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Final Report

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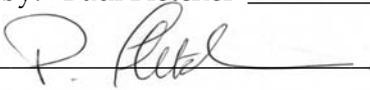
West of England Partnership

Addendum to Sustainability Appraisal of Joint Waste Core Strategy for West of England – Revisions to Policy 8

Final Report

May 2010

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For and on behalf of Environmental Resources Management
Approved by: Paul Fletcher _____
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Date: May 2010 _____

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1 *ADDENDUM TO SUSTAINABILITY APPRAISAL OF JOINT WASTE CORE STRATEGY FOR WEST OF ENGLAND – REVISIONS TO POLICY 8 ON LANDFILL*

1.1 *INTRODUCTION*

In response to consultation on the Pre Submission Joint Waste Core Strategy (JWCS), representations were received by the West of England Partnership (WEP) that questioned the figures for available landfill capacity and the ability of the JWCS to provide an appropriate range of opportunities at which to deliver future landfill requirements.

In response, the WEP commissioned ERM to prepare a Landfill Review Paper to review the evidence base and the content of Policy 8 on principles for landfill, landraise, engineering or other operations, to consider if and how these representations can be addressed. As a result of the recommendations in the Landfill Review Paper, amendments are proposed to policy 8 and are the subject of a further round of public consultation from 17th May to 28th June 2010.

This short paper provides an addendum to the Sustainability Appraisal Report on the Pre-Submission JWCS to report the sustainability implications of those amendments and to inform the consequent public consultation.

1.2 *AMENDMENTS TO POLICY 8*

Section 6.10 of the Pre Submission JWCS deals with landfill, including landraise, engineering or other operations. The review of the evidence base confirmed that text of the document should be amended, to reflect the updated position in terms of disposal capacity. Further, it is suggested that the wording of Policy 8 is amended to reflect the conclusions of this evidence base review, including explicit reference to the key environmental criteria.

Revised wording for Policy 8 is set out in *Box 1.1*. An additional line is proposed at the start of the policy, to recognise explicitly that in order to deliver the sub-region's landfill requirements greenfield land might be required. This reflects the limited supply of unconstrained land within the sub-region given the level of need for disposal facilities. However, there remains a preference to use 'brownfield' land.

The revised Policy 8 also recognises the need to avoid recommended buffer zones for groundwater reserves and European nature conservation sites unless statutory bodies have no objection.

Policy 8 - Landfill, landraise, engineering or other operations – Principles

In meeting the sub-region's landfill need, priority will be given to brownfield land over greenfield land.

Planning permissions will be granted for waste disposal by landfilling, landraising or engineering or other operations, subject to development management policy, provided that:

1. the waste to be disposed of cannot practicably and reasonably be reused, recycled or processed (to recover materials; to produce compost, soil conditioner or inert residues; or to recover energy) or may be required for the restoration of mineral workings; and
2. the proposed development involves the minimum quantity of waste necessary for:
 - a. the purposes of restoring current or former mineral workings sites; or
 - b. a demonstrable improvement in the quality of the land; or
 - c. facilitating the establishment of an appropriate afteruse; or
 - d. improving land damaged or disturbed as a result of previous or existing uses; or
 - e. the engineering or other operations.
3. the proposed development does not prejudice the satisfactory restoration of mineral working sites in the locality, having regard to the supply and availability of appropriate waste materials for their restoration.
4. the proposals are not within major aquifers, source protection zones, European sites of nature designation or the appropriate buffer, except where no objection is received from the Environment Agency or Natural England as appropriate.

In granting planning permission for landfilling or landraising developments, or engineering or other operations, conditions may be imposed limiting both the types and quantities of waste to be deposited in order to conserve capacity for waste that cannot be reused, recycled or processed.

1.3 THE SUSTAINABILITY IMPLICATIONS OF REVISED POLICY 8

1.3.1 The Sustainability of Policy 8

In many respects the sustainability effects of Policy 8 remain unchanged. This includes the likely effects on biodiversity and water quality which should continue to be avoided or minimised. Providing landfill capacity to meet the West of England's needs will support the objective of managing and disposing of waste nearer to its source than currently, reducing the need to transport waste and reducing its impact. It will also promote the taking of responsibility within the sub-region for the waste that it generates.

A full re-appraisal of the revised Policy 8 is set out in *Table 1*, and key changes arising from the revision are highlighted below.

Effects on the Countryside

The policy gives preference to the use of brownfield land for waste disposal and also explicitly seeks to facilitate the improvement of land quality, helping to bring previously developed land back into beneficial use and possibly improving the quality of open spaces. However, the evidence base demonstrates that greenfield development is nevertheless likely given the limited supply of brownfield sites and unconstrained land in the sub-region, therefore adverse effects on the countryside are possible. However, the significance of impacts is dependent on the choice of specific sites and furthermore policy 12 requires avoidance or minimisation of adverse impacts on open spaces which will include the countryside. Therefore significant adverse effects should be unlikely, and are required to be avoided by the Waste Framework Directive.

Effects on Soil Quality and Agricultural Land

With greenfield development, agricultural land may be lost and soil quality adversely affected in the medium term, although the best and most versatile agricultural land will be protected by policy 11 and in the long term soil quality should be restored and the land may be returned to agricultural use.

1.3.2

The Sustainability of the JWCS Overall

By encouraging development of facilities on previously developed land, in both policies and strategic objectives, the JWCS is likely to help reduce the pressure for greenfield development and bring vacant and underused previously developed land back into beneficial use. However, by providing for waste disposal facilities within the sub-region, it is likely that some greenfield land will be lost in the medium term although in the long term this will probably be restored to open land.

Table 1 Policy 8 – Landfill, Landraise, Engineering, Other Operations

Key:

Impacts	Significance	Probability of effects	Direct or indirect effects	Reversibility
+ positive impact	Low significance	L low probability	D direct effect	✓ reversible effect
- negative impact	Medium significance	M medium probability	I indirect effect	✗ not reversible ie permanent effect
0 no significant impact	High significance	H high probability		
? impact unknown				
∅ not relevant				
Multiple symbols are used to indicate differential scale of effects over time				

Objectives	Does the JWCS...?	Short	Med	Long	Comments	Prob	Dir/Ind	Rev?
<i>Health & Well-being</i>								
To protect human health	Ensure effective protection of human health? Prevent illness and reduce exposure to risks? Have regard to the impacts of proposed developments on the health of local communities?	0	0	0	Landfill sites are unlikely to have significant impacts on health. Providing self-sufficiency in waste disposal capacity will help to reduce the distances that waste is transported. This will reduce the potential for health effects arising from transport emissions, although the significance is likely to be small when considered in the context of overall transport levels in the West of England and adjoining areas.	M	I	✓/✗
To protect amenity	Take account of noise and light pollution? Protect residential amenity? Consider general amenity? Improve the quality of people’s living environments? Cut congestion? Locate new development on sites which will not add to traffic congestion?	0	?/+	?/+	New facilities for waste disposal have the potential to affect amenity, from the construction and operation of facilities and from vehicle movements local to the sites. However, the significance of amenity effects is mainly dependent on development control and operational standards, rather than the strategic impacts of more disposal sites. Self-sufficiency should decrease distances travelled by waste, therefore this may contribute to reducing congestion on the primary road network.	L/M	D/I	✗
<i>Economic Development</i>								
To promote sustainable economic	Encourage industrial and commercial development while maintaining and improving environmental quality?	0	+	+	Requiring new landfill facilities in the West of England will help to promote local waste management businesses, retaining the economic benefits and potentially contributing	M	D	✗

development	Encourage competitiveness? Support the sustainable development of the economy? Promote economic development and regeneration? Promote local economies? Develop a culture of enterprise?				to development and regeneration by promoting local enterprises. The costs of waste transport will be reduced by providing facilities within the sub-region.			
To promote social and community enterprises	Promote involvement of NGOs and community sector? Support new social and community enterprises? Support community involvement and action?	∅	∅	∅	Not relevant			
To promote local innovation	Stimulate the market to innovate and to produce more cost effective and sustainable options? Stimulate innovation in technologies, businesses and services? Support efficient, competitive and innovative business? Increase investment in skills, enterprise and innovation?	0	0	0	Unlikely to have impacts on innovation.	H		
<i>Climate Change</i>								
To increase energy efficiency	Increase energy efficiency? Promote energy conservation? Exploit opportunities for Combined Heat and Power?	0	+	+	The policy requires waste to be managed at higher levels of the hierarchy where practicable, including energy recovery, and the policy ensures this will be the case where practicable. Providing sub-regional waste disposal facilities will reduce the distances travelled by waste and so reduce energy consumption by waste transport, leading to greater energy efficiency and promoting energy conservation.	H	D/I	*
To increase renewable energy use	Increase use of renewables?	∅	∅	∅	Not relevant			
To reduce greenhouse gas	Reduce greenhouse gas emissions?	0	+	+	The policy requires waste to be managed at higher levels of the hierarchy where practicable, which is promoted by the	H	D/I	*

emissions	Minimise climate change?				policy, and this will help to reduce emissions of greenhouse gases through greater resource efficiency. Providing sub-regional waste disposal facilities will reduce the distances travelled by waste and so reduce the levels of greenhouse gas emissions from waste transport.			
To reduce the effects of climate change on development and vice versa	Avoid, or where this is not possible seek to reduce, the effects of development on climate change and vice versa? Respond to the risks, challenges and opportunities presented by climate change?	0	?	?	Providing sub-regional disposal facilities will increase the need to deal with the impacts of development on climate change and to address climate change risks in development. This is dealt with in policy 12 on general considerations.	L	I	*
<i>Development & Planning</i>								
To promote community responsibility for waste	Encourage communities to take more responsibility for their own waste?	0	+	+	Providing landfill capacity to meet the West of England's needs will promote the taking of responsibility within the sub-region for the waste that it generates.	H	D	*
To minimise flood risk	Minimise flood risk? Apply a sequential approach to development? Avoid new development in areas at risk of flooding and sea-level rise Ensure resistance/resilience where possible and accommodate hazards? Adopt a risk based approach for proposals in and affecting flood risk areas? Take account of potential effects of climate change? Make suitable provision for the drainage of surface water? Encourage sustainable drainage systems?	0	?	?	Facilitating disposal facilities within the West of England, may increase the risk of development affecting and being affected by flood risk. However minimising flood risk will be dependent on location-specific constraints and development control policy.	L	I	*
<i>Inequality/Access</i>								
To ensure access to services	Promote fair access to public services? Provide access to more convenient	∅	∅	∅	Not relevant			

	facilities and services?							
To support provision of rural services	Support provision of rural services?	∅	∅	∅	Not relevant			
<i>Sustainable Communities</i>								
To promote public awareness, information and participation	Increase opportunities for communities to learn about sustainable development and volunteer in SD activities? Develop and improve skills and knowledge? Ensure people can participate in society? Provide ongoing education and advice for local people?	∅	∅	∅	Not relevant			
To promote rural enterprise	Meet the economic and social needs of rural communities? Support rural enterprise?	0	+	+	Facilitating waste disposal facilities may indirectly help to promote the creation of waste management businesses in rural areas. However, this is unlikely to make a significant contribution to meeting the economic needs of rural areas.	L	I	*
To reduce fly-tipping	Enable people to be free from the fear of crime?	0	0	0	Unlikely to be affected	M		
To take account of the impact of development on communities	Take account of the impact of development on communities?	0	?	?	Construction and operation of new disposal facilities is likely to have impacts on any communities in the area, although the significance will depend on location and on operational standards which are covered by policy 12 on general considerations.	L	D	*
<i>Biodiversity & Landscapes</i>								
To conserve and enhance biodiversity	Conserve and enhance biodiversity? Protect and enhance most valued habitats? Promote biodiversity as a part of sustainable communities, urban green space and the built environment?	0	?	?	New disposal facilities may create additional pressure on biodiversity through landtake, disturbance and emissions, particularly with development on greenfield sites although this is also possible with brownfield development. Development could take potentially up to 78 ha of land, significant amounts of which may be greenfield land. New landfill sites may also increase the risk of aquatic pollution incidents from landfills. However, the significance of impacts will depend on sensitivities in particular areas and	L	D/I	* / ✓

					standards of design, construction and operation. Control of development is covered by policies 11 and 12 and therefore significant impacts are unlikely.			
To protect landscape	<p>Protect valued landscapes?</p> <p>Protect landscape?</p> <p>Protect the wider countryside and the impact of development on landscape quality?</p> <p>Protect diverse and distinctive heritage and landscape?</p> <p>Protect and enhance the quality and character of the countryside?</p> <p>Consider impact of development on landscape?</p>	0	?/-	?/0	<p>The construction of new disposal sites may increase the potential for landscape impacts at specific sites. These could be positive or negative. However, adverse impacts on designated and undesignated landscapes should be avoided or minimised through policies 11 and 12.</p> <p>The development of disposal facilities on greenfield sites is likely. This is likely to adversely affect the quality and character of the countryside at specific locations in the medium term, although long-term the site is likely to be restored to an appropriate use for the countryside such as agriculture.</p>	L/H	D	*/✓
To promote good design	<p>Promote good design and sustainable construction?</p> <p>Address visual impact of development?</p> <p>Promote restoration and aftercare to preserve or enhance the overall quality of the environment?</p>	0	?	?	The construction of new disposal sites may increase the potential for visual impacts at specific sites. However, adverse visual impacts should be avoided or minimised through policy 12. The quality of restoration and aftercare is addressed in policy 9.	L	D	*
To conserve and enhance geodiversity	<p>Conserve and enhance geodiversity?</p>	0	?	?	New disposal facilities may create pressure on sites important for geodiversity, although the significance is dependent on specific locations. Geodiversity designated sites are covered by policy 11.	L	D	*
<i>Transport</i>								
To reduce the impact of transport	<p>Reduce the impact of all forms of transport?</p> <p>Reduce the need to travel?</p> <p>Enable waste to be disposed of in one of the nearest appropriate installations?</p> <p>Provide waste facilities as close as practicable to source?</p> <p>Promote the management of waste in accordance with proximity principle?</p>	0	+/?	++/?	The amount of transport required to take waste to landfill sites will reduce over the period of the JWCS. Providing new disposal sites will support the objective of managing and disposing of waste nearer to its source than currently, reducing the need to transport waste and reducing its impact. This may also contribute to reducing congestion on the primary road network. However, the impact on congestion within the sub-region also depends on where new facilities are located and their proximity to local communities and congestion hotspots, and therefore the overall impacts are unknown. This will be addressed	H/L	D/I	*

	<p>Encourage energy from waste for locally-generated waste in locations close to sources?</p> <p>Give priority to the provision of waste management facilities that will recover value from waste at or near the PUAs/SSCTs?</p> <p>Deliver carbon savings and reduce the impact of other emissions which pollute the environment?</p> <p>Cut congestion?</p> <p>Locate new development on sites which will not add to traffic congestion?</p>				through the requirement in policy 12.			
To reduce the need to travel by car	<p>Reduce the need to travel by car?</p> <p>Manage the demand for travel by the private car?</p>	∅	∅	∅	Not relevant			
To promote alternatives to road transport	<p>Encourage freight traffic to be shifted from road to rail or water?</p> <p>Encourage new development in locations that can be served by more energy efficient modes of transport?</p> <p>Ensure that development which generates large amounts of movement is well served by sustainable transport networks?</p>	0	-/?	-/?	Avoiding the export of waste for disposal by facilitating the development of sub-regional facilities is likely to result in the loss of a rail-linked landfill site. It is not known whether any new sites will be rail-linked, although this is promoted by policy 12.	L	I	✘
<i>Natural Resources & Waste</i>								
To promote sustainable use of water resources	Promote water conservation and sustainable use of water resources?	0	0	0	Unlikely to significantly affect water consumption	H		
To protect and improve water quality	Protect and improve water quality?	0	?	?	Increasing disposal capacity in the sub-region may increase the risk of water pollution incidents. However, the risk is more strongly dependent on standards of facilities management which is covered by policy 12.	L	I	✓

To protect and improve air quality	<p>Protect and improve air quality?</p> <p>Ensure no breach of national air quality objectives?</p> <p>Protect and improve air quality in AQMAs?</p> <p>Ensure air quality outside AQMAs is better than national standard?</p> <p>Take account of air pollution?</p>	0	+	++	Providing self-sufficiency in disposal capacity is likely to reduce the distances waste is transported and therefore emissions from waste transport. However, the significance of impacts will vary with the locations of future disposal sites which is not known. Policy 12 requires avoidance or minimisation of atmospheric pollution.	M	I	✘
To reduce the inefficient use of resources	<p>Reduce the inefficient use of resources?</p> <p>Protect natural resources?</p> <p>Minimise consumption of new resources?</p>	0	+	+	Requiring the recovery of resources in preference to landfill wherever practicable will help to avoid the consumption of new resources.	H	D	✘
To conserve and improve land and soil quality	<p>Take account of land contamination?</p> <p>Improve the sustainable management of soils?</p> <p>Improve soil quality?</p> <p>Conserve soil quality?</p> <p>Protect best agricultural land?</p>	0	+/-	+	The policy explicitly seeks to facilitate the improvement of land quality including damaged and disturbed land. However, development of greenfield sites is likely and therefore soil quality could be adversely affected in the medium term. Development of sites could potentially affect agricultural land, although impacts are required to be avoided or minimised by policies 11 and 12, including avoiding impacts on the best agricultural land. In the long term, sites are likely to be restored to good quality land and potentially to agricultural use.	H	D	✘
To make good use of previously developed land and buildings and minimise greenfield development	<p>Bring vacant and underused previously developed land and buildings back into beneficial use?</p> <p>Minimise greenfield development?</p>	0	+	+	The policy gives priority to brownfield land for new disposal sites and therefore should minimise the need for greenfield development, although greenfield development is nevertheless likely. In promoting the restoration and improvement of land which has had previous uses the policy will help to bring previously developed land back into beneficial use.	M	D	✘
To optimise use of urban land	<p>Make optimum use of urban land?</p> <p>Concentrate facilities in the main urban areas?</p>	0	0	0	Urban areas are unlikely to be suitable for landfill or landraise sites.	M		
To promote the waste hierarchy	<p>Promote more reduction, re-use, recycling, composting and using waste as a source of energy (as per the waste</p>	0	+	+	The policy explicitly seeks to reduce the landfill of waste and requires management at higher levels of the hierarchy where practicable.	H	D	✓

	<p>hierarchy)?</p> <p>Encourage recycling of wastes for mineral use?</p> <p>Recover value from waste including composting, recycling and energy generation?</p> <p>Increase locally-generated energy from waste?</p> <p>Reduce landfill of biodegradable waste?</p> <p>Reduce landfill of waste?</p>							
To improve the management of hazardous waste	<p>Reduce the quantity and hazardousness of hazardous waste, and improve the management of that which is produced?</p> <p>Provide capacity for hazardous wastes?</p>	∅	∅	∅	Not relevant			
<i>Business and Work</i>								
To increase employment opportunities	<p>Ensure that everyone is able to access jobs?</p> <p>Increase employment opportunities?</p>	0	+	+	New disposal facilities in the West of England will create additional job opportunities in the sub-region. However, numbers are unlikely to be significant.	L	I	✘
To improve local authority waste management and procurement practice	<p>Promote more green procurement by public sector?</p> <p>Promote more local authority minimisation and recycling?</p>	∅	∅	∅	Not relevant			
<i>Culture & Heritage</i>								
To protect the built and historic environment	<p>Improve the built environment in and around urban areas and rural settlements?</p> <p>Protect the built environment?</p> <p>Protect and enhance the historic environment?</p>	0	?	?	Developing new disposal facilities in the West of England may create additional pressure from waste development on the built and historic environment. However, the significance of impacts is dependent on the choice of specific sites and minimisation and avoidance of impacts is required by policy 12.	L	D	✘
To protect high	Ensure strict controls on development in	0	-/+	+	Developing new disposal facilities in the West of England	H	D	✘

quality or valued open spaces	<p>the open countryside?</p> <p>Protect open spaces that are of high quality or of particular value to a local community?</p>				<p>may create additional pressure from waste development on open spaces. Although preference is given to brownfield land, greenfield development is nevertheless likely and this is likely to be on land in or near the countryside. Conversely, landfill may be used to restore open spaces to a valuable use. However, the significance of impacts is dependent on the choice of specific sites and policy 12 requires avoidance or minimisation of adverse impacts on open spaces which will include the countryside.</p>			
To protect green belt	<p>Presume against inappropriate development in Green Belt unless very special circumstances are proved?</p> <p>Give favourable consideration to proposals for diversification in Green Belts where the development preserves the openness of the Green Belt?</p> <p>Protect green belts but recognise the particular locational needs of some types of waste management facilities?</p> <p>Maintain Green Belt while providing for changes in specific locations?</p>	0	+	+	<p>Developing new disposal facilities may increase the likelihood that green belt land will be used, but landfill may be not inappropriate development in the green belt and may contribute to green belt objectives in the longer term. The significance is dependent on conditions at specific sites, and policy 11 requires protection of the green belt except in very special circumstances.</p>	H	D	x
Summary	<p>Providing landfill capacity to meet the West of England’s needs will promote the taking of responsibility within the sub-region for the waste that it generates. It will also help to promote local waste management businesses and reduce the costs of waste transport.</p> <p>The policy requires waste to be managed at higher levels of the hierarchy where practicable, which will reduce emissions of greenhouse gases through greater resource efficiency. It will also promote greater energy efficiency and energy conservation.</p> <p>Providing new disposal sites will support the objective of managing and disposing of waste nearer to its source than currently, reducing the need to transport waste and reducing its impact. This may also contribute to reducing congestion on the primary road network, although the impact on congestion within the sub-region also depends on where new facilities are located and their proximity to local communities and congestion hotspots, and therefore the overall impacts are unknown. However, policy 12 requires developers to avoid or mitigate effects on congestion. Avoiding the export of waste for disposal by facilitating the development of sub-regional facilities is likely to result in the loss of a rail-linked landfill site. It is not known whether any new sites will be rail-linked, although this is actively promoted by policy 12.</p> <p>The policy gives preference to the use of brownfield land for waste disposal and also explicitly seeks to facilitate the improvement of land quality, helping to bring previously developed land back into beneficial use and possibly improving the quality of open spaces . However, greenfield development is nevertheless likely given the limited supply of brownfield sites and unconstrained land in the sub-region, therefore adverse effects on the countryside are possible. However, the significance of impacts is dependent on the choice of specific sites and furthermore policy 12 requires avoidance or minimisation of adverse impacts on open spaces which will include the countryside and therefore significant adverse effects should be unlikely. The Waste Framework Directive requires adverse effects to be avoided. With greenfield development, agricultural land may be lost and soil quality adversely affected in the medium term, although the best and most versatile</p>							

	agricultural land will be protected by policy 11 and in the long term soil quality should be restored and the land may be returned to agricultural use.
Mitigation	None