X	X				Absorbed into site F0726
	F2311	X	X	X				Revision of district land use priorities and due to proximity to residential areas
	F0917	X	X	X	X			Prioritised for other uses and support of the landowner was unclear
	F0715	X	X	X	X			Revision of district land use priorities and access constraints for several waste uses
	F0885	X	X	X	X	X		Concerns about traffic, proximity to COMAH site and problematic shape
	F1019	X	X	X	X			Unsuitable location as land to west had been re-allocated for mixed use development
	F2334		X					Traffic concerns; site in multiple ownership; and possible redevelopment of adjacent property
	F2333		X	X				No land available for redevelopment at that time and site in multiple ownership
	H1875		X	X	X	X		Landowner not in favour of waste use and site is part of existing non-waste business
	H1690		X	X	X			Landowner not in favour of waste use; existing non-waste uses under long term leases
	H1651	X	X	X				Council advised no longer suitable for waste use and landowner not supportive
	K2192		X	X	X	X		Affected by safeguarding of former Canada Dock rail line and listed building nearby
	K2204		X	X	X			Landowner not in favour of waste use as site is already earmarked for non-waste use
	K1371	X	X	X				Landowner not in favour of waste use as site is already earmarked for non-waste use
	K2327	X	X	X				Revision of district land use priorities due to proximity to housing and impact on peak traffic
	K2206		X	X	X			Affected by safeguarding of former Canada Dock rail line and listed building nearby
	L0511	X	X	X			X	Waste use not supported by landowner and was already in non-waste use
	L0549	X	X	X			X	Small size resulted in absorption into S1885 and was withdrawn at subsequent consultation stage
	L0560	X	X	X			X	[Now proposed as sub-regional site]
	L0468	X	X	X	X	X	X	Revision of district land use priorities and small size problematic limits scope for further expansion
	L1130	X	X	X	X			Limited land available for redevelopment and landowner's position was unclear
	L0447		X	X	X	X	X	Historic landfill posing contamination concerns and lacked landowner support
	L0435				X		X	Landowner opposed to waste use as site is within wider Wirral Waters regeneration area
	L0558	X	X	X			X	Problematic to develop due to presence of high pressure gas vent on site
	S1737	X	X	X		X		
	S1870		X	X			X	
	S1897	X	X	X				
	S2301	X	X	X	X			
	W0339		X	X			X	
	W0322		X	X			X	
	W2215	X	X	X	X		X	
	W0180		X	X	X		X	
	W0270		X	X	X			
	W0191	X	X	X	X			
	W0240		X	X	X			

Notes:

[1] Site codes shown in the left-hand column are those used to identify sites prior to preparing the submission version of the Waste Local Plan. For example, site H2309 is now allocation H1; site K2322 is K1; site W0360 is W1; etc. The dark cells show the sites that have been taken forward as allocations in the Plan.

[2] The Built Facilities Site Search Methodology document lists other sites that were assessed for inclusion in the initial set of allocations but were not taken forward. They are not listed here as they were not in the consultation report.