WASTE PLANNING MERSEYSIDE

Halton Council, Knowsley Council, Liverpool City Council, St Helens Council, Sefton Council and Wirral Council Joint Waste Development Plan Document

ISSUES AND OPTIONS REPORT

Contents

Section 1 - Introduction

1.1 **Background**

1.1.1 This is the first public consultation document for the emerging Merseyside Joint Waste Development Plan Document (Waste DPD). The consultation is being undertaken on behalf of the districts of Halton, Knowsley, Liverpool, St Helens, Sefton and Wirral. In addition to formal consultation, it is hoped that this document also acts as a catalyst to encourage discussion and lead to positive action about waste and the changes needed in how we deal with it. Your responses to our key questions will aid us in making decisions, and resolving how we tackle the waste issues for Merseyside.

1.1.2 The aim of this document is to build on feedback gained from pre-consultation events, and to provide an opportunity to engage key stakeholders and the people of Merseyside to discuss and reach consensus regarding principal issues and options for the treatment and disposal of all waste types for Merseyside. Continuing discussions will take place with key stakeholders following the consultation on issues and options which will feed into the preparation of preferred options. This will include site specific discussions.

1.1.3 The Waste DPD is a planning document concerned with the scale, location and type of facilities required to manage all waste (commercial, industrial, municipal, construction and demolition and hazardous) in Merseyside. In the next stage of development at the preferred options stage, proposed site allocations will be made for a range of waste management facilities. Importantly this document encourages the transformation of waste to a valuable resource. At the heart of the document is the need to minimise the production of waste in the first place as this will reduce the scale of the challenge in finding suitable sustainable solutions for its treatment.

1.1.4 The Waste DPD will put in place the statutory planning policy framework to enable each of the six Merseyside Waste Planning Authorities to take decisions on the locations for new waste management facilities. It does not deal directly with the management and treatment of waste produced in Merseyside which is the responsibility of Merseyside Waste Disposal Authority (MWDA), the waste collection authorities and the private sector.

1.2 **How You Can Contribute Your Views on the Issues and Options Report?**

1.2.1 This consultation is seeking views on and comments on the objectives, aims, options and questions presented within the report. Comments on other alternative options and potential sites are also welcomed. The consultation is open to anybody, but consultation responses must be received by the deadline of Friday 6th April 2007.

1.2.2 You can do this by either

- Completing the enclosed questionnaire and posting it to:
  Merseyside Joint Waste DPD Team - Issues and Options Consultation
  Merseyside Environmental Advisory Service

Bryant House
Liverpool Road North
Maghull
Merseyside L31 2PA

- Completing the on-line questionnaire via
- http://www.wasteplanningmerseyside.gov.uk.
- Obtain a copy from your local Council Offices or library
- Telephone to request a paper copy.
- Write to: Issues and Options Consultation
  Merseyside Environmental Advisory Service
  Bryant House
  Liverpool Road North
  Maghull
  Merseyside
  L31 2PA

1.2.3 **On-line Availability**

1.2.3.1 The document is available on line at: www.wasteplanningmerseyside.gov.uk. It is also available on the websites of each of the participating districts.

1.2.4 **Consultation Questions**

1.2.4.1 The Issues and Options Report contains nine consultation issues with a number of specific questions. Please complete the consultation reply form in Appendix 1.

1.2.5 **Consultation Period**

1.2.5.1 There is a 6 week consultation period for the Issues and Options Paper from 23rd February 2007. The deadline for comments is 6th April 2007.

1.3 **What Happens Next?**

1.3.1 Following this consultation, all the comments will be collated and a report will be written summarising the initial findings. Responses to the consultation will be published on the web site.

1.3.2 Each representation received during the 6 week consultation period will be considered by the Waste DPD project team. These comments will then input into the development of the preferred options along with changes recommended by the Sustainability Appraisal. A clear audit trail will be provided of how the Preferred Options report has been developed to take account of the views of the stakeholders.

1.4 **Data Protection Act**

1.4.1 Although responses to the consultation will be published, no personal details will be provided in the Results of Consultation report to comply with the requirements of Data Protection and Freedom of Information.

1.5 Timetable and Key Stages in Producing the Waste DPD

1.5.1 The timetable for producing the Waste DPD for Merseyside is scheduled over the next four years with adoption in 2010. The key milestones for the Waste DPD production are as follows:

- Preferred Options consultation – November 2007.
- Submission of Waste DPD – September 2008.
- Examination in Public – May 2009.
- Adoption – April 2010.

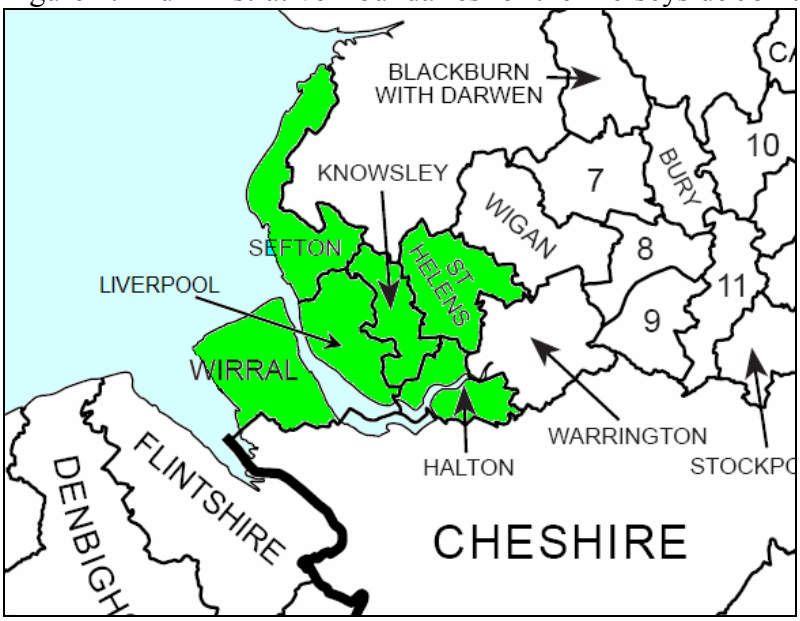
1.5.2 Due to the scale of the challenge and the cost of building new waste management facilities the Waste DPD will have a lifespan from 2010 to 2025. If necessary, earlier substantive review of the plan can take place.

Section 2 - Background to the Waste DPD

2.1 Introduction

2.1.1 The production of the Waste DPD will be a process of joint working between all the Merseyside Planning Authorities in compliance with the requirements of the Planning and Compulsory Purchase Act (2004), Planning Policy Statement 10 (PPS10) Planning for Sustainable Waste Management, PPS11 Regional Spatial Strategies, PPS1 and other government guidance. The following districts are included in the geographic scope of the Waste DPD: Halton Council, Knowsley Council, Liverpool City Council, St Helens Council, Sefton Council and Wirral Council. Figure 1 shows the administrative boundaries of the Merseyside sub-region. The joint approach is being adopted because the Merseyside Waste Planning Authorities recognise that planning for sustainable waste management is a matter which requires a strategic approach.

Figure 1: Administrative Boundaries for the Merseyside Joint Waste DPD



2.1.2 The Waste DPD aims to provide a sustainable land use planning policy framework for sustainable waste management of all waste streams across Merseyside. In particular having regard to the PPS10 key planning objectives of communities taking responsibility for their own waste and enabling sufficient and timely provision of waste management facilities to meet the needs of their communities; and enabling waste to be disposed of in one of the nearest appropriate installations.

2.1.3 It is intended that the Waste DPD will facilitate the planning and provision of waste management facilities for all types of waste on Merseyside, addressing the requirements of the municipal, commercial and industrial sectors. The Waste DPD should assist in smoothing the planning process for non-municipal waste facilities as they arise, and will also assist in the implementation of the Merseyside Joint Municipal Waste Management Strategy. The Waste DPD will do this by identifying strategic and other sites across Merseyside that are

suitable for development as waste management facilities. It will also include unified criteria-based waste planning policies which are complementary to the identified strategic sites and provide consistency across Merseyside.

2.1.4 At this stage, it is not considered possible to conform with the draft Regional Spatial Strategy waste policies as this is still in draft form and due for Examination in Public during the period October 2006 to January 2007. Without wishing to pre-judge the outcome of the Examination in Public it is likely that later stages of the development of the Waste DPD such as Preferred Options or Submission stage will be in conformity with adopted RSS. The lack of appropriate guidance in RSS on broad locations of different types of waste management facilities increases the level of uncertainty at the local and sub-regional level. This issues and options report takes account of this uncertainty in the presentation and discussion of the issues and options.

2.2 Evidence Base

2.2.1 The new planning system requires development plan documents to be built on a sound evidence base. In developing the Waste DPD great care has been taken to develop and update the baseline information on existing waste management facilities, the types and quantities of waste produced in Merseyside, transport of waste in and out of Merseyside and future waste treatment and capacity requirements. A number of studies have been commissioned some of which are on-going. It is important to note that considerable work is ongoing to ensure that there us a common evidence base across all six Merseyside Districts.

2.2.2 In line with the requirements of the PCP Act the process of evidence gathering will continue throughout the development of the Waste DPD. This will ensure that policy is developed on the basis of the best available information at the time. As better information becomes available this will be used to inform policy decisions and help to develop a monitoring framework.

2.2.3 An initial Needs Assessment and Broad Site Search have been commissioned and reported alongside other studies. Studies on commercial and industrial waste arisings and construction, demolition and excavation waste arisings are on-going at the current time and will be used to inform later stages of the Waste DPD. Over the next few months it is also proposed to carry out studies on radioactive wastes, agricultural waste and hazardous wastes.

2.3 The Plan Making Process

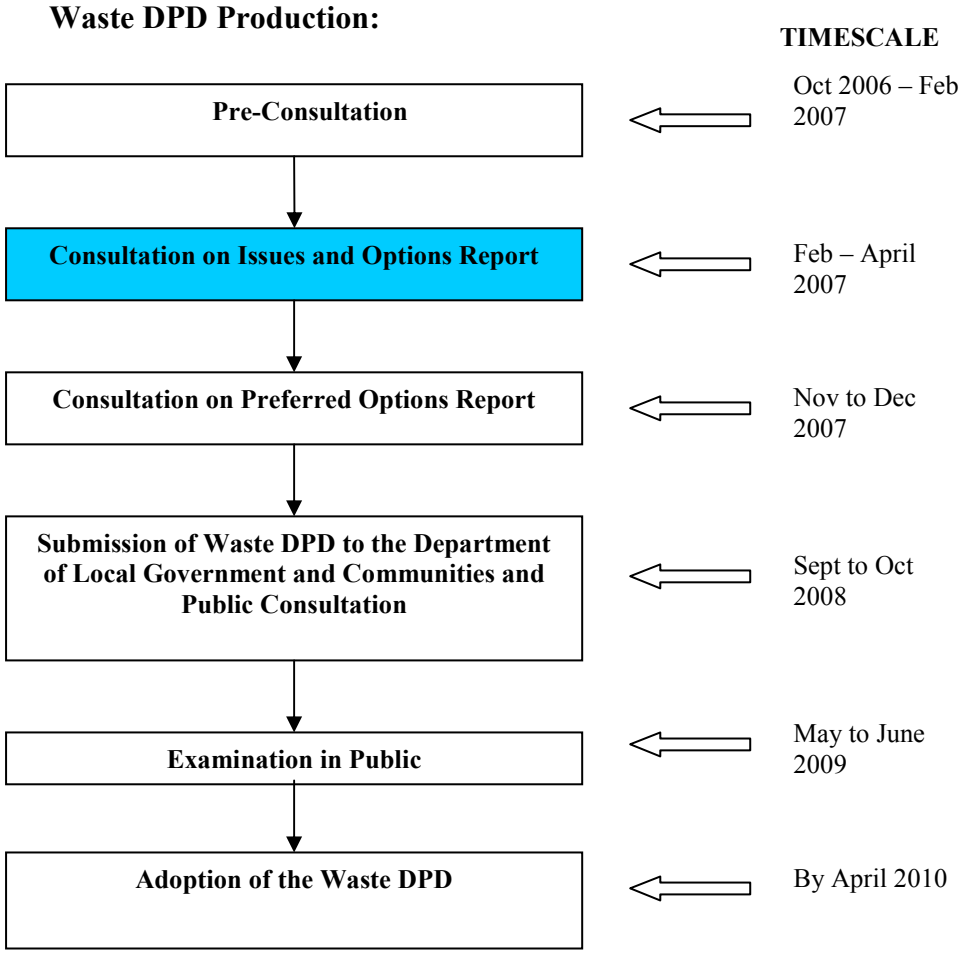
2.3.1 The Planning and Compulsory Purchase Act 2004 brought about a fundamental change to the planning system, including the replacement of the existing land use development plan system with a new system of Regional Spatial Strategies and Local Development Frameworks.

2.3.2 When the Waste DPD is adopted it will replace the waste planning policies in existing adopted Unitary Development Plans of each of the six Merseyside Planning Authorities. Each of the Merseyside Planning Authorities is developing its own portfolio of planning documents as part of their Local Development Framework process. However, it should be noted that the Waste

DPD will need to be in conformity with each of the Districts Core Strategy policies. It is particularly important therefore that waste DPDs are not developed in isolation, and that other DPDs should also consider waste management.

2.3.3 This is the first time that the Merseyside Planning Authorities have worked collectively to fund and produce a joint planning document under the new planning system. The Joint Waste DPD is being produced by Merseyside Environmental Advisory Service on behalf of Halton Council, Knowsley Council, Liverpool Council, St Helens Council, Sefton Council and Wirral Council. However, decisions on the content of the Waste DPD will be made by and is the statutory responsibility of the Merseyside Planning Authorities. Governance arrangements are detailed in Appendix 5.

Figure 2: Production of the Waste Development Plan Document



2.3.4 In accordance with the Planning and Compulsory Purchase Act 2004, and supporting guidance, strict governance arrangements are in place to ensure that all the district Councils involved have Full Council Approval for key milestones in the project, and that the project team receives full support from a district led steering group. The first key milestone was to gain Full Council approval to commence of joint working. Further Full Council approval was

received in 2006 following Halton's decision to join the Waste DPD on 18 October 2006.

2.4 **Consultation**

2.4.1 The new planning system is very demanding in terms of consultation requirements. In order to comply with the pre-consultation and formal consultation requirements of the Act the Waste DPD is supported by a Consultation Strategy that is in conformity with each of the Districts' Statements of Community Involvement. Extensive public consultation is designed to recognise and manage the tensions between potential planning constraints and the clear need for waste treatment facilities.

2.4.2 A series of informal pre-consultation and stakeholder engagement events were held during the period May to October 2006. In addition a wide variety of stakeholder and community groups are being consulted as part of this Issues and Options Report consultation process and this is set out in the Appendices which are available on the website and on request from the Waste DPD team.

2.5 **Sustainability Appraisal**

2.5.1 Sustainability Appraisal and Strategic Environmental Assessment are a mandatory part of the process of developing the Waste DPD. The Government wishes that these two processes can be run in parallel under the umbrella of SA, as long as the procedural requirements of the SEA Directive are met.

2.5.2 Consultants were commissioned in June 2006 to begin work on the SA Scoping Report and production of SA Objectives along with collection of baseline data. The SA Scoping Report has already been prepared and consulted upon for a five week period in December 2006 to January 2007. This consultation process included the statutory authorities as well as other key stakeholders.

2.5.3 It is a requirement that the Sustainability Appraisal process is iterative and informs policy formation. Therefore, work on SA began at the outset of the Waste DPD process and has involved a series of informal stakeholder engagement events.

Date	Location	Pre-Consultation	Agenda/ Activities
Monday 17th July	Building, Pier Head Liverpool	Key Stakeholder Workshop 1	Introducing the Sustainability Appraisal process. Discussion of SA issues, SA Objectives and targets for the WDPD
Tuesday 10th October	Cunard Building, Pier Head Liverpool	Key Stakeholder Workshop 2	Discussion of the indicators, targets and trends for the SA Objectives, and the Draft Scoping Report

2.5.4 The results of the consultation process are used to inform the development of the Issues and Options Report including identification and appraisal of options and alternatives.

2.5.5 For more detail on the SA process, please refer to the accompanying Sustainability Appraisal report (***reference this will be available in time for the public consultation***).

2.6 **Appropriate Assessment - Planning for the Protection of European Sites**

2.6.1 The purpose of Appropriate Assessment (AA) of a land use plan is to ensure that protection of the integrity of European sites is part of the planning process at sub-regional and local level. Under the Conservation (Natural Habitats, &C (Amendment) (England and Wales) Regulations 2006 Guidance for Regional Spatial Strategies and Local Development Documents (The Habitats Regulations, as amended), Habitats Directives and Habitats Regulations (as amended),it is a requirement of that the Waste DPD complies with the process of Appropriate Assessment. Further details relating to how Appropriate Assessment will be considered throughout plan production is included in Appendix 7.

2.6.2 Whilst the Department for Communities and Local Government is currently consulting on its Guidance for Regional Spatial Strategies and Local Development Documents "Planning for the Protection of European Sites: Appropriate Assessment" it is clear that the guidance and requirements of the Habitats Regulations must be applied throughout the process of developing and preparing the Waste DPD. Emerging best practice suggests that this process should be started early in the preparation of the Waste DPD so as to inform the choice of options to be considered. It should also be undertaken in conjunction with the Sustainability Appraisal process so as to avoid any duplication in evidence gathering.

2.6.3 Initial Appropriate Assessment screening has been completed as part of the process of preparing the Issues and Options Report. The results of this process and consultation with natural England are reported in the Appendices which are available from the Waste DPD website or upon request from the Waste DPD team.

2.7 **The Relationship with the Joint Municipal Waste Management Strategy (JMWMS) for Merseyside.**

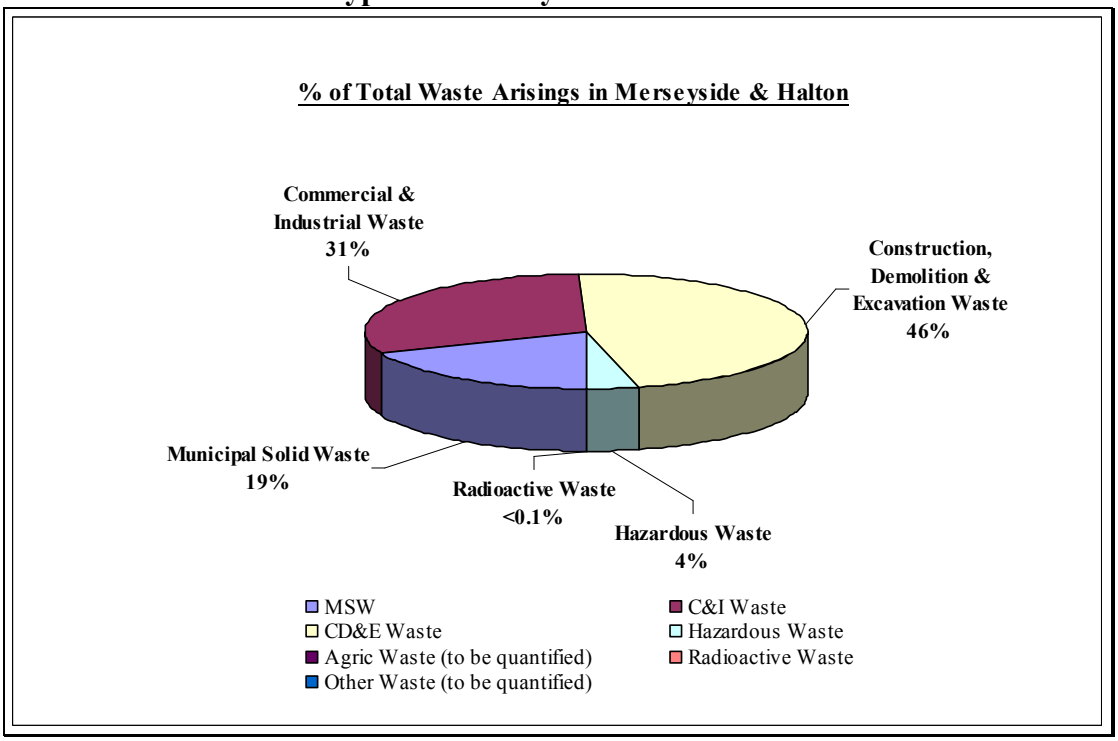
2.7.1 Whilst preparing the Waste DPD is a separate statutory process and needs to be separated from the proposed Joint Municipal Waste Management Strategy for Merseyside some alignment and integration will be necessary to ensure that the waste management facilities required to achieve municipal waste recycling and recovery targets are delivered. The waste DPD will cater for waste management facilities for all waste types including commercial, industrial and special waste streams.

2.7.2 Such an approach is consistent with PPS10 and the requirements of the National Waste Strategy (2006).

2.7.3 There is a pressing need to procure and develop a range of waste treatment facilities across Merseyside in order to provide local authorities with the means to handle waste streams of different types and achieve national recycling and landfill diversion targets.

2.7.4 Merseyside Waste Disposal Authority (MWDA) has estimated that around 12-17 new facilities could be required for the management of municipal waste alone. Similarly, there is a need to plan for a similar number of commercial, industrial and other waste types, as the private sector also has national targets to meet. All planning applications from the private sector including MWDA will be treated in the same manner by the Merseyside Planning Authorities.

Figure 2.1 – Pie Chart showing the Quantities and Distributions of Different Waste Types on Merseyside.



2.8 The Relationship with the Halton Municipal Waste Management Strategy (HMWMS)

2.8.1 Halton has an extensive industrial heritage, and this will mean that it has particular waste streams will need to be considered. Halton Council joined the Waste DPD for Merseyside, in October 2006. As Halton is a unitary authority is has its own Municipal Waste Management Strategy. In the same way that the Waste DPD needs to integrate with the JMWMS for Merseyside it will also need to integrate with Halton's MWMS.

2.8.2 Inclusion of Halton will change the geographic scope of the Joint Waste DPD for Merseyside and consideration has been given to waste arisings within Halton. However, it is important to note that further evidence gathering is ongoing to ensure that the quality of the baseline information for each participating Districts is consistent for Preferred Options stage.

Section 3 –Aims and Objectives for the Waste DPD

3.1 Introduction

3.1.1 Guidance on waste planning and sustainable waste management is set out in a number of national and regional documents (further details included in the Appendices). These in turn ensure that the UK Government is complying with the requirements of several EU Directives. The Waste DPD is required to take account of all relevant international, European, national and regional guidance and policy during policy development. In addition it also needs to reflect the aims and objectives of local planning documents and strategies too.

3.1.2 One of the purposes of developing the Waste DPD is to have a consistent and level playing field for waste planning across Merseyside. The Waste DPD will conform with individual district development plan documents within the Local Development Framework portfolio including Statement of Community Involvement, Core Strategy, Issues and Options and Preferred Options. Each of these District specific DPDs will in turn need to have significant regard for waste management issues in order to pave the way for the Waste DPD, and ensure that sufficient weight is given to waste planning matters. This will also ensure that waste issues are not being dealt with in isolation.

3.1.3 Waste reduction and the control of waste growth is one of the biggest challenges in Merseyside. For example quantities of municipal waste continue to grow each year. Estimating the growth of other waste streams, such as commercial, industrial and construction wastes, is more difficult because of poor historic data, however generally waste produced by businesses can be linked to economic activity. Currently, there is approximately 5.2 million tonnes of waste produced in Merseyside across all sectors each year.

3.1.4 National and Regional guidance encourages that waste arising within a sub-region such as Merseyside, should be managed locally. At the current time significant quantities of waste generated in Merseyside are being managed in neighbouring areas and regions.

3.1.5 By local communities, services and businesses of Merseyside taking responsibility for their own waste this will lead to a reduction in the number of miles that waste must travel and creates significant opportunities for new jobs at treatment facilities. It will also raise awareness of the scale of the waste challenge and the need to minimise waste arisings in the first instance.

3.2 Aims of the Waste DPD

3.2.1 In order to guide the Waste DPD, a number of aims have been proposed which encompass all aspects of waste management planning which the waste DPD hopes to deliver, with specific regard to sustainable waste management, protection of human health and the environment and a sustainable waste economy.

- To reduce the amount of waste generated and move waste management away from landfill disposal.

- To encourage the people and business communities of Merseyside to take responsibility for their own waste by sufficient and timely provision of waste management facilities that meet the needs of the community and reduce the need for waste to travel unnecessary distances for disposal.

- To minimise any negative impacts from waste management on the people and communities and environment of Merseyside.

- To act as a catalyst for creating wealth and employment opportunities through the transformation of waste to resources.

3.2.2 A number of objectives follow on from these aims and demonstrate how the aims will be achieved. The key issues for waste management on Merseyside have been aligned with these aims to provide a clear strategy for how we are going to promote sustainable waste management on Merseyside in line with national and regional guidance.

Question: Do you agree with the proposed aims of the Waste DPD?
Question: Do you think the Waste DPD should have any other aims?
Question: What changes do you think would improve the aims?

3.3 Spatial Planning Objectives for the Waste DPD.

3.3.1 The spatial planning objectives for the Waste DPD cover the following areas:

1. To plan for sufficient waste management facilities to accommodate the sub-regional apportionment of waste arisings for the Joint Waste DPD area until 2025.
2. 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 waste targets.
3. To promote waste minimisation initiatives and optimise re-use and recycling of waste materials as aggregates for both waste specific and non-waste planning applications.
4. To raise awareness in sustainable waste management amongst the people and business communities of Merseyside.
5. To minimise the adverse effects of waste management development (including transportation) on local amenity, and the natural environment of Merseyside.
6. To promote high quality development for waste management facilities.
7. To promote transformation of waste to resource to encourage economic, environmental and employment gain from sustainable waste management.

Question: Do you agree with the proposed objectives for the Waste DPD?
Question: Do you think there are other objectives of the Waste DPD?
Question: What changes do you think would improve the objectives?

3.3.2 There are links between all the objectives and aims, although one objective may better serve one aim than another. In turn, the issues and options can be derived from the aims and objectives. The links between the aims, objectives and issues is shown in the table below.

Table 3.1: The Relationship between the Aims, Objectives and Issues

Aim	Met by the following objectives (in order of influence)	Issue
To reduce the amount of waste generated and move waste management away from landfill disposal.	1, 2, 3, 4	1, 4, 5
To encourage the people and business communities of Merseyside to take responsibility for their own waste by sufficient and timely provision of waste management facilities that meet the needs of the community and reduce the need for waste to travel unnecessary distances for disposal.	1, 4, 5	2, 3, 4, 5, 7
To minimise any negative impacts from waste management on the people and communities of Merseyside.	2, 3, 5, 6	3, 4, 5, 6, 7, 8, 9
To act as a catalyst for creating wealth and employment opportunities through the transformation of waste to resources.	2, 3, 7	1, 2, 5

Section 4 – Current Planning Applications

4.1 Planning applications for new waste facilities will inevitably come forward between now and when the Waste DPD is adopted. These planning applications will be determined in the usual manner by each of the Merseyside Planning Authorities according to their adopted Unitary Development Plan. Due account will need to be taken of more up-to-date planning policy guidance or planning policy statements such as PPS10.

4.2 An Interim Position Statement for Planning was produced in April 2006. A copy of this can be found in the Appendix 6 of this document. Though this has no material weight in planning terms, but it does outline how waste management applications will be dealt with in the interim period. It also provides information relating to applications accompanied by Environmental Impact Assessments.

SECTION 5 - ISSUES AND OPTIONS

5.1 Introduction

5.1.1 The following section considers some of the most important waste management issues facing Merseyside. It identifies the main issues, options for addressing the issues and discusses the main implications of the options. A series of consultation questions are also identified for each issue.

5.1.2 We welcome any comments which you may have on the following questions and proposed options. These comments will then be carefully considered and feed into the development of the Preferred Options report which will be released for further public consultation during November 2007.

5.1.3 It should be stressed that at the current time no decisions have been taken as to how to tackle any of the issues outlined. This is your opportunity to help influence the ways in which Merseyside's waste is managed into the future and work towards achieving a more sustainable approach to waste management.

5.1.4 Reference should be made to 'Section 1.2 – How to Get Involved' which describes how you can get involved with the production of the Waste DPD.

5.2 KEY ISSUE 1 - WASTE MINIMISATION

5.2.1 Waste minimisation is at the top of the waste hierarchy. The objective of minimising the amount of waste produced by different sectors and processes resulting in the generation of smaller quantities of waste requiring management is the starting point in the policy development process. First the amount of waste generated should be minimised *before* consideration is given to how the waste is managed.

5.2.2 Waste reduction and the control of waste growth is one of the biggest challenges in Merseyside. For example quantities of municipal waste continue to grow each year, albeit at a reduced rate to that historically experienced (with typical growth estimates estimated at 3% each year[1]). Ambitious targets have been set by the Merseyside Waste Partnership to reduce the growth in waste production[2]. Achievement of these reduction targets will result from incentives put in place primarily by the waste collection authorities and waste disposal authorities to encourage householders to minimise their waste production, reduce packaging waste and by encouraging reuse and recycling. The Merseyside Joint Municipal Waste Management Strategy details some of the initiatives currently underway to minimise municipal waste, including the Merseyside Real Nappy Awareness Campaign, promotion of home composting and support of education, awareness and communications programmes across Merseyside. Despite this reduction analysis still shows that Merseyside produces approximately 439kg per household per year[3].

5.2.3 Estimating the growth of other waste streams, such as commercial, industrial and construction wastes, is more difficult because of poor historic data, however generally waste produced by businesses can be linked to economic activity. In recognition of the incomplete baseline data on sector specific waste arisings, as part of the Waste DPD development, work is currently underway to fill identified gaps. This information will be used to inform future stages of the Waste DPD.

5.2.4 To achieve maximum environmental benefit waste minimisation practices need to be encouraged across the range of waste streams. Although municipal waste arisings have been targeted, because of the need to reduce biodegradable municipal waste consigned to landfill sites, there is a need to encourage other sectors to minimise their waste arisings. Specialist advice is now available to other sectors producing significant quantities of waste and there are also initiatives to encourage the reduction of packaging waste produced by certain businesses.

5.2.5 The adoption of more sustainable waste management practices is an important consideration in terms of business performance and efficiency. It can be financially attractive to some businesses and result in less money spent on

[1] Joint Municipal Waste Management Strategy for Merseyside, The Merseyside Waste Partnership (June 2005).
[2] JMWMS includes targets to reduce the growth of municipal waste to 2% per annum by 2010 and 0% by 2020.
[3] Based upon 2005/06 BVPI figures published on the DCLG website.

waste disposal, for example by reducing the consumption of certain raw materials. For example the reuse of demolition wastes in construction reduces the need for manufactured aggregate to be ordered thus reducing the costs associated with it.

5.2.6 With the implementation of Planning Policy Statement 10, the revised approach of Government to sustainable waste management goes beyond the traditional remit of land use planning for waste management. Through the Development Control process, planning permissions can encourage waste minimisation practices at sites. Whilst the precise mechanisms vary, the inclusion of certain conditions in planning permission or through legally-binding section 106 agreements can require sustainable waste management practices to be implemented. For example, adoption of Site Waste Management Plans at large developments, particularly those involving demolition and site clearance, encourages more sustainable practices leading to the reuse of a valuable on-site resource. This approach is consistent with the intended scope of the new development frameworks advocated by Government guidance. The Waste DPD will need to include policies that influence the demands on or needs for development but are not necessarily driven by the grant of planning permission.

Questions Relating to Waste Minimisation
What other methods do you think should be employed by Planning Authorities in the implementation of the Waste DPD to help with the reduction of waste arisings generated by householders and industry?
Which methods (i.e. planning condition or section 106 legal agreements) do you think would be most effective in securing practices at developments which deliver waste minimisation?

Options for policies to help reduce waste generated:

OPTION 1.1 - Encourage waste minimisation across all sectors through the adoption of specific policies such as requiring waste audits, site waste management plans and, where practicable, waste minimisation at development sites. Where appropriate these policies will be imposed through the inclusion of this information with planning application and/or conditions in planning consents and other legal agreements such as section 106 agreements.

Implications: waste generation would be minimised on certain development sites where this policy was implemented. This may involve the revision of development companies' procedures when dealing with aspects of the development. Local Planning Authorities would need to ensure the policy is implemented on a consistent basis.

or

OPTION 1.2 - Do not adopt any specific waste minimisation policies and instead rely upon other influences, such as waste disposal charges or other planning conditions, to reduce the volume of waste produced at developments.

Implications: waste would continue to be generated at development sites with no planning obligation to require a revision of practices onsite with a view to reducing the amount of waste produced onsite. External fiscal incentives may eventually lead to a review in procedures and encourage waste reduction however this may take some time to take effect. The amount of waste generated or minimised would be difficult to track.

5.3 KEY ISSUE 2 – WASTE MANAGEMENT SELF-SUFFICIENCY IN MERSEYSIDE

5.3.1 National and Regional guidance encourages that waste arising within a sub-region such as Merseyside, should be managed locally. At the current time significant quantities of waste generated in Merseyside are expected to be managed in neighboring areas and regions.

5.3.2 By local communities, services and businesses taking responsibilities for their own waste this will lead to a reduction in the number of miles that waste must travel and creates significant opportunities for new jobs at treatment facilities. It will also raise awareness of the scale of the waste challenge and the need to minimize waste arisings in the first instance.

5.3.3 The following table includes an overview of where the various waste streams are managed across Merseyside. The table illustrates that there is a significant amount of waste which is managed outside of Merseyside's boundary. As detailed previously, there are a number of existing data gaps and data uncertainties which will be addressed over the coming months. Surveys are currently ongoing to help fill these significant evidence gaps. It is anticipated that the studies will deliver results early in 2007 which will be used to inform the development of the Waste DPD Preferred Options report. Further details relating to waste arisings generated in Merseyside can be found in Appendix 2 ('Waste Arisings in Merseyside') which is available to download from the website or upon request.

Waste Type	Quantity (tpa)[4]	% Managed in Merseyside[4]	Imports from other Areas (tpa)[4]	Current Quality of Data
Commercial and Industrial	1,489,540 (including 731,800 Industrial and 757,740 Commercial Waste)[5]	31%	Not known.	The data associated with this waste stream is poor. Current data relies upon that presented in the Environment Agency's SWMA (2002-03). A survey is currently underway to fill this data gap at the sub-regional

[4] Based on figures collated and presented in the 'Merseyside Initial Needs Assessment Report', SLR Consulting Ltd (August, 2005) & Environment Agency's 'Waste Management Assessment 2002/03'. Indicative self-sufficiency figures do not currently include Halton as Halton joined the Waste DPD after the production of the Initial Needs Assessment report. It is proposed to fill this evidence gap over before the Preferred Options consultation.

[5] The Halton element is extrapolated from the combined Warrington/ Halton figures using relative population figures (38% of the combined figure).

Waste Type	Quantity (tpa)[4]	% Managed in Merseyside[4]	Imports from other Areas (tpa)[4]	Current Quality of Data
				level.
Household Waste Arisings	899,950[6]	64%	0	Robust data collected and released by Merseyside and Halton Waste Disposal Authorities and reported on an annual basis.
Construction, Demolition and Excavation	2,444,744[7]	Not known	Not known.	Data is of poor quality particularly at the sub-regional level. National surveys carried out regularly by the Dept of Communities and Local Government. Data cannot currently be interrogated down to a sub-regional level. Survey currently underway to address the Merseyside data gap.
Hazardous Waste	180,966[8]	28%	Approximately 100,560 (which equates to 69% of Merseyside's arisings).	Reliable data is available from the Environment Agency's Hazardous Waste Interrogator database.
Agricultural Waste	211,296[9]	Not known	Not known, however this is unlikely given this waste has only recently become 'controlled waste' and has traditionally been managed on farm.	This waste has only recently become a 'controlled waste'. Consequently there is a general lack of accurate waste arising data from the sector. It is planned to fill this gap by completing an agricultural waste survey for Merseyside.

5.3.4 Merseyside must carefully consider whether it can achieve self-sufficiency from a waste management perspective and contribute effectively towards regional self-sufficiency. Due to physical constraints within Merseyside it may not be possible to accommodate all its waste arisings. Merseyside may need to continue to export quantities of certain wastes. Merseyside may consider planning for an increased number of treatment facilities which may be able to accommodate certain wastes from other areas of the UK thus helping to achieve net self-sufficiency (i.e. manage a quantity of waste equivalent to the amount generated in Merseyside). Merseyside may also consider whether it should plan to import quantities of waste from neighboring areas and treat it at authorised facilities. This will result in additional employment opportunities associated with the operation of new facilities.

[6] Based upon MWDA & HWDA actual recorded figures for 2005/06.

[7] Based upon figures in "Survey of Waste Arisings and Use of Construction, Demolition and Excavation Waste as Aggregate in England in 2003", Capita Symonds Report (October 2004).
It is important to note that this survey did not cover all elements of the Construction, Demolition and Excavation Waste stream, e.g. the 'soft' element was not captured.
Merseyside figure based upon the total North West arisings figure pro-rated on the basis of Merseyside's proportion (approximately 20%) of the total population of the North-West Region.

[8] 2003 Figures presented in the Environment Agency's 'Hazardous Waste Interrogator'.

[9] Merseyside estimates based upon 2003 Regional Waste Arisings. Approximately 203,000 tonnes of slurry, manure and/or vegetable waste, 1,800 tonnes of combustible waste and 6,150 tonnes of potentially hazardous waste.

5.3.5 As the table above illustrates, Merseyside is not currently self-sufficient in dealing with its own waste arisings. For example as much as 36% of Merseyside's municipal solid waste arisings is exported to facilities in neighboring authorities[10]. This represents a missed opportunity to contribute towards the local economy, create new employment opportunities within Merseyside and contribute positively towards sub-regional self-sufficiency. The proportion of municipal solid waste exported is expected to decrease as more recycling and recovery takes place.

5.3.6 Merseyside currently provides regionally significant hazardous waste treatment facilities, particularly for hazardous waste such as oil contaminated wastes. The hazardous waste industry has developed in the north-west and established facilities representing economies of scale which are attractive to private investors. As a consequence of how the industry has developed there is a considerable amount of movement of specific hazardous wastes between Merseyside and other authority areas, not only in the North-West Region, but throughout the UK. This reflects the specialist treatment requirements for many hazardous wastes.

Questions Relating to Self-Sufficiency in Merseyside:
Do you believe that Merseyside should plan to make provision for all waste arising in Merseyside, i.e. aim for self-sufficiency?
Are there any specific wastes that you consider Merseyside should be self-sufficient in the management of (please tick box relevant box(es))?

	Municipal Solid Waste
	Commercial Waste
	Industrial Waste
	Construction, Demolition and Excavation Waste
	Hazardous Waste
	Agricultural Waste
	Low Level Radioactive Waste
	Other Wastes (Please Specify)

Do you believe that Merseyside should aim to plan for 'net self-sufficiency' and potentially accommodate a range of wastes from other areas of the UK?

Question Relating to Evidence Gaps:
Do you consider that there are other areas of waste management where robust data will be needed to enable effective planning for the future?

Options for Self Sufficiency in Merseyside:

OPTION 2.1 - Continue to export the majority of waste produced within Merseyside into neighboring sub-regions.

[10] Based on figures collated and presented in the Merseyside 'Initial Needs Assessment Report' (August, 2005).

Implications: Failure to comply with the requirements of National and Regional policies which aim to achieve sub regional self-sufficiency and continuing reliance placed upon facilities located beyond the Merseyside boundary. This leads to a significant risk that the Waste DPD may be considered unsound at examination. Other surrounding Waste DPDs and municipal waste management plans may not make provision for accommodating Merseyside's waste. This would represent a continuation of the Industry-led approach.

or

OPTION 2.2 - Make provision for waste management facilities to accommodate a total quantity of waste arisings equivalent to that forecast to arise in Merseyside, with the exception of waste which requires management at specialised facilities.

Implications: The majority of Merseyside's waste is managed within the boundaries of the sub-region thus providing employment opportunities and reducing export to other areas. This will require the construction of new waste management facilities. More specialized facilities provided on a regional basis which represent economies of scale and attract private investment. Hazardous wastes and other wastes requiring specialist disposal and treatment may need to travel significant distances to reach its destination.

or

OPTION 2.3 - Plan for waste management facilities to accommodate the total quantity of arisings from all waste streams equivalent to that forecasted to occur in Merseyside.

Implications: This ensures that sufficient management capacity is available to handle quantities of waste equivalent to that arising in Merseyside. This provides flexibility for Merseyside to develop more treatment and disposal facilities, including potentially more specialist facilities requiring skilled workers. Merseyside could provide a regionally and nationally significant treatment/ disposal capacity.

or

OPTION 2.4 - Make provision for waste management facilities to accommodate the total quantity of arisings from all waste streams equivalent to that forecast to arise in Merseyside but also make provision for additional facilities to manage waste from areas of the region less capable of providing additional waste management facilities.

Implications: Merseyside may not be able to accommodate the full range of facilities which will be required to manage all waste produced, e.g. Merseyside is underlain by major aquifer with limited scope for creating new non-hazardous and hazardous waste landfill void. However Merseyside's geography may well make it possible to plan for additional built waste facilities which provide capacity to manage waste produced from surrounding areas. Where Merseyside has limited scope to provide certain types of waste facilities, such as landfill, this waste would be sent to other less densely populated or environmentally less sensitive areas in nearby areas.

5.4 KEY ISSUE 3 – IDENTIFYING SITES FOR NEW WASTE MANAGEMENT FACILITIES

5.4.1 If sustainable waste management is to be achieved across Merseyside and diversion of waste away from landfill is to be maximised then there will inevitably be a need for new and enhanced existing waste management facilities. It will be necessary to enhance existing facilities to provide the required waste treatment capacity. Any new waste management facilities should be located at suitable sites and then safeguarded throughout the life of the Waste DPD.

5.4.2 Government guidance (Planning Policy Statement 10 – 'Planning for Sustainable Waste Management' and the accompanying Companion Guide) states that waste planning authorities are expected to identify sites and areas suitable for new or enhanced waste management facilities for the waste management needs of their area. Particular regard should be made to the Regional Spatial Strategy with sites allocated to support the broad pattern of waste management facilities and support of the apportionments included in RSS. However at the current time the Regional Spatial Strategy (currently the subject of an Examination in Public) does not provide any advice about what represents a regionally significant facility and indicative locations for such facilities to aid the production of Development Plan Documents.

5.4.3 In order to identify appropriate locations for new waste management facilities then a method must be agreed and then applied to identify sites. The following section details the important elements which must be considered in any site search methodology and provides an opportunity to comment upon it.

5.4.4 What is Site Selection and Appraisal?

5.4.4.1 If Merseyside is to manage more of its own waste and achieve recycling targets then it is likely that a significant number of new and enhanced facilities will be required. A refined assessment of Merseyside's waste management needs is being developed in preparation for the Waste DPD Preferred Options and will aim to define the numbers and types of facilities needed across Merseyside. The results of this consultation and the revised needs assessment will be used to inform the site identification method.

5.4.4.2 The Merseyside Districts have already commenced work on a site selection process however the results of this ongoing process of evidence gathering will not be available until later in 2007 and will be used to inform the Waste DPD Preferred Options. Any adopted methodology will be consistently applied across Merseyside with a view to identifying a range of potential sites which could be used in the future to accommodate sustainable waste management facilities.

5.4.4.3 Any site selection methodology must first identify all available areas of land which may be appropriate for the location of a waste management facility and through a process of different screening and testing (including environmental

and locational criteria) identify locations that have potential to accommodate future waste management processes. The number, size, location and distribution of sites needed will be informed by the results of this consultation, specifically the responses to Issues 2, 3, 4 and 5.

Questions Relating to General Principles of the Site Selection Methodology:
Do you consider that a proactive approach of identifying appropriate sites and encouraging waste management facilities to be established on these sites is the best approach for Merseyside?
Should the plan identify specific sites for the development of waste management facilities or 'areas of opportunity', such as certain industrial estates or other opportunity areas?
Once sites are identified as suitable for waste management facilities then do you believe that these sites are safeguarded for future waste development?

5.4.5 Facility Types

5.4.5.1 'Issue 5 – Waste Treatment and Disposal Options' outlines a number of different types of waste management treatment and disposal facilities. For the purposes of site selection it is necessary to consider broad types of operations as this allows the application of certain criteria across large geographic areas such as Merseyside.

5.4.5.2 Three distinct categories of waste management facilities can be defined based upon the nature and scale of operation undertaken.

- *Facility Category 1*: Large scale waste management facilities which require large areas of open land, such as landfill or open windrow composting activities. These facilities have significant potential to create emissions which may cause nuisance to neighbouring land users.
- *Facility Category 2a*: Facilities typically housed in an industrial scale building or large warehouse, but may also include sites in the open air such as household waste recycling sites, mechanical biological treatment facilities, materials recycling facilities, thermal treatment plants and mechanical treatment plants.
- *Facility Category 2b*: Hazardous waste treatment and storage facilities tend to be located in similar settings to Category 2a facilities however because of the nature of the waste stream then they must be located further away from sensitive receptors.

5.4.5.3 The environmental sensitivities of these two categories of facility are generally of a different order of magnitude. Category 1 facilities, particularly landfill, give rise to a wider range of concerns over potential conflicts with various aspects including land use, water pollution, biodiversity, landscape and visual intrusion and disturbance to local residents and amenity.

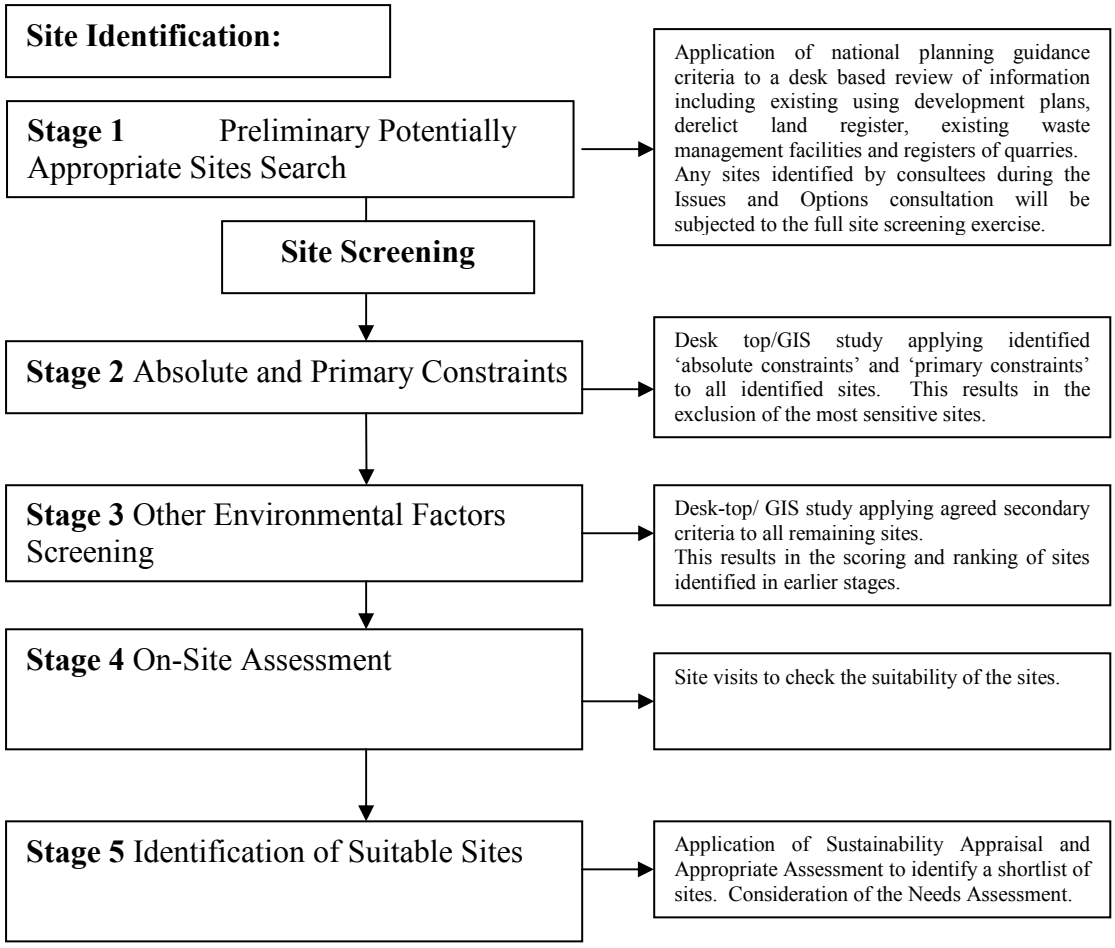
5.4.5.4 Hazardous waste management facilities involve the handling and treatment of waste with particular hazardous properties. Although this type of facility has not been treated separately from other Category 2 facilities there are certain hazardous waste operations which may need sites which are further away from

sensitive receptors in a similar way to how Category 1 facilities are treated in any site search.

Questions about the Split of Facility Types:
Do you consider the approach outlined represents an adequate split of facilities for the purpose of a site selection exercise or do you believe that more specific categories of sites need to be considered?
Hazardous waste storage and treatment facilities have been identified separately, but do you consider there are other types of waste management facility which require a separate category?
Should the criteria be applied to specific technologies rather than broad facility types?
Should criteria be weighted differently for Category 1, 2a and 2b facilities?

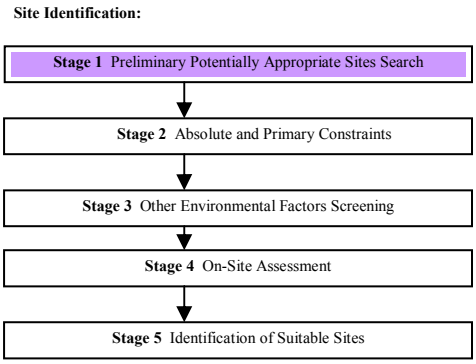
5.4.6 Summary of the Stages in the Site Selection Process

5.4.6.1 The following diagram summarises the various stages of the proposed site search exercise.



5.4.7 Site Search for New Waste Management Facilities

5.4.7.1 STAGE 1 - Preliminary Potentially Appropriate Sites Search



5.4.7.1.1 National planning guidance lists the types of existing land use which should be considered when searching for sites for new waste management facilities. There are a range of sites which should be considered (see table below). In addition, any sites suggested during the Issues and Options consultation will also be subjected to the full site assessment process. It is important to identify the most appropriate sites with the fewest constraints for waste management facilities.

5.4.7.1.2 Given the requirements of the guidance, the contentious nature of establishing waste management facilities and potential site specific issues there are only a limited number of sites which may be considered suitable across Merseyside. The following table identifies the types of potential sites:

Question Relating to Preferred Locations for Waste Facilities

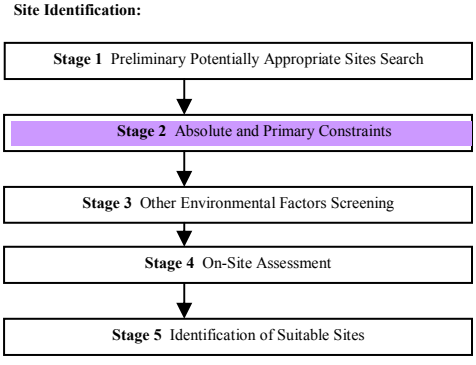
Where do you think new waste management facilities should be located? Rank your choice of sites in order of preference with 1 being the most preferred and 10 the least preferred. The results of the consultation will be used to inform the site search process.

Site Type – Options for Locating Waste Management Facilities	Order of Preference
Business Parks and Light Industrial Areas	
Industrial areas containing heavy or specialised uses	
Contaminated land	
Brownfield land (including derelict land, redundant sites and existing sites or buildings)	
Working quarries and borrow pits	
Former minerals sites	
Existing landfill sites	
Former landfill sites	
Redundant agricultural buildings	
Sites previously occupied by other types of waste management facilities	
Sites adjacent to transport nodes/sidings	
Countryside and green belt	
Urban areas	
Other site type (please specify)	

The results of this consultation event will be used to inform the development of the site selection exercise. Responses can be used to identify where stakeholders in Merseyside consider the best locations for waste management facilities to be.

5.4.8 Screening of Potential Sites

5.4.8.1 STAGE 2 - Absolute Constraints and Primary Constraints



5.4.8.1.1 Following the identification of potential sites using the Stage 1 search process it is then necessary to implement the progressive application of environmental and location criteria with an aim of eliminating the more sensitive sites. A good site screening process should identify any 'absolute constraints' and remove those affected sites from the list.

5.4.8.1.2 The following is a list of absolute constraints or sensitive receptors which will need to be identified[11]:

- Within National or International Site of Nature Conservation Interest e.g. SSSI, Ramsar, NNR, SAC, SPA
- Within a building or site of international or national heritage importance e.g. World Heritage Site, Scheduled Ancient Monument, Listed Building
- Within close proximity of a sensitive receptor, specifically:
- residential areas
- schools
- hospitals
- food processing plants
- Located within a floodplain (1 in 100 year probability of flooding)
- Located on Grade 1 or Grade 2 agricultural land*

**with the possible exception of open windrow composting facilities*

5.4.8.1.3 Note that there is also a need to apply appropriate screening distances around sensitive receptors, such as residential areas or schools. We would be interested to hear about what consultees consider to be an appropriate buffer distances for the various waste facilities.

[11] The list of absolute constraints is based upon PPS10 Annex E and discussions held with members of the Waste DPD Steering Group.

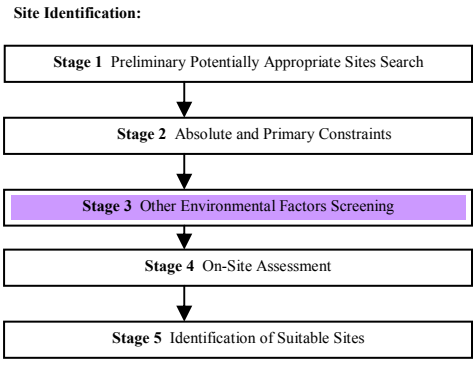
Question Relating to Options for Appropriate Screening Distances from Sensitive Receptors:

Please indicate which you consider to be the most appropriate option for applying distance for different categories of waste management facility away from each of the identified sensitive receptors. The results of the consultation will then be used to inform the site search process.

	Category 1 Sites (see previous definition)				**Category 2a Sites (see previous definition)**				**Category 2b Sites (see previous definition)**			
Sensitive Receptor	>100m	>250m	>500m	>1000m	>100m	>250m	>500m	>1000m	>100m	>250m	>500m	>1000m
Residential area												
School												
Hospital												
Food processing plant												
Building of National or International Heritage Importance												
Site of National or International Importance for Nature Conservation												
Grade 1 or 2 Agricultural Land												
Floodplain												

5.4.9 Continued Screening of Potential Sites

5.4.9.1 STAGE 3 - Other Environmental Constraints



5.4.9.1.1 For any site there will be other criteria including additional planning and environmental constraints which will need to be carefully considered before allocating sites for potential waste management facilities. Although these criteria are important it may be possible to address these concerns

through various precautions, such as a revised design for the facility or amended operational management practices.

5.4.9.1.2 By scoring sites according to different environment constraints it is possible to identify those sites with fewest constraints.

Question Relating to Preferred Locations for Waste Facilities:

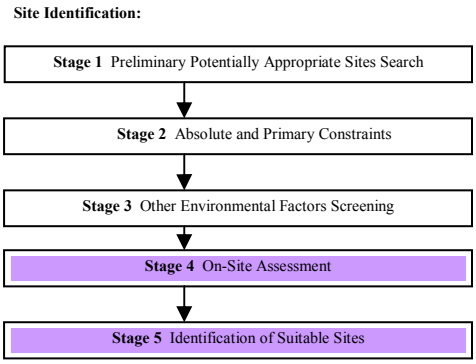
An element of weighting can also take place depending upon the relative importance of certain environmental constraints. We would be interested to hear about how you view the following environmental constraints and whether you think there are others. This will then assist with any weighting adopted in the adopted site search methodology.

Which environmental constraints do you think are the most important? Rank your top five environmental constraints in order of importance with 1 being the most important and 5 the least important.

	Order of Preference for Each Category of Site (see previous definition)		
Environmental Constraint	**Category 1 e.g. Landfill/ Open Composting**	**Category 2a e.g. Enclosed Waste Transfer/ Treatment**	**Category 2b e.g. Hazardous Waste Facility**
Landscape Designations (Statutory and Non-Statutory Designations e.g. coastal planning zones, landscape renewal areas)			
Greenbelt Designation			
Green Space (as defined in Unitary Development Plans)			
Green Corridors and Access Routes			
Nature Conservation Interests, e.g. Local and National Reserves, Geodiversity.			
Archaeology and the Historic Environment			
Flood Plains (subject to tidal or river flooding)			
Groundwater Vulnerability Area, including Source Protection Zones			
Controlled Waters (including rivers, streams and lakes)			
Adequacy of Existing Road Network to Handle Traffic			
Access to Alternative Methods of Transport including Railway, Canal or Port			
Distance from Source of the Waste and Resulting Mileage to the Final Management Destination			
Aerodrome Safety			
Land in Agricultural Production			
Mineral Deposits which could Potentially Lead to the Sterilisation of Resources			
Air Quality Management Areas			
Other Environmental Constraints (Please Specify)			

5.4.10 Final Stages of the Site Selection Process

5.4.10.1 STAGE 4 – Onsite Assessment



5.4.10.1.1 Following the application of the site selection procedure and identification of a shortlist of potential sites, then site visits will take place to verify whether the site is indeed suitable for a new waste management facility. However this is the final stage of the identification process which will take place before the identification of Preferred Options (November 2007).

Question Relating to Environmental Constraints:
Do you consider that all environmental constraints have been identified or do you think other factors must be considered during the development of the site selection process?
Do you consider that there are certain constraints which are of greater importance than other criteria? If so, what are they?

Question Relating to Known Sites:
Do you know of specific sites which may be appropriate for sustainable waste management facilities? If so, then we would be interested to hear about them at this early stage of the plan's development.

5.5 KEY ISSUE 4 - SPATIAL PATTERN/ DISTRIBUTION OF FACILITIES TO SERVE LOCAL COMMUNITIES

5.5.1 Waste is generated in developed areas where people work and live. National guidance refers to the waste being managed at the nearest appropriate waste management facility. The aim of the national guidance is for communities (including industries) to take greater responsibility for their own waste. It seeks to ensure that there is sufficient and timely provision of waste management facilities to meet community needs.

5.5.2 Given the distribution of waste production throughout Merseyside the implication is that there will be a proliferation of smaller facilities to meet the needs of individual communities though national guidance is not specific on this matter. It is important to recognise that smaller facilities may not be an attractive option from a sustainability perspective, and may not be economically viable thus reducing levels of investment. With a larger number of smaller facilities, the potential effects of nuisance, conflicting uses and regulatory burdens can become more widespread and difficult to manage. The Sustainability Appraisal informs the development of the policies included within the Waste DPD and considers issues such as the location of new facilities.

5.5.3 Larger waste park developments, where several waste management facilities are located on the same site, are an alternative option worthy of consideration. Some existing industrial estates may already have appropriate infrastructure in place along with established compatible surrounding land uses. Waste parks may incorporate a range of transfer, treatment and recovery technologies. A limited number of waste park developments could be established to serve Merseyside offering considerable benefits over a larger number of smaller scale facilities distributed throughout the area. However in order to accommodate this, larger development sites (approximately 10 to 15 hectares) would be required.

5.5.4 A mixture of small and large sites may provide a balance of all these factors. The Regional Waste Strategy states that waste development facilities for the treatment of commercial and industrial waste should be sited as close as possible to the sources of waste to satisfy the planning objectives and ensure volumes of waste are not unnecessarily transported around the region or exported from it. The North West Regional Waste Strategy states that municipal waste arisings should be managed and disposed of within waste disposal authority areas as far as is practicable. Given the nature of the construction, demolition and excavation waste stream and its suitability for use on some exempt sites, it is considered unlikely that much of the hard and inert fraction is transported significant distances out of Merseyside. Much of this waste will remain within Merseyside for reuse in engineering and ground work.

5.5.5 Where relatively low levels of arisings requiring specialist treatment are produced, such as hazardous waste and radioactive waste, then a network of specialist facilities need to be established to deal with these specific wastes.

Compared to other waste streams, hazardous and radioactive waste tends to travel a greater distance. This type of regionally and in some cases nationally significant specialist facility may only become attractive from an investment perspective when economies of scale are established.

Questions Relating to the Spatial Distribution of Sustainable Waste Management Facilities:
Should Merseyside plan to encourage facilities to be located within close proximity to the main centres of population and industry?
Should Merseyside seek to identify sites where a number of waste management facilities are clustered together or should facilities plan to be established throughout Merseyside to serve local communities and businesses?
Of those outlined below, which Spatial Strategy should Merseyside adopt (please indicate what you consider to be the preferred option using a tick)?

	Option	Description of Option (see below)
	4.1	Diffuse model
	4.2	Centralised model
	4.3	Cluster model
	4.4	Combination of 4.1, 4.2 and 4.3

Options for establishing facilities which serve local populations:

OPTION 4.1 (Diffuse Model) - Merseyside should plan for small facilities which can serve local populations and businesses and effectively manage the full range of wastes produced.

Implications: A number of waste management facilities would be established throughout Merseyside based around the population centres and location of industry centres. The high numbers of separately located facilities throughout a highly populated area such as Merseyside will increase the potential for conflicting land uses and neighbour disputes.

or

OPTION 4.2 (Centralised Facilities Model) – Merseyside should plan for strategically located large sites with a view to establishing a limited number of resource recovery parks which will serve Merseyside as a whole.

Implications: Reduced number of waste management facilities across Merseyside with waste management facilities clustered into a much more limited number of locations. This option is likely to result in waste having to travel an increased number

of miles to reach a treatment/ disposal point. Reduced number of sites with waste management operations may lead to a reduction in potentially conflicting land uses.

or

OPTION 4.3 (Cluster Model) - Merseyside should aim to plan for a number of strategically located bulking points for municipal solid waste and commercial and industrial waste which will serve the local communities and businesses. The waste should then be bulked up for onward transit to strategically located treatment and disposal facilities where waste will then be managed.

Implications: By locating waste bulking points in close proximity to the centres of waste production there will be a reduction of miles travelled by waste produced. The large scale treatment/ disposal facilities would be strategically located on a limited number of sites reducing potentially conflicting land uses.

or

OPTION 4.4 (Combination Model) – Merseyside should be serve by a combination of the diffuse distribution of facilities, centralised facilities and clustered facilities options.

Implications: This option will ensure that the needs of local communities are satisfied but also provides opportunities for larger scale, strategic facilities (economies of scale) to be established if the industry comes forward with applications.

5.6 KEY ISSUE 5 - WASTE MANAGEMENT TREATMENT & DISPOSAL OPTIONS

5.6.1 The Merseyside Authorities (specifically St Helens, Sefton, Liverpool, Knowlsey and Wirral) have completed an Initial Needs Assessment[12] which considers the future waste management capacity requirements across the sub-region. The report considers current and future arisings of municipal, commercial/ industrial, construction/ demolition and excavation and hazardous wastes using different growth predictions. Over the next few months the Needs Assessment will be extended and revised to include consideration of Halton, review the Initial Needs Assessment and specify the number and types of waste management facilities required across Merseyside over the next fifteen years.

5.6.2 Merseyside is currently reliant upon landfill as the main method of dealing with the waste produced (for example in 2003/04 almost 90% of Merseyside's municipal solid waste was disposed to landfill[13]). Substantial quantities of other waste streams also continue to be landfilled.

5.6.3 As the Waste DPD progresses the required numbers and type and mix of facilities will be more precisely defined and proposed locations identified. This

[12] SLR Consulting Ltd – "Waste Planning: Initial Needs Assessment for Waste Management Facilities in the Merseyside Area" (August, 2005)
[13] MWDA – "Best Value Performance Plan (20004/05)" (Final Draft, 30th June 2004)

level of detail will be included in the Preferred Options report which will be the subject of further public consultation. The following section provides a description of the most common types and processes of waste treatment and disposal which will be considered during the development of the Waste DPD.

5.6.4 Treatment and Disposal Challenges of Different Waste Streams

5.6.4.1 *Municipal Solid Waste*

5.6.4.1.1 The EU Landfill Directive states that an increasing quantity of biodegradable municipal waste must be diverted away from landfill and managed in more sustainable ways. Landfill diversion targets stated in the Directive must be met otherwise financial penalties will be imposed upon the UK Government. These fines are likely to be passed down to the non-compliant local councils. There are a number of alternative waste management techniques to landfill which will be considered as part of the sustainable waste management solution for Merseyside.

5.6.4.1.2 The Merseyside Joint Municipal Waste Management Strategy[14] sets out a vision for how waste management arrangements will be developed and implemented over the short, medium and long-term to meet the challenges of dealing with the municipal solid waste produced in Merseyside. It includes programmed actions aimed at ensuring that Merseyside recycles as much of this waste stream as possible and diverts waste away from landfill to achieve the challenging statutory targets set. The Strategy was subjected to a public consultation during its development and in February 2005 12,000 questionnaires relating to waste management options were distributed to residents of Merseyside. Responses from this consultation exercise were used to inform the development of the Strategy.

5.6.4.2 *Commercial and Industrial Waste*

5.6.4.2.1 Significant quantities of the estimated 1,489,540 tonnes of commercial and industrial waste was produced in 2002/03 (approximately 731,800 tonnes of industrial waste and 757,740 tonnes of commercial waste[15]) are considered similar in nature to municipal waste and therefore require similar treatment and disposal facilities.

5.6.4.2.2 In 2003 approximately 50% of all Commercial and Industrial waste produced in the North West was landfilled[16].

5.6.4.2.3 Although at the current time there is little direct legislative control over commercial and industrial waste, it is possible that statutory targets may be set to encourage more sustainable management of this waste. Whilst there may be some capacity provided within facilities handling municipal waste

[14] "Joint Municipal Waste Management Strategy for Merseyside" – Merseyside Waste Partnership (Version 2, June 2005), available from www.merseysidewda.gov.uk.
[15] Based upon data from the Environment Agency 'Commercial and Industrial Waste Survey 2002-03' and the Initial Needs Assessment, SLR Consulting (Aug 2005)
[16] Estimate based upon "A Waste Strategy for the North West: The Challenge Ahead", Banks Foundation Report (April, 2004)

it is likely that the majority of commercial and industrial waste will require the development of separate facilities close to their point of production.

5.6.4.3 ***Construction, Demolition and Excavation Waste***

5.6.4.3.1 Construction, demolition and excavation wastes mainly arise from the construction and demolition industry along with some from house improvement work. Future waste growth of C&D waste is hard to accurately predict, since it is linked not only to continued economic growth but also to the specific construction projects being carried out in Merseyside in any given period. The majority of construction, demolition and excavation wastes generally comprises materials such as brick rubble, clay, plaster, concrete, subsoil and topsoil but may also contain other materials such as metal, plastic and potentially hazardous materials such as asbestos. Much of this material can be dealt with in sustainable ways, such as the reuse of material onsite and/ or recycled to produce useable material.

5.6.4.3.2 According to the results from the most recent Capita Symonds' work, carried out on behalf of the then Office of the Deputy Prime Minister ('*Survey of Arisings and Use of Construction, Demolition and Excavation Waste as Aggregate in England in 2003*'), approximately 2.5 million tonnes of construction and demolition waste was produced in Merseyside in 2002[17]. Across the North West, like many other regions of the UK, there is a lack of accurate data for this waste. Work is currently underway to gather more accurate and up to date data relating to Merseyside. At the current time approximately 20% of construction and demolition waste generated in the Merseyside is disposed of direct to landfill, with around 31% used to produce an aggregate or soil and a further 37% sent to registered exempt sites (e.g. minor infilling work or agricultural soil improvement).

5.6.4.4 ***Agricultural Waste***

Following the implementation of the new Agricultural Waste Regulations 2006, some of Merseyside's 211,296 tonnes[18] of different agricultural wastes (such as packaging wastes, veterinary products and organic wastes) from 598 farm holdings[19] will need to be handled at facilities in a similar way to commercial and industrial wastes. Historically large quantities of agricultural waste has been managed on-farm, therefore this is a waste stream which must be planned for accordingly.

5.6.4.4.1 There is little accurate data about Merseyside's agricultural waste largely because the waste has only recently become a 'controlled waste'.

[17] Tonnage data from 2003 ODPM survey of CD&E arisings and calculated as a proportion of the North West data based on the split in the population of Merseyside compared to that of the North West Region using 2001 Census data.

[18] 2003 Source of data Regional Agricultural Waste Survey, Environment Agency. Merseyside figure has been extrapolated from the Regional agricultural waste figure based upon the proportion of total agricultural holdings in the region.

[19] Department of Environment, Food and Rural Affairs' June 2004 Agricultural Survey

However this will be addressed over the coming months through a Merseyside Agricultural Waste survey.

5.6.5 Waste Recovery & Recycling Options

5.6.5.1 In accordance with the waste hierarchy following the reduction of waste at its point of production, the next preferred method of managing waste in line with the waste hierarchy is re-use followed by recycling (including composting), energy recovery and finally landfill which is the least favoured option.

5.6.5.2 Recycling, including composting, involves putting the waste through a process so that it can be used again either for the same or an alternative purpose. For example composting involves the processing of organic waste (such as grass or tree cuttings) to produce compost which can then be spread onto land as a soil improver. Energy recovery is the means of generating energy from waste material. By recovering heat energy can be used to power a manufacturing process rather than using alternative forms of fuel such as gas or coal.

5.6.5.3 Different types of waste management facilities have different requirements in terms of landtake and infrastructure and can have varying environmental and amenity effects. For example, sites for sorting and recycling skip waste and metal recycling can take place on relatively contained sites. On the other hand, construction and demolition waste processing sites need larger areas to allow good separation of materials for producing the best quality products and allow adequate stockpiling of materials. Waste recycling facilities are also likely to generate noise and dust emissions and so careful siting is essential to prevent an unacceptable level of nuisance to local populations and neighboring land uses. These issues are discussed further in 'Issue 3 - Site Selection'.

Question Relating to Waste Management Facilities and Disposal:
Should the allocation of sites be specific to different types of facility and waste types?
Should criteria based policies be used to identify potential uses at allocated sites?

5.6.5.4 *Different Treatment Technologies*

5.6.5.4.1 If waste is to be managed across Merseyside in a more sustainable manner then it is important that there is an adequate number and mix of different facilities which can handle waste produced. Waste management facilities can be split into physical treatments, biological treatments and thermal treatments. The following section attempts to describe some of the more common technology types which will be considered during the development of the Waste DPD.

5.6.5.4.2 *Physical Treatments & Transfer*

5.6.5.4.2.1 *Inert treatment facilities* – commonly involve the crushing and mechanical screening of construction, demolition and excavation wastes such as soils, concrete and rubble to produce products for sale and use in construction. Facilities can be undercover but are more commonly located in the open often with perimeter screening installed to minimise environmental impact.

5.6.5.4.2.2 *Materials Recycling Facilities* – normally receive recyclable waste segregated from other commercial and municipal waste by the producer including paper, glass, card, plastics, steel and aluminium. Waste is mechanically sorted using various techniques, separated further, bulked up and transferred on to an authorised reprocessor with residual waste sent offsite for disposal or further treatment. Modern materials recycling facilities (MRF) are undercover and include measures to minimize noise, litter, dust and odour.

5.6.5.4.2.3 *Mixed Waste Processing Facilities* – commonly larger than MRFs and undercover, involving both physical and biological processes, depending upon the chosen technology. Imported wastes treated at the facilities include residual wastes from householders and commercial premises. Mechanical biological treatment is an increasingly common form of mixed waste processing facility. The facilities mechanically separate recyclates from the mixed waste stream at various points through the process and produce a dried mixed material which can be used as a refuse derived fuel or subjected to further refinement to produce a compost material for use in reclamation projects.

5.6.5.4.2.4 *Waste Transfer Stations/ Bulking Stations* - waste transfer stations serve a number of areas where transport of waste direct to a disposal facility is not an option. Whilst the purpose of waste transfer facilities is essentially to bulk up wastes and reduce the overall transport requirements of waste collection, they also invariably involve an element of sorting to separate materials for recycling, recovery or treatment along with some residual material sent for disposal off-site. Modern waste transfer stations vary in scale of operation and types of waste accepted but are located undercover.

5.6.5.4.2.5 *Household Waste Recycling Centres* – facilities where the public can bring their household waste, including bulky goods. Designated recycling points and skips are located at these sites to enable the bulking of a range of recyclable wastes including green waste, dry recyclables and electrical goods. Deposited waste is then bulked up for transport to other authorised facilities.

5.6.5.4.2.6 *Bring sites* – small recycling sites that accept recyclable wastes such as bottles, paper and textiles which are placed in small containers. These sites are often located at supermarkets and other locations regularly visited by householders. Collected material is transported on for further waste treatment facilities or direct to suitable reprocessors.

5.6.5.4.3 *Thermal Treatments*

5.6.5.4.3.1 *Energy from Waste (EfW)* - a process by which heat is applied to waste in order to sanitise it and reduce its bulk prior to final disposal. EfW facilities generate electricity and/or heat from the waste gases through the use of a boiler, steam turbine and downstream generator. Thermal treatment is used as an integral part of integrated waste management throughout Europe because it is a safe, proven technology superior to landfill and is compatible with high levels of recycling. The energy produced can be attractive to certain industries that require large amounts of fuel. Energy from Waste facilities produce substantial quantities of waste in the form of ash which can be used in the manufacture of building materials, along with air pollution control residues which require treatment and disposal at appropriate facilities. Flue gas clean up measures would be required for emissions from energy from waste facilities. The typical unit capacities of an EfW plant range from 45-200,000 tonnes per annum, but can be up to 700,000 tonnes per annum.

5.6.5.4.3.2 *Pyrolysis* - a medium temperature thermal process where organic materials in the waste are broken down (only carbon-based materials can be pyrolysed) under the action of heat in the absence of oxygen. Pyrolysis is similar to the process that produces charcoal. The waste is normally pre-sorted to remove the majority of the non-organics and may be mechanically processed to homogenize the feedstock. The pyrolysis process heats the waste, typically to around 500oC, and breaks down plastics, paper and other organic derived materials to produce a gas. This gas may be condensed to produce a pyrolysis oil. The pyrolysis oil or the gas may be used as a fuel to generate electricity. Flue gas clean up measures would be required for emissions from pyrolysis facilities. A solid slag (char) is also produced which may require disposal.

5.6.5.4.3.3 *Gasification* - operates at a higher temperature range than pyrolysis, typically 1000-1200ºC. A controlled throughput of air or oxygen is used to partially combust the waste to achieve higher temperatures. Additionally water is added to the gasifier, either as steam or from within the waste. At these high temperatures the water 'cracks' into hydrogen and oxygen, the oxygen reacting further with the carbon and the waste material. As with pyrolysis the gas produced (known as syngas) can be combusted to generate electricity. A solid residue (char) is also produced which usually requires disposal if no markets for recycling are available. Flue gas clean up measures would be required for emissions from gasification facilities. At the current time there are few gasification facilities operational in the UK.

5.6.5.4.3.4 *Autoclaving* – waste and high temperature steam are fed into a drum resulting in the breakdown of organic material producing a sterilised material with a crumb like consistency. The residue then needs further processing through mechanical sorting to remove recyclates. The crumb-like fibre material can be used as a secondary material in building

products or packaging, or as a refuse derived fuel. At the current time there are few autoclave facilities operational in the UK.

5.6.5.4.4 *Biological Treatments*

5.6.5.4.4.1 *Open windrow composting* – involves a biological process in which micro-organisms convert biodegradable matter into a stabilized composted material. Facilities accept green waste (e.g. branches and grass cuttings) from householders and businesses, shred the waste and place it into windrows. The process takes place outside or in covered buildings, generally over 8-14 weeks with regular aeration usually achieved through turning. Open windrow composting activities can be popular with farmers and provide an opportunity for farm diversification.

5.6.5.4.4.2 *In-vessel composting* – composting process takes place within a vessel where conditions can be carefully controlled to ensure effective material breakdown. The closer control of the process allows a wider range of biodegradable waste types (including kitchen waste potentially containing meat) to be accepted in comparison to open windrow composting. Following initial sterilization period the compost can be stored in a similar way to open windrows.

5.6.5.4.4.3 Composted material from the various biological processes can be spread on land as a valuable soil improver, with the addition of organic matter helping to improve soil structure and moisture retention.

5.6.5.4.4.4 *Anaerobic digestion* – treatment of biodegradable waste within an enclosed vessel, in the absence of oxygen using microbial activity. Waste types accepted include wet, organic wastes potentially including the putrescible element of household wastes. The digestion results in the generation of biogas which can be used to generate heat/ electricity, stabilised digestate and liquor which can both be used as soil improvers. This technology is widely used in sewage treatment works.

Questions Relating to Waste Treatment Techniques:
Do you think the waste 'resource' could be attractive to existing industries within Merseyside, e.g. through co-located energy from waste developments? If so, how should Waste DPD policy help facilitate this?
Do you believe that new waste management facilities should be co-located on existing waste management facilities?
How should the Waste DPD accommodate the required level of flexibility required to adapt to the rapidly evolving waste management scene?

Options for identifying different technologies on potential sites:

OPTION 5.1 - Sites to be allocated on the basis of the specific waste facility type.

Implications: Sends a very clear message to the Industry as to what facilities are expected to be developed and where. By providing facility specific allocations then industry has the assurance that the proposed facility is appropriate for the site and a

substantial amount of front-end consultation has already taken place. Other stakeholders, including communities, are also aware of likely use of a site. However the approach may lack flexibility and hinder the development of evolving technologies. Allocating to specific facility types or technologies may restrict future flexibility as the plan and sustainable waste management in Merseyside develops. By allocating specific facilities to different sites then the sites will receive a level of protection until a suitable operator steps forward.

or

OPTION 5.2 - Sites to be allocated for a variety of different waste facilities.

Implications: Provides greater flexibility and allows the Industry to make decisions based on the needs of the market at the time. This option may restrict the establishment of new technology types which emerge following the preparation of the Waste DPD. This may lead to the early use of the more favorable sites for certain technologies leading to further restricted options for other technologies.

or

OPTION 5.3 - A combination of facility specific allocations along with allocations of sites which are potentially suitable for a wide range of different facilities.

Implications: The combination of site allocations allows a range of sustainable waste management facilities to develop in Merseyside but reserves certain sites for key facility types. This sends a clear message to industry but also provides an element of flexibility.

or

OPTION 5.4 - Using criteria-based policies for identifying potential waste management uses at allocated sites (see also Issue 9).

Implications: By providing a non-specific approach there is a substantial amount of flexibility offered for industry to come forward with waste applications. The criteria based policies provide a level of assurance/ guidance for the applicant. However this approach does not give a level of assurance that a substantial amount of front-end consultation has been carried out.

5.6.6 **Landfill Disposal**

5.6.6.1 Final disposal as a means of managing waste is the least preferred option and is therefore at the bottom of the waste hierarchy. Regulations have substantially increased the cost of landfill for example by increasing the design and operational standards and placing restrictions on the types of waste that can be disposed of at specific sites. Nonetheless, it will continue to be an essential element of waste management in Merseyside for the foreseeable future. Where alternative markets are not developed landfill is required to manage outputs from different treatment methods and for waste which cannot currently be feasibly recovered or recycled.

5.6.6.2 National guidance makes it clear that the Waste DPD must give adequate consideration to the need for sites dealing with the final disposal of waste.

5.6.6.3 New landfill sites are subject to the landfill location aspects of the Landfill Directive which restricts the locations of potentially suitable sites. There are large tracts of Merseyside underlain by major aquifer, supplying significant quantities of the drinking water supply, which are unsuitable for new landfill development.

5.6.6.4 An assessment of future need for inert, non-hazardous and hazardous landfill will be undertaken by consultants as part of the plan process. The outcome of this assessment will determine whether additional landfill capacity is required in Merseyside. The provision of landfill in Merseyside will be further informed by responses received to the Issues and Options paper.

5.6.6.5 In some cases there may be opportunities for other waste operations to be located at active and closed landfill sites, such as waste transfer stations, waste recycling facilities, household waste recycling centres and electricity generation plants utilizing the landfill gas generated. This approach can capitalise on synergies between the different operations with the residual fraction being disposed of direct to landfill thus reducing the number of vehicles carrying waste on to the surrounding road network. In the past such facilities have been time limited to the life of the landfill site. There are situations where developers are seeking retention of such facilities on open and closed landfills. If their retention would not prejudice the restoration of a landfill site or other policy objectives, such as green belt, then it may be possible to consider their retention on a more permanent basis.

Questions Relating to Landfill Disposal in Merseyside:
Do you consider that Merseyside currently has sufficient landfill void or should Merseyside plan to increase the number of landfill disposal facilities?
If the retention of ancillary operations at landfill sites is not contrary to other policies objectives, e.g. green belt and countryside protection policies, should their permanent retention be encouraged through adoption of a suitable policy?

Options for the landfill disposal of waste in Merseyside:

OPTION 5.5 - The Waste DPD will allocate specific sites for future landfill development, including possible extensions to existing suitable sites.

Implications: The allocation of specific sites for landfill development will ensure that Merseyside has sufficient landfill identified to deal with the residual waste generated following treatment. However the allocation of specific sites will restrict the possible location of future landfills.

or

OPTION 5.6 - Criteria based policies for landfill are included in the Waste DPD for landfill but the specific site identification is left to the Waste Industry.

Implications: This option will provide greater flexibility for identifying suitable sites but will not provide a greater level of certainty as to where sites will be developed. There will be no specific front end consultation associated with the Waste DPD site allocations.

5.7 KEY ISSUE 6 - HAZARDOUS WASTE MANAGEMENT IN MERSEYSIDE

5.7.1 Hazardous waste includes a range of waste types which have a high potential to harm people or the environment as a result of their hazardous properties (there are fourteen hazardous properties such as toxic, flammable, ecotoxic, corrosive, oxidising etc). As a result hazardous wastes are subject to tighter controls than other controlled wastes. Hazardous waste not only include substances widely recognised as dangerous or harmful (such as asbestos, certain contaminated soils and equipment containing ozone depleting substances including fridges and freezers and certain industrial process wastes), but can also include wastes from more familiar activities, such as pesticide containers, fluorescent tubes, waste electrical equipment, engine oils, paints, solvents and certain clinical wastes.

5.7.2 Recent regulatory changes have changed the way hazardous waste is managed throughout the UK. A new regime for the regulation and control of Hazardous Waste was implemented on 16th July 2005 with the introduction of the Hazardous Waste Regulations. This substantially increased the types of waste classified as 'hazardous'. On 16th July 2004 the full requirements of the Landfill Regulations came into force. In effect, the regulations stop the practice of 'co-disposal' of hazardous and non-hazardous waste in the same landfill thus dramatically reducing the number of landfill sites able to accept hazardous waste for disposal. Any hazardous wastes must be pre-treated prior to disposal at landfill. This has also resulted in hazardous wastes being transported over long distances to reach suitable facilities which potentially increase the risk of pollution incidents.

5.7.3 The Regional Spatial Strategy for the North West does not currently provide any clear guidance on the locations of hazardous waste management facilities across the Region. Due to the specialist nature of these facilities and small quantities of certain hazardous wastes it is unlikely that Merseyside will be able to manage all this waste within its boundaries.

5.7.4 In 2003 Merseyside produced approximately 21% of the North West's hazardous waste (180,966 tonnes in 2003[20]) with the highest proportion, 30% being consigned direct to landfill (141,297 tonnes in 2003). The North West is the highest producing region in the UK generating approximately 645,000 tonnes of hazardous waste each year, largely due to the industrial processes within the region. This waste largely consists of wastes from organic and

[20] Based upon figures presented on the Environment Agency's 'Hazardous Waste Interrogator'

inorganic chemical processes, oil contaminated wastes and waste contaminated with asbestos.

5.7.5 Approximately 80% of the hazardous waste produced in Merseyside is exported to specialist treatment and disposal facilities across the UK, with approximately 25% exported to Lancashire for disposal and 15% exported to Greater Manchester. Hazardous waste requires technologies which can attract wastes derived from areas throughout the country.

5.7.6 Despite continuing efforts and initiatives to minimize the amount of hazardous waste produced, there continues to be concern that there will be a shortfall in capacity to treat, recover or dispose of hazardous waste in the future and when this is combined with increased management costs may lead to storage problems and an increase in illegal disposal (including fly-tipping).

5.7.7 *Radioactive waste*

5.7.7.1 Radioactive wastes are classified as high level (HLW), intermediate level (ILW) or low level (LLW) according to their degree of radioactivity and whether they generate heat. Most of these wastes come from the operation and decommissioning of nuclear facilities and consist mainly of paper, plastics and scrap metal with smaller amounts produced by a range of non-nuclear industries such as hospitals, research and educational facilities and the oil and gas industries.

5.7.7.2 At the current time all LLW is transported to the disposal facility at Drigg in Cumbria. This facility is of national importance however the facility is nearing its authorised capacity.

5.7.7.3 There are no major producers[21] of radioactive waste within Merseyside however there are a number of sites that use radiation producing radioactive waste on a smaller scale, including certain hospitals and research laboratories. These sites are likely to only produce limited quantities of LLW. A Merseyside Radioactive Waste survey will be carried out over the coming months to provide some reliable data on the size of this waste stream and this will feed into the Waste DPD Preferred Options.

Questions Relating to Hazardous Waste Management in Merseyside:
How can the plan encourage hazardous and radioactive waste to be minimised?
How should we plan to accommodate Merseyside's hazardous and radioactive waste arisings?
How can the plan encourage a shift towards more sustainable solutions for dealing with hazardous waste produced in Merseyside?

[21] According to data from the National Survey of Radioactive Waste there are 34 major producers of radioactive waste located across the UK.

Options relating to the management of hazardous waste in Merseyside:

OPTION 6.1 - The Waste DPD allocates a sufficient number of sites to manage all Merseyside's hazardous waste arisings, including hazardous waste transfer, treatment and disposal.

Implications: Under this scenario Merseyside allocates a sufficient number and type of sites to enable the management *all* its various hazardous waste arisings. A number of specialized facilities are established throughout the sub-region. Merseyside potentially provides facilities which can be utilized by neighboring sub-regions thereby providing a valuable regionally important capacity. This would result in the net import of waste to Merseyside. The scale of some of the facilities may not be attractive to private investors resulting in a failure to deliver the facilities at sites allocated.

or

OPTION 6.2 - The Waste DPD allocates sites to accommodate specific hazardous wastes resulting in the delivery of regionally/ nationally significant facilities and helping to achieve a net self-sufficiency with respect of hazardous waste.

Implications: Provide valuable regionally significant hazardous waste treatment capacity. Facilities are more likely to represent economies of scale which would be likely to attract private investment. Establishing new, regionally significant facilities would present new employment opportunities for skilled workers across Merseyside. There would be a continuation of waste imports and exports, largely by road, to reach the treatment facilities.

or

OPTION 6.3 - Do not make specific provision for hazardous waste management facilities and instead rely upon the waste industry to propose suitable sites and the use of criteria based policies.

Implications: This option would result in some uncertainty about the location of hazardous waste management facilities however it would provide the waste industry with greater flexibility to identify sites. Planning Authorities would be able to call upon the criteria based policies. Without formal allocation of the sites determination of applications may be delayed.

5.8 KEY ISSUE 7 - TRANSPORT OF WASTE

5.8.1 Within Merseyside there are no waste management facilities capable of accepting waste by alternative modes of transport other than by road. Even when waste is imported or exported by rail or water, it is reliant on final transport to the waste management facility by road.

5.8.2 Waste transported by road can potentially have a significant impact in terms of congestion, nuisance, highway safety and emissions, particularly where heavy goods vehicles use minor roads. Where large amounts of waste need to be transported it may be economically attractive to plan for alternative methods of transportation such as rail and water, pipelines or conveyors. This can help to reduce the effects of a large number of vehicle movements and the alternative methods of transportation could be more sustainable, for example transportation of waste by barge can result in the movement of much larger quantities of waste to a treatment/ disposal facility.

5.8.3 Given the geography of Merseyside it is feasible that the transport of large quantities of waste could be carried out by alternative methods in certain parts of the plan area. The current Unitary Development Plans produced by the individual Merseyside Districts include a number of policies relating to possible alternative methods of transport at proposed new waste management facilities. For example the Halton adopted UDP states that waste developments will, '*…where practicable, utilise sustainable transport modes in place of road transport*'.

5.8.4 Diverting waste movements away from the existing road network and onto more sustainable, alternative modes of transport needs to be encouraged. Consideration should therefore be given to the Waste DPD encouraging the establishment of new sustainable waste management facilities across Merseyside accessible by a range of modes of waste transport and waste related products.

Question Relating to the Transport of Waste within Merseyside
What scope is there for encouraging alternative means of transport, and how can the Plan help to achieve this?
Should the Plan include specific policies to encourage waste facilities to be developed at sites where there is access to alternative methods of transport?
Do you know of any existing sites with a feasible connection to alternative modes of transport which could be developed for new waste management facilities? If so, then please forward any sites and comments through for further consideration.

Options relating to the transport of waste:

OPTION 7.1 - Do not attempt to encourage waste to be transported by alternative methods instead continue to rely upon existing policies at planning application stage to assess the issue.

Implications: The Waste DPD would not encourage new waste management facilities to utilize alternative methods of transportation. This may not change the characteristics of waste management in Merseyside which would be likely to continue on the roads. As a result there would be similar or more HGV movements in Merseyside which would conflict with other plans and strategies such as the Air Quality Management Plans and Local Transport Plan.

or

OPTION 7.2 - Encourage the establishment of new waste management facilities at locations that enable more sustainable modes of waste transport, including docks and rail depots. Encourage alternative modes of transport for specific waste management facilities, such as bulking operations with onward movement.

Implications: New waste management developments would be required to consider the issue of alternative transport when designing facilities. Greater use of alternative transport methods will divert quantities of waste away from traditional road network particularly those facilities moving the greatest volumes of waste. This approach would considerably constrain the choice of suitable locations for new sustainable waste management facilities.

or

OPTION 7.3 - Require all planning applications for sustainable waste management facilities submit transport assessments as part of the information required for validation.

Implications: This option would ensure that the transport of waste is considered adequately as part of the planning application for new waste management facilities. The option would not restrict the location of possible sites to those in easy access of alternative modes of transport.

5.9 KEY ISSUE 8 - LAYOUT AND DESIGN OF NEW DEVELOPMENTS TO SUPPORT SUSTAINABLE WASTE MANAGEMENT

5.9.1 National and regional guidance identifies that waste management must be considered in any new development alongside other important issues.

5.9.2 There are two distinctly different elements to the good design of new development which must be considered in the plan:

i) detailed consideration of waste management issues and promotion of designs and layouts that secure the integration of waste management facilities without adverse impact on the street scene or, in less developed areas, the local landscape.

ii) design and construction of high quality waste management facilities that not only manage imported waste in a safe and responsible manner but also carefully consider their impact upon the surrounding townscape and landscape.

5.9.3 *Promotion of Appropriate Designs and Layouts in New Developments*

5.9.3.1 A significant proportion of Merseyside's population lives in urban areas with high population densities. Many people live in flats and terrace houses and properties which were constructed a number of years ago and were not designed with multi-bin arrangements for refuse collection in mind. This in itself creates challenges for modern sustainable waste management practices, particularly from a waste storage and collection perspective.

5.9.3.2 In addition, the size of the average household has fallen across the country from 2.90 persons in 1971 to 2.32 persons in 2002. This reduction in household size is set to continue, both nationally and in Merseyside whilst the number of single-person households is set to rise dramatically. In 2001 according to the National Census figures approximately 33% of households in Merseyside were single person occupancy. This decline in occupancy numbers is expected to continue into the future.

5.9.3.3 It is likely that this trend in occupancy will result in the changes to the design of houses in the future with the possibility of smaller properties and more flats. This approach raises questions for planning when considering what actually represents good design and encourages more sustainable waste management practices (e.g. separation of recyclables, waste storage and collection). In order to encourage practices which result in higher recycling rates waste management must be carefully considered, alongside other issues, at a development design stage.

5.9.3.4 New commercial and industrial developments must also consider waste management at a design stage and identify opportunities to facilitate sustainable waste management at an early stage in their design. By considering waste related issues in designs, for example through the use of secondary and recycled materials during construction of new developments or designs to minimize waste production at the end of a development's life, more sustainable designs can be achieved throughout Merseyside.

5.9.3.5 There are various measures outside of the Waste DPD which can be used to guide the issue of design standards throughout Merseyside, such as Supplementary Planning Documents or policies presented elsewhere in other Development Plan Documents such as District specific Core Strategies.

Questions relating to the design and layout of developments:
Question: Should the Waste DPD include policies to encourage the layouts of new developments to consider waste-related issues such as waste storage and collection or should this issue be tackled by other Development Plan Documents and Supplementary Planning Documents?
Question: How can the Waste DPD encourage the use of secondary and recycled materials in new developments, and minimize any waste production at the end of the life of the development?

Options relating to the need to consider waste management issues in the design of new developments:

OPTION 8.1 - The Waste DPD assists with good design from a waste management perspective by including specific policies to address the issue.

Implications: Districts would be able to refer to a specific policy which would sit within the Waste DPD to ensure new developments consider sustainable waste management. The issue of design cuts across many different subject areas and by developing policies within the Waste DPD there is the potential for duplication and inconsistency with other policies in planning documents.

or

OPTION 8.2 - Whilst recognising this issue as an important one, the Waste DPD does not include specific policy relating to general design principles in new developments. Instead the Waste DPD informs the development of policy elsewhere which may be detailed in other DPDs or SPDs.

Implications: Districts would rely upon policy being developed in other planning documents rather than the Waste DPD. There is the potential that the specific waste-related message may become lost in more general design policy. This approach could result in inconsistency across Merseyside.

5.9.4 *Design of Modern Waste Management Facilities*

5.9.4.1 To minimize the adverse effects of waste recovery, disposal and transport on the quality of life of nearby residents, minimize risks to the environment and achieve the highest standards of design it is important to ensure that facilities are designed to a high standard.

5.9.4.2 Waste management facilities have traditionally been regarded as low quality, poorly designed facilities, often detracting from their surrounding area. If people's perception of waste is to change then it is essential that waste management facilities are designed and operated to a high standard. Considering that one of the spatial options (outlined in Issue 4) is to locate

sustainable waste management facilities in technology parks or existing industrial parks, they must be designed and operated to a high quality to avoid any blight or negative effects on public or investor perception. Modern waste management facilities are tightly regulated with high standards of environmental management. For such facilities to be accepted in to existing industrial parks then any detrimental effects must clearly be avoided or mitigated.

5.9.4.3 It has now become commonplace for many waste activities to be carried out in an enclosed building which reduces potential issues associated with the activity. Various mitigation measures can also be required through planning conditions that will address the impact of noise, dust, odour, visual intrusion, air and water pollution, vibration and litter.

5.9.4.4 As with all new developments, planning applications for waste management facilities must carefully consider the potential visual impact of their proposals and proposed design. In most cases it is necessary to consider the surrounding locality and ensure the design of a scheme is suitable; this may also include the need for landscaping and planting around the facility.

Questions Relating to the Design of New Waste Management Facilities:
How should the Waste DPD encourage good design at new waste management facilities throughout Merseyside?

Options relating to the design of new waste management facilities:

OPTION 8.3 - New waste management facilities must carefully consider the proposed design to ensure it does not adversely impact on the locality of the area, promotes sustainable waste management and affords a high level of protection of the surrounding environment.

Implications: The development of waste management facilities will be designed to a high standard to ensure it does not impact adversely on the surrounding environment. This would be in keeping with what is expected from modern waste management facilities. Adoption of such a policy would require developers to carefully consider the issues of design and operation (including environmental management).

or

OPTION 8.4 - Continue to assess proposal designs across Merseyside without the benefit of an adopted policy in the Waste DPD.

Implications: New waste management facilities may fail to give sufficient attention to the issue of design which could lead to certain facilities impacting upon the surrounding environment, including visual impacts. Failure to include such a policy may underestimate the importance of the issue. A continuation of this option may lead to inconsistencies of approach across Merseyside and confusion for developers.

5.10 KEY ISSUE 9 - CRITERIA BASED, DEVELOPMENT CONTROL POLICIES

5.10.1 As described in Issue 3 ('Identifying Sites for New Waste Management Facilities') significant effort will be taken to develop and apply a comprehensive site identification and screening methodology for the Waste DPD Preferred Options Report. However it is inevitably that not all locations with potential for waste management facilities will have been identified. Furthermore, over the life time of the Waste DPD, land use will change and potential new sites will become available, synergies may be identified with other strategic developments and the waste industry may come forward with speculative applications.

5.10.2 As a result there may be a requirement to include criteria based policies within the Waste DPD against which we can assess forthcoming planning applications on both non-allocated sites. Similarly different technologies may come forward that have not been identified in the Waste DPD and there must be a mechanism to assess these planning applications. Such a mechanism to determine more speculative applications on non-specified sites will provide the applicants for facilities on such sites with a greater level of certainty.

5.10.3 It is intended to include criteria-based policies covering the following issues within the Waste DPD Preferred Options report:

- Highways and Traffic
- Noise, Dust and Odours
- Protection of Water Resources
- Flooding
- Landscape Issues
- Soil Resources (Best and Most Versatile Land)
- Archaeological and Heritage Issues
- Nature Conservation and Geology (including the Hierarchy of Designations from International to Local).
- Public Rights of Way
- Green Belt
- Types of Waste Facility and Technologies
- Decommissioning, Restoration and Aftercare
- Environmental Management
- Sustainable Design and Master Planning.
- Provision of Environmental Information with Planning Applications

Questions Relating to Criteria-Based Development Control Policies:
Do you agree that criteria for inclusion in development control policies needs to be considered in the areas listed above?
Are there any additional criteria areas that we need to consider which would improve the proposed development control policies?

Options relating to design standards for new waste management facilities:

OPTION 9.1 - Criteria-based development control policies are included in the Waste DPD which allows applications at non-allocated sites to be assessed.

Implications: The adoption of criteria based development control policies provides a method of assessing speculative applications for sites which are not allocated in the Waste DPD. This provides the Industry with a level of flexibility to apply for non-allocated sites but also provides Local Planning Authorities with a mechanism for assessing such applications.

or

OPTION 9.2 – Do not include criteria-based development control policies in the Waste DPD but instead rely upon applications at non-allocated sites being assessed against other policies in the other Development Plan Documents.

Implications: By relying upon criteria-based development control policies from other development plan documents it will be important to ensure these other policies are developed with adequate consideration of waste management. Possibility of inconsistency resulting from the policies developed within the development plan documents across the six Merseyside Districts.

Questions Relating to Other Waste Streams:
Do you think that there are other issues which need to be considered within the Waste DPD?

6.0 Glossary of Terms

Term	Definition
Aggregates	Materials such as sand, gravel and crushed rock, used in the construction industry for purposes such as concrete, mortar or roadstone.
Agricultural Waste	Any waste generated on farms and can be a wide variety including silage liquors, waste straw, packaging and construction waste.
Air Quality Management Area (AQMA)	An area identified by a local authority with set objectives for either one or more pollutants by target dates to improve the air quality.
Apportionment	The framework area's share of the regional waste management capacity which must be provided. Apportionments are detailed in Regional Spatial Strategy.
Biodegradable Waste	Any waste that is capable of undergoing natural decomposition, such as food and garden waste, paper and cardboard.
Brownfield Land	Formally known as "previously-developed land" and defined in Annex C to PPG3 (the Government's Planning Policy Guidance Note 3: Housing). It is land that is or was occupied by a permanent structure (excluding agricultural or forestry) and associated fixed surface infrastructure. It can occur in both built up or rural setting and includes defence buildings and land used for mineral extraction and waste disposal where there is no requirement for restoration through planning control. It does not include such land as parks, recreation grounds and allotments and land that cannot be regarded as requiring development, such as where it has been put to an amenity use or is valuable for its contribution to nature conservation.
Co-disposal	A process whereby industrial waste, particularly liquid and sludge is landfilled in conjunction with household and commercial waste.
Construction & Demolition Waste	Controlled waste arising from the construction, repair, maintenance and demolition of buildings and structures.
Contaminated Land	Land that may have retained residual polluting substances by virtue of its previous usage and presents a potential risk to the water environment, especially if re-development takes place.
Development Plan Document (DPD)	A term brought in by the Planning and Compulsory Purchase Act 2004. These set out spatial planning policies and proposals for an area or topic. They replace the former Local Plan and include the core strategy, detailed development control policies, site specific allocations of land, area action plans (where needed) and a proposals map.
Energy from Waste (EfW)	The burning of waste under controlled conditions where the heat released is used to generate electricity and/ or thermal energy for use in the locality e.g. as a community heating scheme or for commercial uses.
Energy Recovery	The generation of heat and power from burning waste, the

Term	Definition
	production of fuels from other forms of treatment, and the combustion of landfill gas and gas from anaerobic digestion to create electricity.
Environment Agency	Regulatory Authority formed in 1996, combining the functions of the former National Rivers Authority, Waste Regulation Authorities and Her Majesty's Inspectorate of Pollution.
European Sites (Natura 2000)	Natura 2000 is the European Union-wide network of nature conservation sites established under the Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) - The EC Habitats Directive
Evidence Base	The information and data gathered by local authorities to justify the "soundness" of the policy approach set out in Local Development Documents, including physical, economic and social characteristics of an area.
Fly-tipping	The illegal and indiscriminate depositing of waste.
Green Belt	A designated area around a city where development is severely restricted with the purpose of keeping land permanently open to protect the city's character, and to prevent urban sprawl and the coalescence of settlements.
Green Waste	Organic waste from parks, gardens, wooded and landscape areas, such as tree pruning, grass clippings, leaves etc.
Groundwater	Refers to all sub-surface water as distinct from surface water. Generally groundwater is considered to be that water which is below the surface of saturation and contained within porous soil or rock stratum (aquifer).
Hazardous Waste	Defined under the Hazardous Waste (England and Wales) Regulations 2004. Waste materials that have properties that can pose a threat to human health or the environment and require management at specialised facilities. Can only be dealt with at licensed hazardous waste disposal facilities.
Household Waste Recycling Centre (HWRC)	A site where the public can deposit household waste for reuse, recycling or disposal.
Industrial Waste	Waste from a factory or industrial process.
Inert	A material that will not react chemically to others. In the context of waste, it is materials such as soil, clay, chalk and soil.
Landfill	The disposal of waste into or onto land, as defined by the Landfill (England and Wales) Regulations 2002 (as amended)..
Listed Buildings	Buildings protected under the planning (Listed Building and Conservation Areas) Act 1990.
Major Aquifer	A permeable geological stratum or formation that is capable of both storing and transmitting water in significant amounts. Aquifers are designated in accordance with the Environment Agency's Policy for the Protection of Groundwater Resources.
Municipal Solid	Also referred to as Municipal Waste. Household waste and

Term	Definition
Waste (MSW)	any other waste collected by a Waste Collection Authority such as municipal parks and gardens waste, beach cleansing waste and waste resulting from the clearance of fly-tipped materials.
Non-Hazardous Waste	All those wastes that do not fall under the definition of hazardous waste and do not meet the waste acceptance criteria for inert waste.
Protected Species	Plants and species afforded protection under certain Acts of Law and Regulations.
Planning and Compulsory Purchase Act ('the Act')	The Act updates elements of the 1990 Town & Country Planning Act. The Planning and Compulsory Purchase Act 2004 introduces: - a statutory system for regional planning; - a new system for local planning; reforms to the development control, and - compulsory purchase and compensation systems; and removes crown immunity from planning controls.
Planning Policy Statement 10 (PPS10)	Government guidance issued in July 2005, relating to 'Planning for Sustainable Waste Management'. Outlines a number of key concepts which should be considered and statutory requirements of local and regional planning policy documents.
Ramsar Sites	Sites of international importance for waterfowl protected under the RAMSAR Convention of the Conservation of Wetlands of International Importance, ratified by the UK Government in 1976.
Recovery	Value can be recovered from waste by recovering materials through recycling, composting or recovery of energy
Recycling	The reprocessing of waste either into the same product or a different one.
Recycled Aggregate	Aggregates produced from recycled construction waste such as crushed concrete and planings from tarmac roads
Regional Spatial Strategy (RSS)	Documents produced at the regional level; forming part of the statutory plan.
Residual Waste	The elements of waste streams that remain following recovery, recycling or composting operations.
Self-Sufficiency	Requires that most waste should be managed within the region in which it is produced
Sites of Special Scientific Interest (SSSI)	Sites that are notified and identified under the Wildlife and Countryside and Rights of Way Act 1981 on account of their flora, fauna, geological and physiographical features
Special Area of Conservation (SAC)	A SSSI considered to be of international importance designated under the EC Directive on the conservation of Natural Habitats and of Wild Flora and Fauna.
Special Protection Area (SPA)	A SSSI considered to be of international importance designated under the EC Directive on the Conservation of Wild Birds.
Statement of	A document that sets out an LPAs intended consultation

Term	Definition
Community Involvement (SCI)	strategy for the different elements of the planning process. This is a requirement brought in by the Planning and Compulsory Purchase Act 2004.
Strategic Environmental Assessment (SEA)	An evaluation process for assessing the environmental impacts of plans and programmes. SEA is a statutory requirement.
Strategic Facilities	Large facilities that serve a greater area (i.e. the geographical area, county or region) compared to smaller local (community based) facilities.
Treatment	Physical, thermal, chemical or biological processes (including sorting) that change the characteristics of waste in order to reduce its volume or hazardous nature; facilitate its handling or enhance recovery.
Void Space	The volume created, for example by the excavation of minerals, which can potentially be backfilled.
Waste	Waste is any material or object that is no longer wanted and which requires disposal. If a material or object is reusable, it is still classed as waste if it has first been discarded.
Waste Arising	The amount of waste generated in a given locality over a period of time.
Waste Disposal Authority (WDA)	A local authority that is legally responsible for the safe disposal of household waste collected by the WCAs and the provision of Household Waste Recycling Sites.
Waste Hierarchy	A framework for securing a sustainable approach to waste management. Wherever possible, waste should be minimised. If waste cannot be avoided, then it should be reused; after this value recovered by recycling or composting; or waste to energy; and finally landfill disposal.