APPENDIX 5:

DETAILED ASSESSMENT OF SITE ALLOCATION POLICIES

LOCATION OF POLICIES

SITES IDENTIFIED IN POLICY SAP1 FOR HOUSEHOLD WASTE RECYCLING CENTRES

AL37 – Lillyhall Industrial Estate (Allerdale) – replacement for Clay Flatts and Frizington Household Waste Recycling Centres

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	?	?	?	Adverse impact quite likely	Site is a replacement for two under-equipped sites, one in Workington and one to the east of Whitehaven. However, it is more distant from both of the existing facilities and this is likely to be a disincentive to use it even if retaining the existing sites could also have a detrimental effect on recycling rates in the near future. Even if usage rates are maintained, it would appear to result in an increase in "waste miles" which appears to conflict with Strategic Policy SP2 (while recognising, also, that Strategic Objective 3 requires waste to be managed "as near as practicable" to its source).	**-**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Quite likely	The existing sites appear to be relatively close to residential areas and, therefore, this allocation would appear to be an appropriate land use within an industrial estate (that includes the existing MRF). Provided there is appropriate mitigation, the net impact should be positive when the removal of any adverse impacts from the existing sites is taken into account. (Impacts on non-human receptors are considered in assessing against policy EN1).	**+(+)**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport	?	?	?	Limited likelihood	There may be a marginal benefit if the existing HWRCs are relatively close to recreational facilities and the removal of the capacity to an industrial location would end any impacts. The lack of impacts on other criteria suggests the overall assessment should be implicitly positive.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	√	√	Limited likelihood	The site is currently unoccupied brownfield, with a belt of trees along the north western and south western edges. The site is close to various biodiversity designations and there are areas nearby known to be used by species affording varying levels of protection, but other locations on the wider estate may prove more appropriate habitat for these species. Prior to the granting of planning permission in 2013, survey information established that there was no 'reasonable likelihood' of Great Crested Newts being present on site or in the vicinity. The size of the plot allows retention of the tree belts, which would also provide some screening.	+
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Limited impact very likely	The site is distant from any heritage designations and would be an appropriate land use alongside the existing occupants. The site is visible from high ground to the east, but, the visual impact is limited by surrounding buildings. The intended use is largely open with only low-level structures.	++
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Limited impact very likely	No impact on heritage assets. Site is in lowest flood risk zone. It is currently grassed over and laying concrete for the HWRC would increase run-off, which has been taken into account in the drainage design for the site and in protecting water quality in the stream along the western edge of the site. HWRC use is unlikely to give rise to significant dust, light and other impacts provided best practice mitigation is used to limit the risks of them occurring and assuming there is less risk of impact to sensitive receptors than at the two sites that this facility will replace. Effect on the urban environment is neutral as this is a vacant plot within an industrial area.	++

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Very likely	The impact is judged as moderately adverse because the existing HWRCs are closer to potential sources of waste in Workington, Whitehaven and nearby settlements. Relocating HWRC capacity to this site could have two impacts: • increased trip lengths and resulting emissions if usage rates are maintained • reduced use leading to possible reduction of recycling performance that could lead to more waste going to landfill with resulting impacts on methane generation. The site is co-located with an MRF and a physical treatment facility that could offer two offsetting benefits: • materials suitable for treatment would only have to be moved to an adjacent plot, rather than brought by road from the existing sites • recyclables separated in the HWRC could be bulked with those from the MRF into larger loads for dispatch to distant reprocessing facilities, which should be a better outcome than separate, smaller loads sent from three facilities. The overall impact is assessed as likely moderately adverse.	**(+)/-**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Quite to very unlikely	The main requirement is to protect the quality of the stream flowing along the western edge of the site. Other surrounding open water bodies could be adequately protected from dust and other material blown off the site by using mitigation measures normally used for this type of facility. See also comments in the assessment against EN3.	**++**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat	?	?	?	Very unlikely	Site is likely to have been contaminated by previous use, but to an unknown extent. The HWRC should not require piling and, therefore, laying a concrete apron would limit percolation of rainwater and further risk of contaminants entering groundwater. This is a brownfield site with no recent agricultural use.	**+(+)**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand in the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials	√	√	√	Very likely	HWRCs promote recycling of domestic and some commercial/industrial wastes so make an obvious contribution to sustainable waste management while also providing a modest source of materials that can be crushed into secondary aggregate. The assessment is positive based on this principle. The increased distance of the HWRC from waste sources might affect recycling rates, cancelling some of the benefit.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
	-Support use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Inevitable if developed	The increased throughput of this facility compared to the two HWRCs being replaced, will retain 4 existing full-time employees. It is unlikely to create new employment opportunities.	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Inevitable if developed	Same as above.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No effect	Replaces existing facilities so there is no obvious benefit, though a modern HWRC could enable a wider range of materials to be accepted.	**o**

Summary of Assessment

The allocation is an appropriate location for an HWRC, in terms of possible conflicts with adjacent land uses, and would add to the existing cluster of waste facilities at this location. Plot size suggests that there is scope to design it to provide sufficient capacity and range of facilities to meet the anticipated need, while also retaining some of the habitat (tree belts), if this provides a wildlife refuge within the industrial estate. Impacts on sensitive receptors (human and natural) appear to be limited, but would need further survey to confirm specific issues. The main adverse impact of this site is that it relocates recycling facilities largely for domestic use to a suitable site some distance from waste sources, and this is expected to impact on residents' willingness to travel greater distances to use it. Any benefits from providing more and broader capacity could be offset by a reduction in use compared to the two HWRCs it would replace - this may impact recycling rates. It is likely to result in an increase in 'waste miles'.

Secondary, Cumulative & Synergistic Impacts

Secondary: the possible reduction in recycling rates is most likely to mean wastes being diverted from the HWRCs to residual waste deposited in landfill, which would generate greenhouse gases.

Cumulative; the HWRC would add to impacts from existing waste (and other industrial) activities on the estate, such as traffic effects. However there are positive aspects of co-location (see below).

Synergistic: co-location of the site with other recycling and waste treatment plants may bring some minor benefit if material managed in these facilities is currently brought to Lillyhall by road from the existing HWRCs. There is scope to bulk separate recyclates from the HWRC with those from the MRF; this could reduce waste miles and emissions arising from moving materials to reprocessing facilities elsewhere.

Mitigation Proposed

The following issues should be addressed at the planning application stage:

- Dust, odours, etc.: but should only require standard measures to limit impacts on surrounding land uses.
- Ecology: Phase 1 habitat survey to assess wildlife use of site and scope for (and value in) retaining trees on the site; will also require protected species, invertebrate and reptile surveys.
- Contamination: it may be appropriate to require a Stage 1 desk survey of land contamination (i.e. focusing on previous land uses and likely sources and types of contamination).

SL1B – Kendal Fell Quarry (South Lakeland) – replacement for Canal Head Household Waste Recycling Centre

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Quite likely	Site is proposed as a replacement for the existing Canal Head HWRC to facilitate regeneration of that area. It could be regarded as less accessible than the existing site as it is peripheral but this comparison only applies to local residents and does not take account of the impact of traffic generated by the site on congestion in the town. The positive score also acknowledges the site is probably more accessible for people living outside the town for which it is the nearest HWRC. See comments in the assessment against Objective EN3.	**+**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Probably inevitable	The existing site occupies a hemmed-in plot that is accessed by streets passing through an area of mixed residential and commercial properties which experience some impacts as a result. The current site is too small for the operations. The proposed site lies adjacent to the inactive Kendal Fell Quarry. It will generate new traffic (and associated impacts) affecting properties on Greenside, while alleviating impacts in the streets around the existing site. There is a public footpath down the east side of the quarry, which shares the narrow access road that would serve the site and this has implications for pedestrian safety. Collectively, these issues mean that the site can only be given a mildly positive assessment. There are two large residential properties about 100m south of the entrance to the site. However one of the industrial units that has an open storage area, is likely to have a more direct impact on them.	**(+)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact	The site lies between an inactive quarry and a light industrial estate. It is not evident that there are recreational facilities or built heritage assets in the vicinity that would be adversely affected. See also comments referring to Objectives EN3 and SP5 above.	**++**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	?	?	?	Limited likelihood	The proposed use should offer limited risk of impact on adjacent biodiversity and earth heritage features. The site itself is derelict land (former weighbridge) between an inactive quarry and light industrial estate - it is not clear what specific ecological value it offers, nor is it clear that its open aspect means it is valuable as a wildlife refuge or foraging area given there is open farmland nearby, on three sides.	++
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Inevitable	The site abuts the National Park boundary and is in a relatively open and elevated rural location, though there is vegetation screening on all sides. The HWRC would only require a low-level structure for offices, which would have a lower elevation than the industrial buildings on the site access road. However, it will increase road traffic and other impacts from activities within the site.	-
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Highly likely if developed	Balance of impact on the urban environment is very positive since the existing site is in a cramped location accessed through residential streets, part of which is a Conservation Area. The existing HWRC is not compatible with its surroundings (see comments against objective NR1) and therefore any adverse impacts referred to against objective EN2 would be offset by improvements to the urban environment. The site is not at risk from flooding though it will require laying of concrete that will alter percolation rates and run-off patterns, which will need to be addressed in the drainage design. The site has the potential to increase adverse impacts in an edge of town environment offsetting the benefit of removing them from the current location. Specific mitigation would be needed to deal with dust, litter and odour risks associated with this type of facility. Overall the assessment is judged to be mildly positive, although it might be considered adverse if there was an alternative replacement site available within the town boundary and not too close to housing.	+/(-)
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Likely but varies with location	Re-locating the HWRC is most likely to transfer impacts from one locality to another and the assessment turns on whether the immediate surroundings of either site are more capable of accommodating any residual impacts that cannot be mitigated effectively. Overall, the site is assessed as positive, as the existing site will generate air quality impacts in fairly confined urban streets where pollutants may be slow to disperse. Similar considerations apply to odours from the existing HWRC in a residential area. The edge of town location of the new site implies it is less sustainable than the existing site because journeys will be lengthened, however the existing site has to be accessed through the congested urban road network and this will have air quality impacts that will not arise to the same extent at the new site. On balance, mildly positive impact.	+/(-)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	?	?	?	Very limited effect	Potential impacts could be addressed with standard mitigation measures used for this type of facility. Site drainage measures will need to prevent pollution by materials washed off the site in solution, as there is a groundwater extraction permit close to the site and pastoral land nearby.	**o**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat	?	?	?	Very limited effect	Very limited risk of adverse impact as this is a brownfield site. The main risk is potential impact on soil quality on nearby agricultural land as a result of material being washed or blown off the site, though this should also be addressed through industry standard mitigation measures	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate - Support use of co-products from minerals working				No impact	The site would relocate an existing facility and although there may be scope to increase throughput it would not alter its position in the Waste Hierarchy.	**o**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No impact	Relocation of an existing facility would not appear to create new jobs unless its size is expanded substantially.	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	As above	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
There is a need to move the existing HWRC in the town centre, where it impacts on a range of properties including those in a Conservation Area, to a peripheral location on a brownfield site; this has been designated as employment land and proposed for a range of waste management uses. In addition, the current site is too small for current operations. Development of the site would shift impacts from an urban to a rural location, resulting in reduced adverse effects on human receptors. While mitigation measures can be used to address the typical impacts associated with an HWRC, development of the site will introduce impacts of noise, odour, increased traffic, dust and emissions to a relatively tranquil rural location (recognising the fact that light industrial units adjacent to the site will generate some of these impacts already). One of the principal benefits would be an incremental contribution to reducing emissions and congestion on roads in the town, while recognising that the site will increase traffic on the road from the town centre. Given the apparent lack of alternative sites within the urban area, this site may have to be developed to relieve the problems associated with the existing HWRC.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: most likely to be traffic, dust and noise impacts adding to those generated by the light industrial units immediately to the south of the site. Synergistic; none identified.							
Mitigation Proposed							
Standard mitigation measures used for this type of facility (netting, damping down paved/concrete areas during dry weather, surface drainage management with filter traps) should deal with the main generic impacts. Some additional screening along the western edge of the site might be considered to limit visual impact from the National Park, although the site lies alongside a currently disused quarry in the Park, which could also be considered unsightly. The junction of the access road with Underbarrow Road may need to be re-designed and measures will be needed to protect any pedestrians using the public footpath that runs alongside the access road (which is paved but narrow and which is assumed to carry very little traffic at present). As the site is currently unused, it would be prudent to require an ecological survey to check for wildlife use or occupancy of the site. The site is sufficiently large (estimated to be 2ha) that space will be available for ecological mitigation and/or habitat creation which, ideally could provide additional visual screening.							

SITES IDENTIFIED IN POLICY SAP2 FOR WASTE TREATMENT AND MANAGEMENT FACILITIES

AL3 – Oldside, Workington (Allerdale) – waste treatment and management facility

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect /depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No effect	Any impact would occur as a result of involvement in the determination process	**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	The site is fairly centrally located in the town and well located to serve a wider catchment of the other coastal towns and possibly settlements inland within the National Park. Southern boundary of the site is approx. 200m from docks, which also contains a railhead; the railway line passes the eastern boundary of the site	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No effect		**o**
SP4: To improve the level of skills, education and training	-Education and training				No effect		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Limited likelihood	Noise, dust & vibration: site is on existing mixed industrial area and proposed use is likely to be indoors. Access from the wider catchment of the facility is assumed to use existing haul routes so may result in incremental increase in impacts (if the site has a wide catchment the impact further afield cannot be assessed at this time). Receptors: site is 350m from housing (350m) and is appropriate for this type of use. There is a primary school on the north side of the roundabout A597/A66 junction. Junction improvements may be necessary and the issues for pedestrian and road safety would need to be addressed at determination. (See also comments under SP6)	**+**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport	√			Limited likelihood	Heritage: site has some industrial archaeology interest and this would require survey/excavation. Culture/recreation: land immediately north contains recreational facilities and a caravan park. There are public footpaths to the west and east of the site and cycle routes along the southern boundary; there may be some actual or perceived adverse impact. Collectively, these factors suggest a very mild potential adverse impact without mitigation	**(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect /depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	?	?	Depends on use	Development of the entire site for waste use may remove habitat used by the Small Blue butterfly, though there may be scope for off-site mitigation on adjacent land. There is a SSSI and LNR 400m northeast of the site, though they appear to include different habitat; the A597 limits the scope to incorporate a wildlife corridor. Similarly, with the port area to the south, it appears that the site may not be part of an existing corridor. Impacts on the River Derwent and Bassenthwaite Lake SAC are addressed in assessing against Objective NR2	**-**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	No adverse impact, as the site is located in an industrial area and is most likely to house structures similar to those around it. Therefore, it should not look out of place when viewed from inland or offshore (though note comments under secondary impacts in the summary).	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriate development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	?	?	?	Limited likelihood	Heritage: impacts have been assessed under objective SP6 Flood risk: site in lowest flood risk zone Noise, dust, etc.: impacts have been assessed under objective SP5 Light: appears unlikely the site would increase light pollution and any necessary controls would be implemented with planning conditions once the waste use has been established Urban area: impact neutral if it is accepted this would regenerate a derelict brownfield site to appropriate alternative use and would not result in loss of open space	**(+)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Depends on use	Dust: impact depends on waste use and whether there is external storage of received materials or those to be despatched Sustainable transport: there is scope for modal shift though this depends on whether there are waste sources or processing facilities at the other end of the connections. The waste facilities in the county serve more than just the local community as they are dispersed; this may result in more emissions. The net impacts are, therefore, difficult to assess. Nevertheless the site is proposed for a treatment facility that contributes to landfill diversion and, therefore, should reduce generation of methane.	**(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	?	?	?	Limited likelihood	Possible risk of contamination of the mouth of the River Derwent during construction and operation. The southern edge of the site is 200m from the river and there are other industrial structures in the intervening space, so it is difficult to see that contamination by overland flow of run-off represents a risk to the river. Any potential risk will be assessed when a planning application is submitted.	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect /depends on use	Explain the nature/scale for each impact as necessary	
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat	√			Inevitable (if site is re-developed)	Former use almost certainly means this will be contaminated land that will need to be remediated prior to re-development. While this is beneficial, the additional costs will affect its valuation and therefore the incentive to bring it back into use. Possible contamination arising from seepage of landfill gas from an adjacent site may also need to be addressed. Brownfield site, so no loss of good quality agricultural land is entailed	+
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working	√	√	√	Inevitable (if site is re-developed for the intended purpose)	Intended purpose will contribute to landfill diversion capability. Waste use should be prioritised for recycling or composting to move management higher up the waste hierarchy than treatment, though the site is big enough to accommodate both recycling and treatment (or reprocessing facilities), which would be particularly beneficial.	++
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Very likely	Site would be developed to provide capacity that does not exist in the county currently and, therefore, should create new technical and managerial jobs. However, waste facilities are not large employment sites so the benefit is expected to be modest.	+
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Very likely	Site has potential to contribute to job creation in an area of unemployment.	+
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	?	?	?	Limited likelihood	The site is likely to contribute to existing capacity in the county rather than diversify the range of facilities, and it would have little or no clear impact on the other criteria, so it is not clear that there would be a significant impact.	?

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect /depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
The site benefits from providing an opportunity to regenerate disused brownfield land for a use that does not clash with those on adjacent land and which is sufficiently distant from human receptors that any potential risks and impacts will be minimal. Proximity to Workington Port offers the scope tor modal shift, including possible export of recyclates (though it would be preferable if these materials could be reprocessed on another part of the site or on one of the other allocations in the town).							
Secondary, Cumulative & Synergistic Impacts							
Potential for cumulative impacts depends on how much of the site is re-developed for waste use. Its size suggests one or more sizeable facilities could be built. Further cumulative impacts would occur if it is developed alongside new waste facilities in the port (see assessment of site AL18). Either outcome will have an impact on cumulative levels of noise, dust, traffic and emissions that will primarily affect local road users, but which could have some additional impact on adjoining recreational land uses. There is possible scope for secondary synergistic impacts as a result of wastes being brought to the site, treated or processed, and then exported through the port, contributing to traffic and sustaining its economic viability.							
Mitigation Proposed							
The following issues would need to be implemented through the planning application process. • Traffic: review of impact on existing levels once type and scale of waste use is known; road safety issues also need to be addressed, as access to the site is likely to cross cycle and pedestrian routes. • Dust, noise, etc.: assess impact once type and scale of waste use is known; proximity to biodiversity assets and recreational uses implies that the site should only be allocated for enclosed waste use (including storage of received materials and any to be moved off-site) unless there is evidence to show that none of these impacts would arise. • Drainage: evaluation and appropriate mitigation (filter traps or similar) would need to be applied through the planning application process. • Ecology: some of the site could be retained to support habitat for the Small Blue butterfly and this may be essential if there is no scope for habitat compensation on adjacent land; however, this form of mitigation may limit the size of the facility on the land and/or the scope to co-locate complementary waste facilities on a single site.							

AL8 – Lillyhall Industrial Estate (Allerdale) – diversification of waste uses (without increase in land take)

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Quite likely	Expansion of the range of facilities would appear to be beneficial in providing additional options for managing wastes arising along the western and north western coastal fringe at a fairly centrally located site with good road access. There is limited scope for modal shift unless a handling facility is developed in Workington Port (possibly serving the railhead also); however, the alternative would involve re-locating the existing uses to an alternative site where proximity to waste uses may result in new and greater adverse impacts.	**+**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Very likely	Several waste uses are already grouped on the site and mitigation measures will be in place to limit or prevent impacts on nearby sensitive receptors. The need for additional measures will depend on the new waste uses; the priority appears to be for enclosed facilities, which would clearly limit the risks of certain impacts. Given the location, issues of well-being are primarily concerned with other development on the estate and are addressed in comments on Objectives EC1 to EC3.	**+(+)**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport	√	√	√	Very likely	The assessment is positive, insofar as there are no recreational, cultural or heritage assets in the vicinity and, therefore, providing the additional facilities here, could avoid development in other locations where such impacts might arise.	**+**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	√	√	Limited likelihood	The site is close to various biodiversity designations and there are areas nearby known to be used by species affording varying levels of protection, but other locations on the wider estate may prove more appropriate habitat for these species. The site is occupied and the main issue is whether the additional activities would generate cumulative or new impacts; they would be limited if new uses are enclosed.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Limited impact very likely	The site is distant from any heritage designations and would broaden the range of waste activities on the site within an existing industrial area. The site is visible from high ground to the east, but visual impact should be limited given the existing surrounding uses and provided any new structures are not out of keeping (in terms of elevation particularly) with those already on the site and surrounding plots.	**++**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Limited impact very likely	No impact on heritage assets. Site is in lowest flood risk zone. The priority is for new enclosed facilities that would limit the risk of external impacts when used in conjunction with the existing mitigation applied for this site. Provided new enclosed facilities are housed in structures similar in scale and design to those already on the estate, there should be no visual degradation of the area, though perceptual issues are commented on in the assessments of objectives EC1 to EC3.	**++**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Very likely	Installation of enclosed facilities will limit new and cumulative dust and emissions impacts. Strategic Objective 3 requires waste to be managed as close as practicable to sources. Centralising facilities inevitably increases 'waste miles' compared to dispersing facilities to each main settlement, but this could mean the sites handle so little local waste that they are not economically viable. It seems sensible to seek to concentrate additional facilities on a fairly centrally located site where suitability for waste use is already established, recognising that the economic constraints referred to above mean some increase 'waste miles' is inevitable.	**(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Quite to very unlikely	New facilities would be enclosed and therefore it is expected that existing mitigation of such impacts would be sufficient (with reconfiguration possibly) as some of them address impacts of open waste management uses.	**++**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat	√	√	√	Very unlikely	The site is likely to have been contaminated by previous use to an unknown extent. New structures may necessitate piling work and contamination impacts would need to be assessed beforehand and mitigated appropriately. This is a brownfield site with no recent agricultural use.	**+(+)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate -Support use of co-products from minerals working	√	√	√	Very likely	The expansion plans would appear to diversify waste management options, which will contribute to improved resource efficiency and landfill diversion. It is assumed the priorities will reflect those stated in Strategic Policy SP4 (in turn reflecting the waste hierarchy) while at the same time addressing the county's identified waste management needs as stated in Strategic Policy SP3. The additional facilities include treatment plant though, ideally, capacity for re-use, recycling or re-processing (re-manufacture) of recyclates should be prioritised if they are feasible.	**++**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	?	?	?	Quite likely	Proposed expansion would appear to create new jobs, though this is unlikely to be significant as most new waste technologies are largely automated. Further waste development on the site could prejudice occupancy rates and opportunities to attract new investment in the estate; the likelihood of such risks cannot be judged in this assessment, but they would be significantly greater if the site was being proposed as new waste development rather than expansion of what is already there. Waste facilities will be judged inevitably as bad neighbours but the NPPW acknowledges they are a form of development that should be capable of sitting alongside other compatible industrial land uses.	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Quite likely	Any incremental growth in jobs appears to support the second criterion. The site is accessible by public transport.	**+**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	?	?	?	Unclear	See comments for Objective EC1.	**?**
Summary of Assessment							
This site offers several benefits in concentrating expanded existing or new waste management facilities on an existing site, for which the suitability for waste use is already proven. The current and possible future waste uses need to be centrally located (i.e. serving a potentially wide catchment) in order to be economically viable, and it has to be accepted that this will mean some wastes have to travel over some distance for management. This does not necessarily mean that the allocation is in conflict with Strategic Objectives and Policies in the Plan, especially if it delivers capacity that does not exist in the county now, and which means that wastes that are currently being exported (generating considerably more 'waste miles') can be managed locally. This outcome is also likely to deliver modest employment growth. The nature of future waste use is not explicit, and any development would require							

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
comprehensive assessment of the likely cumulative effects, alongside impacts from existing waste and non-waste uses on the wider estate. The location is a little distant from the main settlements in the coastal fringe and this limits the likelihood of impacts on various sensitive receptors. The NPPW makes clear that waste facilities are appropriate development alongside other industrial land uses provided they are mitigated satisfactorily and, in this case, recognising that wastes are already being managed on the site.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative; obvious potential for cumulative impacts from increased road traffic at the site and in the road network in the vicinity, and other generic impacts (odour, noise, dust, etc.) that accompany most waste management activities. Synergistic: impact will depend on the type of facilities that come forward. Co-location could mean some materials are recycled and treated on the same site, reducing waste miles, emissions and possibly the amount of waste landfilled.							
Mitigation Proposed							
The priority is likely to be to assess the suitability and efficacy of the existing mitigation measures (including issues such as drainage) and to determine whether additional ones are needed to deal with impacts arising from any new waste uses on the site. However, this is likely to be addressed in seeking a new or varied Environmental Permit from the Environment Agency. It may also be prudent to require a Stage 1 contaminated land assessment if piling work will occur, and a walkover survey by an ecologist to check for any signs that parts of the site that will be re-developed are being used by protected species.							

AL18 – Port of Workington (Allerdale) – waste treatment and other facilities

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No effect	Any impact would occur as a result of involvement in the determination process	**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	The site is centrally located in the town and well located to serve a wider catchment of the other coastal towns and possibly settlements inland. The site contains the whole port estate, which provides scope for economic use of space for vehicular access and manoeuvring, wharfage and a railhead	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need				No effect		**o**
SP4: To improve the level of skills, education and training	-Education and training				No effect		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Limited likelihood	Noise, dust & vibration: site on existing mixed industrial area and proposed use is likely to be indoors. Access from the potential catchment is assumed to use existing haul routes so may result in incremental increase in both impacts (though if the site has a wide catchment the impact further afield cannot be assessed at this time). Receptors: site is some distance from housing (>500m) and is an appropriate area for this type of use. There is a primary school on the north side of the roundabout A597/A66 junction; junction improvements may be necessary and the issues for pedestrian and road safety would need to be addressed at determination. (See also comments under SP6). The site contains areas of brownfield land and it is assumed that occupation of one or more of them for waste use would not raise these impacts above levels experienced when the whole port estate was in use.	**+**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, dialect and sport	?	?	?	Impact unclear	Heritage: there is a Conservation Area over 300m from the port entrance; however waste facilities are unlikely to differ in scale or type from other structures on the port (which include sheds and storage tanks) so there is limited likelihood of any adverse impact on setting Culture/recreation: assessment of transport impacts may need to consider possible road safety impacts for cyclists using route across the north of the site	**(?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	?	?	Limited likelihood	Parts of the site are reported to contain species-rich grassland supporting rare orchids and the Small Blue butterfly. Re-development could result in the loss of some of this habitat and further assessment is necessary of how much land could be lost with minimal biodiversity impact, and of the scope for habitat mitigation in the vicinity. Impacts on the River Derwent and Bassenthwaite Lake SAC are addressed in assessing against Objective NR2	**(-)**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	No adverse impact, as any waste facilities would be located in a sizeable industrial area, although it may be necessary to restrict the height of new structures so that they are in keeping with what is in the port estate already	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and land use -Enhance the degraded urban and rural environment within the area	?	?	?	Limited likelihood	Heritage: impacts have been assessed under objective SP6 but are unlikely Flood risk: site in lowest flood risk zone Noise, dust, etc.: impacts have been assessed under objective SP5 Light: appears unlikely the site would increase light pollution as it assumed there will be some night-time illumination of the port estate already for security purposes Urban area: impact neutral if it is accepted this would regenerate a derelict brownfield site to appropriate alternative use. It would not result in loss of public open space.	**+**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Depends on use	Dust: impact depends on waste use and whether there is external storage of received materials or those to be despatched. Parts of the port estate are already used for storage, so this is less of a constraint than for site AL3. Sustainable transport: there is scope for modal shift, though this depends on whether there are waste sources or processing facilities at the other end of the connections. The waste facilities in the county serve more than just the local community, as they are dispersed; this may result in more emissions. The net impacts are, therefore, difficult to assess. Nevertheless, the site is proposed for a treatment facility that contributes to landfill diversion and, therefore, should reduce generation of methane.	**+**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	?	?	?	Limited likelihood	Possible risk of contamination of the mouth of the River Derwent during construction and operation, but similar risks apply to other land uses on the port. Any potential risk could be assessed when a planning application is submitted, though it may be prudent to rule out open storage of materials received or those stored for despatch	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat	√			Inevitable (if site is re-developed)	Former use almost certainly means this will be contaminated land that will need to be remediated prior to re-development. This may be less onerous than for site AL3 if it is supported by the landowner. A brownfield site, so no loss of good quality agricultural land is entailed.	+
NR4: To manage mineral resources sustainability and minimise waste	-Reflect waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary -Support use of co-products from minerals working	√	√	√	Inevitable (if site is re-developed for the intended purpose)	Intended purpose will contribute to landfill diversion capability. Waste use should be prioritised for recycling or composting to move management higher up the waste hierarchy than treatment, though the wider site has several plots that could accommodate both recycling and treatment (or reprocessing facilities), which would be particularly beneficial.	++
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Very likely	Site would be developed to provide capacity that does not exist in the county currently and, therefore, should create new technical and managerial jobs. However waste facilities are not large employment sites, so the benefit is expected to be modest. Development could help to sustain the viability of the port either directly (stimulating port traffic) or indirectly (providing income for the land-owner)	++
EC2: To improve access to jobs	-Increase access to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Quite likely	Site has potential to contribute to job creation in an area of unemployment	+
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management/minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	?	?	?	Limited likelihood	The site is likely to contribute existing capacity in the county rather than diversify the range of facilities, and it would have little or no clear impact on the other criteria, so it is not clear that there would be a significant impact	?
Summary of Assessment							
The allocation would be beneficial if it helps to return parts of the port estate to industrial use, as this will contribute to efficient use of local brownfield land resource while also helping to sustain the economic viability of the port. As an existing employment site, it is particularly suited to waste uses alongside other industrial uses, and provided those uses are comparable							

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood no effect/ depends on use	Explain the nature/scale for each impact as necessary	

in scale to other structures on the site. Introduction of new waste facilities has the scope to increase cumulative impacts of all activity on the site, but this would need to be confirmed at the time any planning application is received.

Otherwise, the site is sufficiently distant from most sensitive receptors that the potential for impacts are limited. The main exception to this is the possible effect on water quality at the mouth of the River Derwent and mitigation will be necessary to limit any contribution the site might make to that generated by other activities in the port or in other sites adjoining the river.

Secondary, Cumulative & Synergistic Impacts

Secondary: development in the port has the scope to generate synergistic impacts if it results in export of materials, stimulating traffic and helping to sustain its economic viability.

Cumulative: potential depends on how much of the site is re-developed for waste use. There is clear scope for cumulative impacts as a result of these developments and further impacts if there is development in the port and to the north (see assessment for site AL3).

Synergistic: there is sufficient spare land to enable co-location of more than one waste facility in close proximity, which would make some contribution to reducing emissions and other impacts if the alternative capacity is spread across dispersed sites.

Mitigation Proposed

The following measures would need to be implemented through the planning application process:

- Traffic: cumulative traffic impact; routeing agreement for access to the site within the town; assess safety impact on cycle routes; possible need for improvements at junction at the entrance to the port estate.
- Dust, noise, etc.: scope to permit open storage and any mitigation necessary (proximity to open water would need to be taken into account).
- Drainage: need for SuDS, filter traps and other mitigation to limit risk of contamination by run-off and overland flow.
- Ecology: retention of some habitat to support the Small Blue butterfly and other rare species as there appears to be sufficient vacant land to meet the waste need and provide this mitigation. However, the amount of land retention as habitat will need to take account of the opportunity the site offers to co-locate waste facilities and the need to use land to maintain the economic viability of the port. (Note that this approach appears to be more viable than for allocation AL3 due to the amount of vacant land within the port estate.)

CA11 – Willowholme, Stephenson Industrial Estate, Carlisle – various waste treatment or recycling uses

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Very likely	Site is fairly centrally located within the town, though this would mainly benefit waste contractors rather than residents, and access is via a long and unadopted road through the rest of the industrial estate. There is no obvious scope for modal shift as the adjacent railway line is on an embankment. The River Eden is deep enough to enable barge movement but there may be heritage/nature conservation issues	**+**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Very likely	A footpath runs between the site and the adjacent river so there may be a recreational impact; however, the path also passes industrial units to the southwest and limited vegetation along the boundary means the adjacent waste water treatment works are also visible from the footpath. The site is accessed via the single road serving all other facilities on the estate and, therefore, there is scope for cumulative impact on receptors on the access roads to the estate	**+**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No adverse impact	Potential impact on heritage assets is covered in the assessment against objective EN2.	**(+)**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	√	√	Quite likely; at worse very likely	The site was inundated during the floods in 2009 and 2015. Principal risks are contamination of the adjacent River Eden SAC and SSSI with material washed or blown off the site. Mitigation measures can reduce these risks, though waste use should be restricted to enclosed facilities. Possible use of the adjacent riverbank by a number of protected species, which requires survey prior to submission of a planning application.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
						There are a number of relatively mature trees along the boundary with the footpath, which will have to be retained if they provide habitat for protected species.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	?	?	?	Limited likelihood	The site is in an industrialised urban setting so the principal impacts would affect heritage assets. The site is within the Hadrian's Wall WHS Visual Impact Zone. However, the path of the Wall runs through the southern part of the estate and is already built over by industrial units. It is not clear that development on the site would have an additional adverse impact, provided that structures are proportional to those elsewhere on the estate. The site is also next to an 'historic' ford across the River Eden, and any potential impact would need to be reviewed if a planning application comes forward.	**?**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Very likely adverse impact in some respects	Impact on built and other heritage assets is discussed above. Development would introduce some additional impacts from waste management activities that should be capable of being mitigated using best practice implemented through a planning permission and/or environmental permit. Development is likely to be in keeping with surrounding land uses, but without scope to enhance the urban environment. Development should be prioritised towards the southwestern end of the site so it forms an extension to uses on adjacent plots, leaving open land on the rest of the plot if possible. Previous flood history of the site indicates that this site is not suitable for hazardous waste facilities or non-inert landfill.	**Flood risk: -** **Other issues: o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable though scale depends on use	The site should ideally be restricted to closed waste facilities, as this will limit the impact of dust and other emissions on the immediate vicinity, and particularly the risks of contaminating the adjacent water environment. The central location would have some benefit in reducing emissions and dust from carrying wastes over long distances (assuming the site primarily serves the immediate vicinity of Carlisle), though some cumulative effect on properties in the vicinity of the site would be inevitable	**+/-**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Quite likely	There is potential risk of contamination of the adjacent River Eden as a result of future flood events even if the site is developed as a built waste facility and on-site drainage measures (e.g. oil filters, silt traps) are installed.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
NR3: To restore and protect land and soil	-To reduce amount of contaminated land -Loss of high grade agricultural land/greenfield -Potential to cause soil degradation, pollution - the use of peat	?	?	?	Limited likelihood	This is a partial brownfield site and it may need remediation prior to development (which would require particular care due to risk of impact to the adjacent SAC and SSSI). However, it would have no impact on good quality land resources.	**+**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√	√	Quite likely but depends on use	Proposed uses will contribute to reducing landfill rates and/or removal of local wastes to recycling and treatment facilities some distance from the town, or outside the county. The potential impact on the adjacent river suggests that the site should not be for open waste uses and, therefore, it may offer no scope to encourage use of secondary aggregates, though this does not affect the overall assessment.	**+**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Very likely	Assuming the site will house a new facility adding capacity to the county's waste infrastructure, then it offers some scope for additional employment.	**+(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Very likely	Assessment as above. The facility is accessible using public transport (or cycle) though it appears to be about three quarters of a mile from the site to the entrance to the estate.	**(+)**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	?	?	?	Depends on use	Any positive impact is likely to result from the site supporting new waste facilities that do not exist elsewhere in the vicinity (or in the county)	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
The site is fairly centrally located within the city, with good access to the strategic road network, and situated within a sizeable industrial estate, so that development would be compatible with many adjacent uses. Further survey is needed of potential cumulative impacts from dust, emissions, etc., but the site has the advantage of being some distance from human sensitive receptors. Its proximity to sensitive ecological and heritage assets requires further specific survey, prior to submission of a planning assessment, and this could lead to a reduction of the area that could be re-developed in order to provide necessary buffering or visual screening, habitat placement or enhancement. The main drawback to this is that it lies in Flood Risk Zone 3, and although flood defences in the vicinity have been improved since the events of 2009 and 2015, there is still a risk of inundation; therefore, further development of the site could be limited.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified (all principal impacts are likely to be direct if unmitigated). Cumulative: noise (traffic and equipment), emissions, dust and possibly odours (with WWTW to east) though scale will depend on whether development is open or enclosed. Synergistic: none identified.							
Mitigation Proposed							
The principal measure is to restrict development to enclosed waste use, such as requiring internal storage of incoming material and any baled (or similar) outputs in order to limit impacts on adjacent biodiversity assets, as well as to lessen any impacts associated with flooding. Possibly require buffer zone along the north western boundary, to reduce risks of impacts to the river, and provide scope for biodiversity improvement and visual screening of the site from the adjacent footpath. Additional assessments for protected species, heritage impacts on the adjacent historic ford, and of cumulative traffic impacts on the junction of the access road into the estate with the A595 needed.							

CA30 – Kingmoor Road Recycling Centre, Carlisle – waste management facility

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Very likely	The site could re-instate the former recycling facility (with the intention of capacity increase and/or diversification) on a relatively accessible location at the urban fringe (though a height restriction creates some restrictions from the north).	**+**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Quite likely but depends on type and scale of use	The site is close to housing, so any growth in throughput or change in use would need to consider whether any increase in impacts would be excessive. A moderate increase in throughput rather than change or broadening of use (introducing new impacts) would appear preferable. The site is well connected to the Carlisle Northern Development Route but the access is impeded by a rail bridge with a 4.2m height restriction that would prevent it being used by larger HGVs; access to the site from the south passes a substantial number of residential properties.	**-(-)**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport	√	?	?	Possible	It is unclear whether there may be an impact on the existing leisure use on adjacent land.	**(-)**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	√	√	Inevitable	To the west, the site is adjacent to Kingmoor Sidings Local Nature Reserve (mixed woodland) and to the east it faces the Kingmoor Sidings County Wildlife Site. Development could result in cumulative impacts on both assets (though the former is more likely to be affected). Land to the north of the site is known to contain habitat used by great crested newts; development of the site may require provision of compensatory habitat. Use of the adjacent plot by protected species, breeding birds, etc., will need further survey.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Limited likelihood	The site is 100m from the WHS visual buffer zone, but is screened by woodland in the adjacent LNR, so further impact is likely to be negligible, provided any new structures do not exceed the scale or elevation of those previously on the site. The site is 500m from the Stanwix Conservation Area; any waste traffic unable to access the site from the CNDR, would have to pass through the Conservation Area.	**-**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Varies from very likely to limited likelihood depending on impact	Historic impact: see assessment above. Flood risk: the site is in the lowest flood risk zone. Amenity impacts: the main issue will be limiting any cumulative impacts on nearby properties and natural receptors as a result of any increase in throughput or change in waste management function.	**(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	?	?	?	Limited likelihood	Closure of the site following the fire in 2014, has meant that waste has been taken to the Hespin Wood Waste Management Complex, some way north of the city. A re-instatement of this site to waste management use will help to reduce waste miles back to their earlier level. Any increase in former throughput would need a review of the suitability of existing mitigation measures.	**?**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Quite likely	Previous contaminated land survey has identified the potential risk of contaminants being washed by surface flow or percolation into the brook to the west, which provides a pathway to the River Eden SAC. This risk could be addressed if the plot is covered by hard standing with drainage to foul sewer. Any open waste management use could also result in dust blow-off, which might also contaminate the brook, although this is likely to be a lesser risk than that from water dispersal.	**-**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites	√	√	√	Quite likely	The existing plot is brownfield land that may be contaminated. so may require remediation, particularly if development involved excavation or piling work. No loss of agricultural land.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
	-Potential to cause soil degradation, pollution - the use of peat						
NR4: To manage mineral resources sustainability and minimise waste	-Reflect waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	?	?	?	Quite likely but depends on use	Re-instatement of the site as a recycling facility will provide a relatively conveniently located facility serving Carlisle, its surroundings, and possibly a wider catchment in the north of the county. As such, the proposal supports the initial assessment criterion.	**+**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Quite likely	Expansion of throughput or change waste management functions has the potential to generate new jobs in the town (recognising the impacts of expanding the size and capacity of the site).	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Quite likely	As above. Although the proximity of the site to residential properties creates problems, its location implies that it is readily accessible on foot, by cycle or public transport, rather than private car.	**+**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management/minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	?	?	?	Depends on use	The priority is to bring the facility back into use to provide recycling capacity within the town rather than using contingencies some distance away. However, its benefit in terms of other criteria appears to be limited.	**?**
Summary of Assessment							
This site is well located to serve the city, but has a number of drawbacks. It is located very close to housing and ecological assets, and a nearby bridge restricts access to the site from one direction. The aim is to redevelop the site to increase former throughput, without changing or broadening its waste management function, as this would appear to offer a reduced risk of increasing any existing impacts or creating new ones as a result of introducing new waste functions and equipment on the site. The height restriction on the rail bridge to the northwest and the desirability of avoiding (or at least minimising) lorry movements through the nearby Conservation Area, suggests that the scope to increase capacity should be limited and controlled by planning conditions applied to vehicle size and routeing. This site's close proximity to housing means that it is not an appropriate location for an energy from waste facility on any scale.							

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: these would result primarily from any increase in throughput at the site and its effect on noise, traffic, dust, odours, etc. Synergistic: the bridge access restrictions may limit scope to integrate functions on this site with rail delivery (or removal) of material, though there is greater scope to integrate it with any facility that comes forward on allocation CA31. While this would also be limited by the bridge height restriction, the use of medium-sized vehicles (rather than large HGVs) may not unduly affect emissions.							
Mitigation Proposed							
Any change in the throughput or the range of waste activities performed should result in a review of whether the previously existing mitigation measures would be appropriate and effective for any intended future use. A survey of the use of the site by great crested newts and other protected species is necessary. Appropriate mitigation of land contamination risks, particularly in terms of disturbance and excavation of material that could then find its way into surface watercourses is also necessary, as is the need to prevent water running off the site and percolating into the soil beneath, carrying contaminants in solution into adjacent watercourses or uncontaminated greenfield land.							

CA31 – Kingmoor Park East, Carlisle –various waste treatment or recycling uses

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Very likely	Although the site is peripheral to the town, the intended uses suggest that it could serve a wider catchment. The site is served by the Carlisle Northern Development Route, improving its accessibility from the town and surrounding district via the junction with the M6 to the northeast. It is also adjacent to Kingmoor Sidings to the west although they are not directly accessible, as they are on the opposite side of the West Coast Main Line.	**+(+)**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	No adverse effect	The site is brownfield land surrounded on all sides by different industrial uses (including railway land) and is some distance from human receptors.	**++**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport	(√)	(√)	(√)	No impact	Assessment regarding heritage impacts is included against objective EN2. Otherwise there are no implications on the other criteria and, therefore, the assessment is intrinsically positive.	**(+)**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				Limited likelihood	The ecological value of the site is unclear but it is separated from the nearest local designation by a cluster of industrial units and the risk of impact appears limited. There is a possible risk of impact on the River Eden SAC about 1km to the west, but the railway corridor lies in between, so the most likely potential pathway would be airborne pollution. There is possible use of the railway corridor by great crested newts, but most of this area lies a little distant on the opposite side of the West Coast Main Line. Nevertheless, it would be prudent to require the site to be surveyed for biodiversity value (Phase 1), invertebrates, reptiles and protected species.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	(√)	(√)	(√)	Limited likelihood	The site lies in a designated employment zone and is adjoined on three sides by plots containing industrial units, likely to be similar in scale and design to a waste facility. The site is outside the Hadrian's Wall WHS visual impact zone, but use of the site for an EfW facility would need further assessment of visual impact. The lack of adverse impact is assessed as implicitly positive.	**(+)**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Likely to be inevitable	Heritage impacts are referred to above and the site is in an area of low flood risk. Development will give rise to additional impacts from dust, emissions, etc., that inevitably result from new waste facilities, but which can be addressed through standard best practice mitigation measures. Nevertheless, it will be necessary to assess cumulative impacts on the road network and adjacent land uses, most of which appear to be enclosed.	**+(+)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Likely though scale of benefit depends on use	The site is well located with respect to potential sources of waste from the town, the surrounding district, or elsewhere in the county. The site has the potential to support an EfW facility subject to further assessment of wildlife and visual (and heritage) impacts. The nearby railway sidings could allow delivery of fuel stocks, though it may be necessary to apply planning conditions to limit import of material from outside the county – recognising that the same issue applies to non-EfW development on the site.	**+**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	(√)	(√)	(√)	No impact	There are no artificial or natural waterbodies in the vicinity and comments against objective EN1 suggest the potential risks to the River Eden SAC are limited by distance. As a result, the overall assessment is implicitly positive due to the lack of impact.	**(+)**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat	√	√	√	Very likely	The site occupies a plot on a former military depot, therefore a Stage 1 land contamination survey is advisable. However, it is a brownfield site and could deliver additional waste capacity in a suitable location, avoiding development on agricultural land or in other urban locations where the risk of impact to all types of sensitive receptors is greater.	**+(+)**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area	√	√	√	Very likely but depends on use	The range of potential uses covers several levels in the waste hierarchy; those in higher tiers (reprocessing for re-use, recycling, composting) should be prioritised. However this site may be more suitable for an EfW facility than other locations and this may support its use for this purpose.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
	-Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Very likely	Any development of the site appears likely to add new waste management capacity and would, therefore, contribute jobs	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Quite likely	Development would increase the supply of jobs in the Carlisle urban area.	**+**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	?	?	?	Depends on use	It is not clear if development would address any of the criteria directly. Use of the site for an EfW facility would diversify waste management capacity in the county, recognising the perceived adverse public perception of this type of facility.	**?**

Summary of Assessment

This site is in a very sustainable location, insofar as it is well situated with respect to local sources of waste and labour supply. It has good access to the strategic road network, scope to exploit nearby railway infrastructure for modal shift, and is remote from a wide range of sensitive receptors and other designations. The site is potentially suitable for a range of enclosed (or possibly open) waste management uses, including the provision of an EfW facility to meet the specific need identified in policy SAP2. Proximity to the nearby sidings provides scope for the modal shift of delivery or removal of materials to/from the site, but the County Council will need to consider whether to restrict waste imports from outside the county, in order to reduce exports, and avoid becoming a net importer of certain wastes.

Secondary, Cumulative & Synergistic Impacts

Secondary: possible development of an EfW facility on the site would necessitate a sizeable stack in order to meet the requirements for the Waste Incineration Directive for the dispersal of exhaust gases and this is likely to introduce a new structure considerably taller than those on the existing built plots. The resulting visual impact would need further consideration, particularly in terms of the nearby World Heritage Site visual impact zone (though the site lies outside it) although high-tension power lines already cross it.

Cumulative: the most likely impact would be on roads and specifically the traffic on the Carlisle Northern Development Route.

Synergistic: a facility on the site might operate in conjunction with the refurbished recycling plant to the south (allocation CA30). Network Rail also operates a recycling facility on the nearby sidings though this recycles waste rail ballast and sleepers and may not offer any synergy with the other two sites.

Mitigation Proposed

Mitigation requirements are primarily best practice requirements for supporting the detail of waste developments and will probably include those required by the local planning authority's validation lists. A planning permission will need to be supported by ecological assessments to check on use/occupancy of the site by various protected species. Assessment of cumulative impact on traffic on the Carlisle Northern Development Route is also advisable, though there may be limited history of usage levels as the road has only been open a few years. Further assessment and mitigation may be necessary if the site is proposed for an EfW facility.

CO11 – Bridge End Industrial Estate, Egremont (Copeland) – enclosed waste management or treatment facility

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Quite likely	The site could provide recycling capacity away from the main coastal towns, reducing waste miles for some materials. There is no scope for modal shift, as the site occupies railway land long since disused.	**+**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Depends on use but potentially limited likelihood	May result in some marginal (cumulative) increase in dust and vehicle emissions, but allocation clearly envisages an enclosed facility that could significantly reduce these impacts. Housing is a short distance to the northwest (already partially screened by deciduous trees) and to the northeast (partially screened by a hedge around the plot). In both cases, the properties already have views of industrial premises as the "industrial estate" appears to be a mosaic of units interspersed with residential premises. The main issue is whether a further unit that would occupy currently open land would be an unacceptable cumulative impact (visual encroachment) on these properties.	**(-)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact	(See assessment against objective EN2 for comments on heritage issues)	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	?	?	Limited likelihood	Protected species are present in the vicinity and ecological survey will be necessary. The site occupies an elevated position above and some distance from the River Eden; there are industrial units to the west and northwest that are much closer to the river and are more likely sources of adverse impacts. Any impacts should be capable of mitigation using best practice, together with waste	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
						activities confined within a building. The disused railway line forms the western boundary of the site and could be retained as habitat and visual mitigation without unduly reducing the developable area. There is no apparent scope for impact on the Florence Mines earth heritage SSSI to the northeast.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Limited likelihood	Development would result in a further extension of the industrial estate onto additional land which is designated for employment use. It does not appear to have any impact on landscape character provided any structures on the site are of a comparable scale and elevation to others on the industrial estate (which includes one quite large and visible box).	**?**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Limited likelihood	Historic environment: see previous comments. Flood risk: the site is elevated above the river so is not at risk but any hard surface would alter percolation and run-off rates and would need to be addressed with drainage measures to limit flood risk (mainly from overland flow) on property to the west/northwest. Amenity impacts: new use of the site has the scope to increase impacts; cumulative impacts with the nearby industrial estate would need to be assessed at the planning application stage. The relatively small size of the site will limit the scale of impacts. Environmental quality: the site is greenfield and therefore development has a potentially adverse impact on the rural area. However it is allocated for employment use and it is not clear that an enclosed waste facility would give rise to impacts markedly different from other non-waste light industrial uses similar to those generated by other units on the industrial estate.	**+/-**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Limited likelihood	Dust or other emissions would primarily result from movement of materials to/from the site if the activities are enclosed. Road transport is the only feasible option, but the small size of the site suggests its best role could be in providing local waste processing for the communities inland from the coast, all of which are linked by the A595 that passes the site.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Very likely	The site will require a drainage design that takes account of the fact that it is currently grassland and any hard surfacing will alter runoff and percolation rates, diverting water down the incline along the western boundary. The allocation favours enclosed waste use and any risk of dust or pollution by material blown off the site to the River Eden could be limited by ensuring all waste activities – including storage – are indoors.	**(-)**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat	√	√	√	Very likely	The site is identified as likely to be high grade agricultural land, though it is also designated for employment use by the District Council (recognising also that the amount of land lost is small and most of the land to the east, south and west of the site is in agricultural use already). Any impact on the soil environment around the site can be mitigated if all waste activity occurs indoors.	**(+)/-**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√	√	Very likely if very localised	Development appears to offer the scope to provide recycling or similar capacity serving smaller inland communities and the rural areas beyond, albeit on a small scale. As the site is proposed for enclosed use only, it is unlikely to be suitable for aggregates reprocessing, which tends to occur in the open and which could lead to impacts that this assessment does not anticipate for that reason.	**(+)**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Quite likely if limited	Offers the potential for job creation in a small community in a rural area where unemployment may be a continuing problem (though the size of the site suggests the benefit may be small).	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	√	√	√	Quite likely if limited	As above.	**+**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact	No obvious implications for any of the criteria.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
This site has benefits and drawbacks in equal measure. It is greenfield land of potentially good agricultural quality and its development would extend the built footprint of Egremont slightly. The potential to contribute to flood risk on adjacent land can be addressed with mitigation, and its allocation for employment use at a Key Centre in the district, means that some increase in traffic and visual intrusion from a new industrial building are considered acceptable, provided both are modest in scale. This is likely, as the relatively small size of the plot suggests it would support a modestly-sized facility serving the needs of the district not the wider county. A previous consultation response from the District Council has proposed that the site it too small for waste use, but this is not the case, and it appears to offer scope to provide ancillary capacity away from the coastal towns, which can make an incremental contribution to reduced waste miles and local job supply.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified (impact on drainage considered to be a direct impact) Cumulative: possible impact on traffic and visual intrusion with other existing facilities, though the plot is designated for employment use, which would appear to prejudge the likely significance of these impacts. Synergistic: none identified							
Mitigation Proposed							
The small scale of the site should limit the impacts and best practice mitigation should be satisfactory, subject to assessment of any eventual development proposal. Specific surveys will be needed for wildlife use of the site, and also drainage requirements to limit impact of runoff on land to the west.							

SITES IDENTIFIED IN POLICY SAP3 FOR THE TREATMENT, MANAGEMENT, STORAGE & DISPOSAL OF RADIOACTIVE WASTES

CO32 – Land adjacent to Sellafield (Copeland) – disposal and/or storage of radioactive waste or non-radioactive, inert C&D waste

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact). This is shown in the 'Score' column.

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	(However. see comments against Objective NR1)	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people			√	Very likely though localised	Main impact would be on a limited number of properties (mainly farms). The closest are in the hamlet of Calder, about 200m from the perimeter of Sellafield at its closest point, though development on the very south side of the proposed plot would be closer. This is likely to be the most significant impact, as others (including noise and dust) could be addressed by high quality mitigation and/or by locating any facility in the north and western parts of the proposed plot.	**-(-)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact	(It is assumed any impact on the community and amenity would be subsumed by comments against other Objectives)	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources			√	Very likely	The wider site is open, good quality agricultural land that has intrinsic biodiversity value and which may be occupied or used by a number of protected species. Natterjack toads are likely to be present in the vicinity, though the site does not appear to contain the main habitats they require. Several county-level biodiversity designations and earth heritage assets are in the vicinity (200m to 1.5km distant) though these distances are measured from the nearest edge of the site and may be greater if a facility is located in the centre of the plot or to one side.	**-(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
						The facility may involve an engineered landform that may not be capable of restoration to agricultural use, but which could provide scope for habitat creation and/or improvement. Depending on the location of any facility within the wider site, water quality in the River Calder may need to be protected, as it is used by salmon migrating to an SAC upstream. The assessment is fairly strongly negative, but is mitigated somewhat by the scope for beneficial restoration.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity			√	Limited likelihood	Capping or restoration might result in a low raised landform. The site is likely to be more visible from the edge of the National Park to the east and the NP Authority would need to be consulted on appropriate visual mitigation of any impacts when the site is being prepared and filled, and if restoration would result in a slight increase in elevation above the surrounding area. However, the area is generally flat and screened to some degree by surrounding woods and hedges; it is not clear that the long-term visual impact would be adverse or significant.	**(-)**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area			√	Quite likely but variable	Historic environment: consideration may need to be given to impact on the setting of listed buildings; however, the likely nature of the facility suggests that this impact would be limited and much less than the impact of proximity to the main complex. Flood risk: the site is in the lowest flood risk zone; see comments for the assessment of Objective NR2. Impacts: impacts would be limited by the nature of the facility; if an engineered landform, it would need to be mitigated using best practice measures to limit impacts of dust, etc., particularly during clearance and construction. Enhancement: degradation of the rural environment around the Sellafield complex could occur during preparing and filling of the site, but could be mitigated by appropriate restoration.	**-**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors			√	Very likely, possibly inevitable	As with allocation CO36, development obviates the need to move radioactive waste originating in the Sellafield complex by road or rail, reducing inherent risk and impacts.	**+(+)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water			√	Quite likely	The exact nature of the facility is not known and may involve shallow below-ground storage and/or disposal and/or an engineered landraise that will cap the facility once it has been filled. However, the site may be restored to the existing ground level. An alternative use for the site may be as a temporary or long- term store for non-radioactive inert construction and demolition waste created by works around the Sellafield complex. Containment to prevent contamination of the soil or groundwater environments will be necessary and should be appropriate to the type of material in the site.	**-**
NR3: To restore and protect land and soil	-Reduce contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat			√	Inevitable	The nature of the facility implies that there could be irreversible loss of good quality agricultural land. The proposal presents some risks of contamination of surrounding land by material blown or running off the site, though this is most likely to be excavated inert material and the main risk is more likely to occur during construction or if it is used for temporary storage of other waste, as referred to above.	**-**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working			√	Inevitable	Complies with national policy and strategic policies in the Plan, prioritising the management of wastes at source or as close as feasible.	**+(+)**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment			?	Limited impact, short-term only	Job creation is only likely during construction of the facility, with limited ongoing need once any site is operational. Previous consultation indicated concerns that development would hinder investment in the local area, though it is difficult to see what additional adverse impact would occur as a result of developing this facility, considering it is very close to the existing complex.	**(+)/?**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in recycling and use of co-products			?	No impact	See comments against Objective EC1.	**o**

Summary of Assessment

This site would extend the footprint of the existing Sellafield site, but it would be different in nature. It is has the potential to accommodate an engineered voidspace, reserved for lower activity LLW generated by decommissioning activity on the adjacent complex; however, an alternative use, for storing non-radioactive, inert construction and demolition waste, is also under consideration. It is not clear whether any voidspace would be excavated or whether it would be a landraise, and this may have implications for temporary or permanent visual impact, though this is not expected to be significant. Regardless, the facility would not be a built structure and this factor, combined with the nature of the wastes, reduces the likely severity of some of the potential impacts. Best practice mitigation would still be required to prevent contamination of surrounding agricultural land, particularly by dust generated during construction, and to prevent any impact on the ground and surface water environments, using mitigation appropriate to the type of materials stored and/or disposed on the site. Some visual impact on nearby properties and on views from the more distant National Park are inevitable, though they would be limited if the facility/landform has a low elevation. Development would also result in permanent loss of some good quality agricultural land, and impacts on local nature conservation designations will require further assessment, though restoration could provide some compensatory habitat improvement.

It is not considered that the whole of the allocation would be developed; rather, further assessment would narrow down the most suitable area(s) for each waste use, and mitigation of the identified impacts would still be necessary. The proposal is not as sustainable as allocation CO36, which falls wholly within the existing Sellafield complex.

Secondary, Cumulative & Synergistic Impacts

Secondary: none identified.

Cumulative: any impacts are likely to be cumulative with those from operation of the main complex. Road impacts would be limited to the construction phase only, unless the rail link was used, as wastes would be moved within the expanded Sellafield site without access to public roads.

Synergistic: the main benefit comes from concentrating civil nuclear activities in close proximity, reducing the possibility of impacts on other parts of the county or further afield (the latter being a concern of the Plan in terms of its broader sustainability even if it has a lower local priority).

Mitigation Proposed

The exact nature of the facility is not yet determined; if it requires an earth-bunded landform (and subsequent earth-capping during restoration) measures to prevent movement of water away from the feature and other stored materials being carried or blown off the site, will be necessary. Specific measures would be needed during construction to prevent dust and other material being blown onto adjacent agricultural land. The likely low elevation of the facility and containment using bunds is likely to be sufficient to mitigate the principal visual impacts. Further consideration would also need to be given to the impact on protected species and the scope for habitat compensation, depending on how much of the site is developed and where, within the overall allocation.

CO35 – Low Level Waste Repository, near Drigg (Copeland) – storage and/or disposal of low level radioactive wastes

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-Improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Proposals involve maximising delivery of wastes to the site by rail (though some delivery by road would continue).	**+(+)**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	?	?	?	Limited likelihood	The impacts are assessed as being negligible, as the proposal is to continue an existing use of the site and mitigation; it is not evident that there would be any change other than in the length of time over which the site would receive materials.	**?**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	(√)	(√)	(√)	Limited likelihood	HRA has concluded there is some risk of impact to the adjacent SAC and there are other designations (mainly SSSIs and some priority habitat) that might be affected. It is expected that existing mitigation measures would provide satisfactory protection.	**-**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	The facility contains low-level structures and therefore has limited impact on these criteria.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				No impact	There are small areas of flood risk zone 2 and 3 in the very south of the site; it is not clear what measures are in place to limit any risk to the wider site. Additional LLW capacity would only be provided on low flood risk parts of the site, protected as necessary.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Very likely but only in certain respects	Dust emissions are expected to be addressed by on-site mitigation (wheel washing and damping down of areas in dry weather) and by continuing use of rail delivery to the site where this is feasible.	**(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	(√)	(√)	(√)	Limited likelihood	Same assessment as Objective EN1, as the principal waterbody that could be affected is protected by Natura 2000 designations.	**-**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	(No impact in the expectation that containment infrastructure is built to prevent contamination to the air and land environments.)	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	(√)	(√)	(√)	Likely	The County Council's position (including that stated in Policy SP4) supports use of generic waste management policy (including both BAT and respecting the waste hierarchy) and, therefore, the assessment is positive.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No new impact	It is assumed that no new employment would be created (except possibly in short-term construction activities) although existing employment would be safeguarded.	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Summary of Assessment

The principal reason in favour of safeguarding this site, is to concentrate management capacity on an existing site rather than exposing other localities to similar issues. The assessment expects that the existing mitigation measures will persist while the site continues to accept waste, though further clarification is necessary of the risk of impact on adjacent Natura 2000 designations immediately to the west, and of any additional measures that will be warranted. It also anticipates that the very small area of the site at medium or high flood risk is part of the buffering zone around the edge and that future storage or disposal areas are sufficiently distant from it and protected by existing, viable flood defences.

The LLW Repository is currently the principal facility in the UK receiving such wastes although less than a quarter of deposits originate within the county. The proposal to safeguard extended and possibly increased storage/disposal capacity reflects a national need, which is supportable if the material sent to the site cannot be managed at or close to source.

Secondary, Cumulative & Synergistic Impacts

Secondary: none identified.

Cumulative: the principal impact is the concentration of LLW storage and disposal capacity in West Cumbria.

Synergistic: none identified.

Mitigation Proposed

Given the nature of the existing activity on the site, it is reasonable to expect existing mitigation measures are of the highest technical specification and rigidly enforced. Nevertheless, it would be prudent to review their effectiveness and the possible need for additional facilities when evaluating any proposal to continue accepting LLW at this site. Further clarification is needed of the risks to the SAC and appropriate mitigation that may be required.

CO36 – Sellafield site (Copeland) – storage and/or disposal of radioactive wastes

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact		**o**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people			(√)	Limited likelihood	There are 30 residential properties within 250m of the boundary of the wider site; however, development of a facility for this purpose would not reduce this distance, and proximity may be a greater issue for other activities on this site.	**?**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources			√	Moderate likelihood	Possible need for drainage measures to protect water quality in the River Calder, which is used by salmon migrating upstream to the River Ehen SAC; though this may depend on the location of any facility within the site. Given the rural location, the site is close to a range of national and county level designations, priority habitat and ancient woodland. All of these areas might be at risk, though this needs to be set in context of other risks posed by the wider site. Various protected species have been identified on or near the site with specific concerns about the natterjack toad. However, this species requires sandy heathland primarily, of which there is very little within the perimeter of the site.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	Any facility would be built within the curtilage of the existing industrial complex.	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area			√	Limited likelihood; possibly no impact	Heritage impact: there are 2 listed buildings within the vicinity of the complex, but any facility would be built within the curtilage of the existing industrial complex. Flood risk: most of the site is in flood risk 2 and 3 but existing flood defences provide protection. See comments against NR2. Impacts: the facility would be within the industrial complex and would only take wastes arising in the immediate vicinity, so any new impacts appear unlikely. Impacts: any incremental impacts are expected to be negligible alongside those of the existing industrial complex. Overall, the impact should be positive if it means that wastes from the site are no longer taken to the LLWR or consigned elsewhere, irrespective of whether this transfer occurs by road or rail. Enhancement: no impact	**(+)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors			√	Limited impact but will be beneficial	Same impact as above, in terms of avoiding local movement of LLW between Sellafield and other sites.	**(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water			(√)	Quite likely	The facility may be an engineered landfill/landraise site on a modest scale, creating inevitable potential risks to surface and groundwater resources, requiring mitigation measures appropriate to the level of activity of the wastes.	**-**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat			?	Limited likelihood	The principal potential risk is likely to arise from dust generated during construction that is blown or washed off the site.	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working			√	Inevitable (if built)	The proposal is consistent with policies SP2 and SP4 in providing capacity to manage or dispose of wastes as close as feasible to where they arise.	**++**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment			?	Limited likelihood	Any benefit is likely to be limited to construction jobs when the facility is built with limited ongoing employment once it is operational.	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Summary of Assessment

This is a very sustainable allocation, as it would result in wastes being managed or disposed at source, obviating the need to use road or rail to transport them to a suitable facility, and any risks and impacts that would arise as a result. Compared to allocation CO35, this proposal would accommodate further civil nuclear waste development within the existing complex, limiting the likelihood that it would generate incremental impacts and preventing the extension of risks and impacts to new locations. The principal adverse impacts are potentially on habitats supporting protected species within the site (though there is a risk if pollution were to travel down the River Calder, to species passing up the River Ehen to an SAC), and the need to ensure the integrity of storage or disposal areas.

Secondary, Cumulative & Synergistic Impacts

Secondary: the key secondary benefit will come from reduced use of the LLWR near Drigg, both in terms of extending the potential life of the existing capacity and the corresponding reduction of any incremental impacts from transporting wastes from Sellafield to that and other sites.

Cumulative: these are considered unlikely given the scale of activity in the wider industrial complex.

Synergistic: none identified, since the materials would be waste and are assumed to be unsuitable for reprocessing or recovery.

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
Mitigation Proposed							
Any facility would need to be mitigated by using measures at least as effective as those already in place. Further consideration needs to be given to preventing any contamination of land and water environments by material stored or disposed in an engineered landform or, in storage mounds in the case of non-radioactive inert wastes, which are expected to be the nature of any waste related developments. Location should be prioritised towards areas of the site that have been cleared, but which are not in use at present. Development on wooded land along the eastern border, and the plot just north of the mouth of the River Calder, should be avoided to protect biodiversity assets. Open “greenfield” plots on the north side of the site would need to be assessed for use by protected species.							

SITES IDENTIFIED IN POLICY SAP4 AS PREFERRED AREAS AND AREAS OF SEARCH FOR MINERALS

M18 – Stamphill, Long Marton (Eden) – Preferred Area for new open-cast gypsum mine

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices			√	Very likely	The proposal is to use conveyor belts to carry excavated material from the mine to the nearby gypsum works, avoiding any road use, due to concerns about its suitability for HGV traffic.	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need ,			?	Limited	There is an extremely indirect impact in that the Kirkby Thore plant supplies building material to the local construction industry, but this is less significant than most of the other allocated sites.	**+**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people			√	Very likely	The northern part of Long Marton village lies within 250m of the edge of the allocation. There are also properties on the opposite side of the railway line that are around 200m from the eastern edge of the site. Although the area proposed for excavation is surrounded by a buffer zone of varying depth, all of these premises have the potential to be affected by noise, dust and possibly vibration resulting from plant on the site.	**-(-)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact	Any impacts on the community are addressed through other comments in the assessment.	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources			√	Very likely, positively inevitable	There are a number of potential pathways (airborne, surface and groundwater) that could result in adverse impacts to Natura 2000 sites in the vicinity and the species they support. There may be protected species in the vicinity or possibly on the site (which is pasture at present). Without effective mitigation, open cast working has the potential to impact all these assets.	**-(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity			(√}	Limited likelihood	The site is in an open upland landscape, though there are some undulations that will help to screen the excavation (as will working below the surrounding ground level); however some visual intrusion appears inevitable. There is also likely to be a reduction in tranquillity, as existing gypsum extraction occurs underground.	**-**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area			√	Varying likelihood	Heritage assets: impacts would affect the setting of buildings in those parts of Long Marton closest to the site, although this could be offset by the workings being below ground level. Flood risk: there is a small area of medium/high risk, where a stream crosses the northwest end of the site, outside the intended excavation area; the site drainage design will need to ensure any landscaping or infrastructure (e.g. conveyor belt) do not extend the risk onto other parts of the site. The main issue will be effective drainage of the workings to enable movement of plant and address human safety. See also comments against Objective NR2. Impacts: working carries the likelihood of introducing some impacts into an area where they do not currently exist regardless of the effectiveness of any mitigation measures. Enhancement: scope to restore site to provide BAP priority habitat or create other habitat to benefit the protected species in the area.	**(+)/-**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors			√	Very likely	The principal benefit derives from proposed use of conveyor belts to take material from the site to the Kirkby Thore works, avoiding use of lorries with associated noise, vibration, dust and emissions impacts. This benefit is very likely to be offset to some extent by generation of dust by workings and depends on the effectiveness of any mitigation.	**(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water			√	Very likely	A stream feeding Trout Beck crosses the northwest end of the site; the site drainage design will need to address both flood risk and prevention of silting. This may be the principal pathway for off-site contamination of Natura 2000 sites in the vicinity. Open cast mining will probably require drainage of the area under working; both the Environment Agency and Natural England will need to be consulted about discharge arrangements in terms of quantities and maintenance of water quality in streams.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat			√	Very likely though not permanently	The site is greenfield and, therefore, the principal contamination risk lies in the future from dust and other material blown onto surrounding agricultural land, which is assumed to be of the same high quality as the site itself. Loss of productive land will be temporary, though potentially over a substantial period, depending on the depth of open-cast working.	-
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working			√	Very likely	The allocation would sustain the supply of raw materials to the Kirkby Thore works, which supplies a national market. Changes in construction practice resulting from the need to address climate change may alter the priority attached to using plasterboard, and the importance of maintaining supply of these products will need to be reviewed when a future planning application is received, as this matter will need to be judged alongside the apparent impacts on the surrounding communities if the site is worked. (The assessment does not pre-judge this issue and reflects the apparent importance of the Kirkby Thore works.)	+
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment			√	Very likely, if not inevitable	Will maintain economic viability of the Kirkby Thore works in the longer term, protecting jobs, many of which are presumably held by local residents.	+
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need			√	Very likely	Given this is a rural area, loss of the factory would force any local employees to look for work at more distant locations, so maintaining local jobs has an additional benefit.	+
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		o
Summary of Assessment							
This site was permitted for open cast extraction of gypsum about two decades ago, but that has now lapsed, though a new permission would only be required to continue supply to the Kirkby Thore works in about 15 years' time. The case for permitting the site turns on the importance of continued supply of gypsum products from the works to serve a national market, compared to the potentially substantial local impacts from this method of working in an area not subject to impacts from noise, dust, etc., at present. The potential to maintain jobs in a rural location, distant from larger employment centres, may also be a material consideration. Development has the scope to create a range of impacts affecting the local community (Long Marton village and other properties surrounding the site), as well as a range of sensitive receptors, particularly a number of highly protected wildlife designations and the species they support. The scale of development suggests that any future planning application will need to be supported by a full Environmental Impact Assessment and detailed assessments of impacts and mitigation of wildlife impacts (specifically an Appropriate Assessment if one has not been conducted already).							

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified, other than potential to relieve possible traffic increase on local roads if conveyor belts are used. Cumulative impacts: none identified, as there are no other comparable activities generating the same impacts in the vicinity. Synergistic: scope for habitat creation when the site is restored, recognising it is currently good quality land and restoration to agricultural use may be the priority.							
Mitigation Proposed							
This development is likely to require extensive mitigation to address a range of potentially significant impacts that do not affect the surroundings at present. The use of conveyor belts to carry material to the nearby works only addresses one of several issues. Open cast working would necessitate best practice mitigation to address impacts from dust (blow-off and in solution), noise (primarily plant as conveyors are relatively quiet), vibration (though this may be negligible as the worked area is surrounded by a buffer zone) and water quality. Archaeological records imply a desk or field survey will be necessary as this is an undisturbed greenfield site.							

M27 - land adjacent to Roosecote sand and gravel quarry, Barrow-in-Furness – Preferred Area: extension of sand and gravel quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**O**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope to use alternative modes to remove material from the site. Access will be via the existing quarry access.	**O**
SP3:To provide everyone with a decent home	-To help meet local housing need	√	√	√	Very likely	The site can contribute to maintaining the supply of sufficient primary aggregate to meet needs in the southwest of the county. Aggregates are expected to be needed for improvement at Barrow Waterfront, Port of Workington and Ulverston infrastructure. Further potential infrastructure projects: NW Coast Connections, new nuclear power station at Moorside, BAE systems shipyard at Barrow, Siemens and Glaxo Smith Kline at Ulverston.	**+**
SP4: To improve the level of skills, education and training	-Education and training	√	√	√	Quite likely	Site presently employs two directly and 10 associated with haulage and admin. Extending the working life of the quarry could allow opportunities for new staff to join and undertake training.	**(+)**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Very likely	The closest human receptors are a few houses at Page Bank Lane, approximately 500m to the east. There are also houses on Dungeon Lane (800m north west). Roosecote is 1km northwest and Rampside 1.5km south of the quarry. Visual mitigation may be necessary from the Rampside Road, but due to the profile of the land, the quarry extension area would not be visible to residents. The location implies movement of aggregate past properties and through the major road network in Barrow. Noise, vibration and dust impacts would result, though it is not clear that they would exceed those experienced from the existing workings unless either output increased, or area M27 was worked (or restored) at the same time as the existing area and nearby Area of Search at site M12.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		**O**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	(√)	(√)	(√)	Quite likely	There are two ephemeral water bodies that could support great crested newts and, although most of the habitat within the site is not optimal to support their foraging, these are qualifying species of the Morecambe Bay SAC, SPA and Ramsar, which are only 256m away. The fields may be also used by roosting/resting birds from the mudflats while the tide is in. Potential loss of habitat will need to be investigated. The built complex of the gas terminals lies between this site and the European Sites, and it is considered unlikely that silt laden water would flow from the quarry or that any restoration proposals for the site would have an adverse impact. Best practice mitigation of dust blow-off risk and appropriate drainage design would be required. The site's broken hedgerows between fields would be lost. There is only one of any significance on site that may support breeding birds and foraging bats. The hedgerows on site are a small percentage of those available in the wider area. Grey partridge, lapwing, red shank and tree sparrow are all recorded in the area. Although the site offers some potential for restoration to provide biodiversity improvement, most appears to be good quality agricultural land and restoration to this use would be a priority. However, the land may be utilised for the gas works expansion.	**(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Limited likelihood	The site is not remote but is semi-rural with a gas terminal, and a vacant site, between it and the coast. It is between two elevated positions and mitigation (bunding) may only be necessary from Rampside Road (on the eastern side). There is a significant strip of trees that will screen the area directly adjacent to it, so it is only on the approach from the elevated positions on the road that the site will be seen.	**(-)**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriate development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Quite likely	There may be ground-level heritage assets in the vicinity, and a survey, and potentially recording of threatened remains, will be required as part of a planning application. It would be prudent to require a future planning application to propose possible mitigation of impacts on Moor Head Cottages (Grade II listed buildings) in the event that the properties are to be renovated and re-occupied while the site is being worked. The site is not in a flood risk zone due to its elevation. Site drainage and any risks of material being washed off the site are low, as the flow is likely to be north east towards the existing quarry and not onto adjacent agricultural land. Consideration needed to extending the drainage plan for the existing site to provide appropriate mitigation (collection/dispersal) of run-off in this area.	**(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	(√)	(√)	(√)	Quite likely	There is concern over NO_2 levels near the gas power terminal boundary, but not enough to declare the area an Air Quality Management Area (AQMA). It is, therefore, not an area in which measures are being implemented to improve air quality. As with other minerals sites, there is inevitable scope for dust and other emissions from extraction and vehicle movements, but these could be controlled with best practice mitigation unless cumulative impacts arise from simultaneous development on all areas identified for mineral working, and/or from other developments in adjacent areas. However, faster development would decrease the duration of impacts. Movement of materials by other modes is not possible.	**(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	√	√	√	Quite Likely	The nearest open flowing water is Sarah Beck about 1km to the east of the site. There are ephemeral ponds in the curtilage of the proposed site. The site is over a major aquifer at high risk and an important consideration may be the scope to affect groundwater and its effect on water levels and quality. These matters would need to be addressed at the planning application stage, in combination with other developments in the area.	**(-)**
NR3: To restore and protect land and soil	-To reduce contaminated land -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat	(√)	(√)	(√)	Inevitable and possibly permanent	Development would take good quality agricultural land used as pasture. This loss may or may not be permanent as there maybe plans to expand the gas facility onto the site. Alternatively, there would be scope to return the site to its original use if and when extraction ends. The topsoil should be stored to enable restoration to this use if it is considered the priority.	**(-)**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√	√	Very likely	This extension to the existing sand and gravel quarry would increase and maintain the supply of sand and gravel to the local area. The vast majority of sand and gravel quarries are located in the north and east of Cumbria and there is a policy in the MWLP to “minimise road miles”. Maintenance of a sand and gravel quarry to service the local area is a positive benefit. Extraction of the mineral prior to use of the site for extension to the gas terminal, or a new energy development, would also be a benefit.	**++**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Limited likelihood	The purpose of the site is to provide continuity of supply in the event of increased demand in the area and, therefore, it is likely that jobs would be re-located if this occurs, with no increase in employment. (See additional comment under Secondary impacts in the summary section.)	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need	(√)	(√)	(√)	Limited (probably no) impact	Comments as above. It is also unclear how well the site is served by regular public transport, so employees would need a car impacting the scope for sustainable commuting.	**O**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact	No direct impact, but a secondary impact of providing aggregate to support development.	**O**

Summary of Assessment

This site is assessed as largely sustainable. Its main advantage is judged in planning terms insofar as it would maintain a supply of aggregate to serve the Furness peninsula and possibly a limited area beyond, and enable recovery of a mineral resource prior to non-mineral development.

Specific issues include groundwater impacts and potential effects on qualifying species for European Sites.

Extraction would result in the temporary loss of a modest area of good quality agricultural land and would have to be justified on the basis of maintaining the county landbank of sand and gravel. If this were to be permanent, due to a subsequent use of the land, this would have to be justified as part of the planning application for that proposal.

Secondary, Cumulative & Synergistic Impacts

Secondary: the provision of sustained supply of local aggregate would support local infrastructure development.

Cumulative: possible risk if site allocation M12 on the other side of Rampside Road to the existing quarry and this supplementary site are both opened simultaneously, or if other developments (new energy infrastructure and National Grid connection) occur simultaneously.

Synergistic: none identified. Site M12 (on the east side of Rampside Road) would provide additional, longer term supply.

Mitigation Proposed

The key mitigation requirement would be to protect groundwater from any intrusive quarrying impacts; the operating quarry to the north has a condition not to quarry below the water table. A programme of phasing would need to be agreed, in order to limit possible cumulative impacts with the existing quarry. The water bodies would require surveying for the presence of Great Crested Newts. Surveys also required for birds from the nearby Special Protection Area, to see if likely to use the site for loafing, feeding, etc. Feasibility of future sand and gravel extraction at site M27 and the existing quarry, will become clearer once the HSE safety report on consolidation of gas processing at one of the adjacent terminals is issued. This should clarify whether none, all or part of site M27 should be removed from the site allocations.

M5 – Land adjacent to High Greenscoe Quarry, Askam-in Furness (Barrow) – Area of Search: extension of mudstone quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	The site location offers no scope for alternative transport modes.	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need	√	√	√	Inevitable	The site supplies raw materials for brick manufacture and while this is for a national market it has obvious benefits in terms of meeting local housing demand.	**++**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Very likely	There are several dwellings within 250m of the site; the scale of impact is assessed as moderate due to the limited number of houses. Some of these properties are likely to have been affected to some extent by working on the existing site, but the proposed extension would reduce the distance to other surrounding properties. Some impacts should be capable of being mitigated with bunding and/or buffering, though this may reduce the workable area and the available reserve.	**-**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport	?	?	?	Limited likelihood	A public footpath runs along the southern edge of the extension. This may result in impacts on local users and necessitate safety measures to prevent access into the worked area.	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	?	?	?	Limited likelihood	County, national and international designations lie within 0.5 to 1.5km of the site, with two of the former adjoining the proposed extension immediately to the south. HRA has concluded there are no risks to any Natura 2000 sites.	**?**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	?	?	?	Uncertain likelihood though some specific impacts possible	Workings will be visible from the high ground to the east. Impact on rural tranquillity will be limited, insofar as the site is already an active working quarry, and extension would more likely affect the duration rather than the scale of impacts.	**?**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Quite likely though varied	The closest property (250m) is a listed building and visual impact mitigation may be necessary in the form of screening around the site, which could impact the available resources. Flood risk: the site is in the lowest flood risk zone; drainage design will need to limit run-off increasing the risk of flooding and/or siltation on land and properties downhill to the west. Particular consideration may need to be given to the risks to the impact on the environmental assets in the area proposed for the extension. Impacts: allocation continues the inevitable impacts of mudstone extraction, but these should not increase provided the extension is worked once the existing reserves are exhausted. However, extension will shift working closer to some properties and the effectiveness of existing mitigation may need to be reviewed. Environmental improvement; no opportunity re built assets.	**(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors				No impact	There is no scope to use non-road transport modes and assessment against other objectives has addressed possible dust impacts.	**o**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	?	?	?	Limited if any likelihood	Previous assessment has concluded that extended workings would not have any impact on groundwater levels or quality in the vicinity of the site. The comments regarding flood risk (Objective EN3) are also relevant insofar as such events could provide a pathway for contaminating adjacent land by overland flow and/percolation and may need to be considered	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	The plot is assessed as being low quality agricultural land and the restoration scheme is for habitat creation and improvement, to complement the cluster of assets in the immediate vicinity. Soil contamination appears unlikely, provided existing mitigation measures are maintained and dispersal via other pathways (see EN2 and NR2) is prevented.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working		√	√	Moderate	Extension will provide for continued supply of a resource to serve county and wider markets and, therefore, safeguarding the resource adjacent to existing workings is appropriate.	**+**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment		√	√	Very likely, if not inevitable	Will protect jobs in the local quarrying sector and maintain the supply of building materials to support the local construction industry.	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	Appears to offer no scope for job creation, and its rural location means it is not accessible by non-car modes. It may be accessible by foot or cycle if some employees live locally.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
The allocation, comprising an eastward extension of the existing brick-making mudstone quarry, will continue any existing impacts, bringing some of them closer to a listed building while, at the same time, increasing distance from other properties to the north and west that will have been affected by existing working. The area has, however, been noted as a strategic resource in Policy SP9, which reflects its potential importance in the supply of high quality brick to local and national markets, although a justification of need may be required to support further extension in the light of the potential impacts. The proximity of the quarry to human and wildlife assets necessitates a range of mitigation measures, some of which are likely to reduce the workable area.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified Cumulative: none identified, provided the extension is only worked once the existing reserves are exhausted. Synergistic: very significant scope for habitat creation and improvement given the cluster of existing important assets around the site.							
Mitigation Proposed							
Existing mitigation measures should be sufficient to deal with operational impacts, though a future planning application will need to provide evidence to this effect. Additional survey may be needed to check for use or occupancy of the extension land by any of the various local protected species. Visual mitigation of impacts on the listed farmhouse to the east will be necessary and it would be advisable to evaluate the effect of water drainage off the site on adjacent land, if this has not been done already.							

M6 – Land between Overby and High House Quarries (Allerdale) – Area of search: extension for sand and gravel extraction (long-term)

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	Location of the site provides no scope for alternatives to road movement	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need			(√)	Very likely if indirect	As with other aggregates sites, this site can contribute to maintaining the supply of sufficient primary aggregate to meet needs in the north and west of the county.	**(+)**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health, e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people			√	Limited likelihood	The proposal gives significant advance notice to local communities of the possibility of further working in this area. The site is distant from human sensitive receptors and, provided working begins after one or both of the existing quarries has ceased, it is reasonable to expect that cumulative assessments would be no greater than those experienced at present, with appropriate best practice mitigation.	**(+)**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources			√	Quite likely	There is scope for contamination (through dust-blown siltation) of local water courses that feed into the various Solway Firth designations, while BAP priority habitats that may draw on the same groundwater supply are closer to the site. Excavation would provide an opportunity for biodiversity enhancement and/or priority habitat creation that could extend the proposals in place for the existing quarries unless restoration to agricultural land is a priority.	**+/-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity			√	Limited likelihood	There is unlikely to be any additional visual impact, provided the scale and elevation of operations is no different from that in the existing quarries, and provided the search area is only worked once the other quarries have ceased and in the final stages of restoration. Existing workings establish the planning context for aggregates working in this rural area and, therefore, extended working should have no additional impact provided it is on a similar scale. As a result of the lack of adverse impacts performance against this objective, it is assessed as mildly positive.	**(+)**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area			√	Limited likelihood against all criteria	May require archaeological survey to establish whether there are any assets present, but there is no indication of direct impact on other heritage assets, except those that may result from lorry movements through nearby settlements. Hadrian's Wall WHS visual impact zone is c800m away, over an intervening ridge. The site is in the lowest flood risk zone, though site drainage design will need to ensure that there is no risk of runoff onto adjacent land, whilst also addressing contamination risks to nearby open watercourses. The site would only be developed to meet long-term aggregates requirements once the other two quarries are nearing exhaustion. If operating as a single site, it is likely that overall impacts would be lower than the cumulative ones from two sites being worked fairly close to one another. It is not clear whether scope exists to alter the preferred routeing of lorries through the local rural road network to reduce any current impacts though clearly this would only shift them rather than eliminate them. Any opportunity to enhance the rural environment lies principally with scope for biodiversity enhancement.	**+/(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors				No impact	Any impact on dust, etc. is likely to be no worse than from the two existing sites and the location provides no scope for modal shift.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water			√	Quite to very likely	Possible risk, primarily to open watercourses rather than groundwater, which feed into SAC, SPA and Ramsar sites in the Solway Firth, and to other nearby national and local designations. Mitigation should be appropriate to the scale of the risk, given the distance of the site from most of these designations.	**-**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat			(√)	Depends on restoration	Land appears to be good quality agricultural land that will be removed from productive use during extraction. As a result, restoration to this use may be the priority, though this may need to be informed by, and consistent with, the restoration proposals for the two existing quarries.	**?**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working			(√)	Quite likely if some way in the future	The site will provide for continued supply of aggregates to markets in the north and west of the county and will help maintain the landbank. Allocation provides an appropriate level of safeguarding and advance warning of the possibility of workings.	**(+)**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No impact	Development would occur sometime in the future and only if the other quarries cannot meet the required landbank resources. It appears more likely that extraction would shift from the worked-out quarries and that this limits the scope for new jobs. (See also comments under Secondary impacts in the summary.)	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	The rural location of the site suggests employees would need a car to reach the site. (However this is assessed as neutral if they have been previously working on one of the other two quarries.)	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
The sustainability of this site for future extraction of sand and gravel, is justified primarily by the operation of existing quarries to the northeast and southwest, which demonstrate that local impacts are capable of being mitigated effectively and that the location is an important source of aggregate available to markets in the north of the county. The County Council must meet its landbank requirements. This allocation provides flexibility in safeguarding a location to provide scope to deliver additional resource in the event that reserves at existing sites peter out, or that there is an unanticipated increase in aggregate sales during the Plan period. It is considered appropriate to safeguard the site, insofar as this also provides notice of possible extraction in the longer term, and it is not evident that this has a substantial blighting impact on the surrounding area.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: as with other aggregates sites, this one can contribute to the supply of local aggregates supporting the local construction/development sectors. Cumulative: impacts should decline if the site is worked after the other two quarries have ceased operations or if one of them remains open. In the event that it has to be developed while the other two sites are operating, the planning application will need to pay particular attention to cumulative impacts in terms of road traffic, emissions, dust and noise. Synergistic: none							
Mitigation Proposed							
Provided the site is only worked progressively, once one or both of the currently operational sites have closed or completed a permitted phase, mitigation should be the same as that provided for the existing workings. This is assumed to include use of buffering, bunding, visual screening, noise suppression on compressors and other equipment, wheel washing and dust suppression during dry periods, etc. Specific mitigation will be needed to deal with impacts on Hards Farm, which lies beyond the south east edge of the allocation.							

M8 – Land adjacent to Cardewmires Quarry (Carlisle) – Area of search: extension for sand and gravel extraction (long-term)

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport				No impact		**o**
SP3:To provide everyone with a decent home	-To help meet local housing need			(√)	Very likely if indirect	As with other aggregates sites, this site can contribute to maintaining the supply of sufficient primary aggregate to meet needs in this part of the county. Outputs from the existing site are forecast to last throughout almost all of the Plan period, so the new site is not required in the immediate future, though it can supply housing and other development projects in the longer term.	**(+)**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people			?	Limited likelihood	The site is in a rural location some distance from human sensitive receptors, the nearest of which is Cardew Hall and Farm (400m to the southwest) and the western end of Dalston (300m from the very eastern edge of the site).	**?**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources			(√)	Limited likelihood	There are limited biodiversity designations within the vicinity of the site. The River Eden & tributaries SAC is over 1km away and there are other sources of potential impact on the land in between. HRA refers to the possibility of BAP grassy marshland habitat within the site, so this will need a survey when a planning application is submitted. Ecological and possibly Phase 1 habitat survey would be prudent to check for use of the site by protected species and to consider scope for restoration of this site; though currently in agricultural use, it is not high quality land.	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
						As parts of the existing site are currently restored as open water bodies, restoration as wetland may be feasible, as there does not appear to be a conflict with the Carlisle Airport safeguarding zone.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity			√	Limited likelihood	There are no landscape designations in the vicinity. Development will result in an inevitable intrusion into currently open agricultural land. The intent of removing materials by conveyor under the railway land to handling and despatch facilities in the existing site could limit the need for structures on the new site, limiting visual intrusion to some extent.	**?**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area			√	Limited likelihood against all criteria	Historical environment: Dalston Conservation Area is over 700m away and it is difficult to see that the development could have an adverse impact on its setting from this distance. Flooding: parts of the site are in risk zones 2 and 3a; however, this aggregate extraction is water-compatible, that has the potential to provide temporary or, depending on restoration priorities, permanent flood risk mitigation through water storage. Impacts: as with all minerals and waste developments some adverse impacts are inevitable. Apart from the sensitive receptors identified in assessment against objective SP5, there appears limited scope to generate widespread impacts provided that best practice mitigation is applied. The new site has no direct access to the road network, but the use of conveyor belts would limit the generation of new road impacts. In general, impacts are only likely to be significant if the site is worked at the same time as the existing quarry but it is understood this is not the owner's intention. Environmental enhancement: there is potential scope for improvement of the site through biodiversity enhancement provided this has a higher priority than restoration to agriculture. (Collectively these assessments are more positive than negative though the latter have to be acknowledged.)	**+/(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors				No overall impact	Dust emissions are a likely consequence of extraction and transport of aggregates, but this can be mitigated using appropriate measures such as dust suppression, routeing agreement, etc. There appears to be little scope to remove material using the railway line, but there is scope to avoid new road impacts on Dalston by moving material on conveyor to batching and despatch facilities on the existing site.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water			√	Quite to very likely	HRA concluded that there is limited risk of impact on the River Eden and Tributaries SAC. The site contains several field drains and is bisected by Gill Beck; there are risks of siltation of these features by material washed off or blown from the site and so site design will need to ensure existing drainage patterns are maintained, as these watercourses serve other land that will continue to be in agricultural use.	**-**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat			(√)	Depends on restoration	Degradation: there is scope for material blown off the site to be deposited on adjacent land. While this may not be contamination it should be avoided nevertheless. Improvement: land does not appear to be good quality agricultural land and therefore there is scope to restore for biodiversity improvement, possibly as BAP priority habitat appropriate to this part of the county.	**+/-**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working			(√)	Quite likely if some way in the future	The site will provide for continued supply of aggregates to markets in the north of the county and also help maintain the landbank. Allocation provides an appropriate level of safeguarding and advance warning of the possibility of workings. The site is conveniently located to supply aggregates to the local district (and possibly neighbouring parts of the county).	**+**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No impact	Development would occur sometime in the future to meet the required landbank resources. It is likely that extraction would shift from the current site to this allocation; this limits the scope for new jobs. (See also comments under Secondary impacts in the summary.)	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	The site is a little distance from Dalston with no direct access (though a cycle route runs down the eastern edge of the site). The location of the site suggests employees would need a car to reach it. (However, this is assessed as neutral if they have previously worked on the existing quarry.)	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
The sustainability of this site for future extraction of sand and gravel, is justified primarily by the operation of the existing quarry, which demonstrates that local impacts are capable of being mitigated effectively and that the location is an important source of aggregate available to markets in the north of the county. The County Council must meet its landbank requirements. This allocation provides flexibility in safeguarding a location to provide scope to deliver additional resource, in the event that reserves at the existing site peters out, or that there is an unanticipated increase in aggregate sales during the Plan period. It is considered appropriate to safeguard the site, insofar as this provides notice of possible extraction in the longer term, and it is not evident that this has a substantial blighting impact on the surrounding area. Impacts are likely to be comparable to those created by the existing workings, though a planning application will need to demonstrate that mitigation applied to the existing workings are capable of dealing with the impacts of workings slightly closer to properties in Dalston. There is scope to reduce local impacts by using conveyor belts to move aggregates to despatch points on the existing site, and the relatively poor apparent quality of the existing land gives scope for restoration alternatives including BAP priority habitat or possibly additional wetland, to complement that on the existing site. The planning application will need to pay particular attention to the drainage design of the site, to ensure continued free flow of uncontaminated water through the local field drain and stream system, whilst also maximising the scope for the site to provide temporary, or possibly permanent, flood storage.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: as with other aggregates sites, this one can contribute to the supply of local aggregates supporting the local construction/development sectors. Cumulative: impacts should decline if the site is worked after the existing operations have ceased. In the event that excavation starts while the existing site is being worked, the planning application will need to pay particular attention to cumulative impacts in terms of road traffic, emissions, dust and noise. Synergistic: none							
Mitigation Proposed							
Mitigation should be the same as that provided for the existing workings; this is assumed to include buffering, bunding, visual screening, noise suppression on equipment, wheel washing and dust suppression during dry periods, etc. Specific mitigation may be needed to deal with impacts on Cardew Hall and Cardewlees Farm.							

M10 – Land adjacent to Silvertop Quarry, Brampton (Carlisle) – Area of search: extension of limestone quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, the countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	The site location offers no scope for alternative transport modes.	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need		√	√	Very likely	The site can maintain the supply of construction materials to serve local housing needs.	**++**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health, e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No impact	There are no human sensitive receptors in the immediate vicinity (nearest house is 300m); it is not evident that the site is crossed, bounded or close to public rights of way or recreational areas. Mineral workings will create noise, dust and other impacts, but it is assumed those generated by the extension will be no greater than impacts from the existing workings.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact	There is no indication of impacts on recreation or similar land uses. Impact on heritage assets is considered under Objective EN3.	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources		√	√	Limited likelihood	Agricultural land that may be used or occupied by nationally and/or locally protected/priority species in the vicinity. HRA concluded that there is no risk of adverse impacts to Natura 2000 sites.	**(-)**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity		√	√	Very likely	Lies within an area of landscape sensitivity; excavation is unlikely to be problematic as it is part of an existing quarry. The site is adjacent to but not within Hadrian's Wall Visual Impact Zone, but would not appear to create impacts different to those experienced already, though this may require further assessment.	**(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area		√	√	Quite likely	Heritage assets: impact on the WHS is addressed above, though there are records of archaeological assets in the vicinity and further desk (and possibly field) research may be necessary. Flood risk: the site is in the lowest flood risk area and the main issue will be drainage of the excavated area and any implications this has for discharge consents to adjacent watercourses. Impacts: the site is remote from sensitive receptors and excavation of the extension is not expected to result in an increase to existing impacts. This will also prevent any increase in off-site impacts from removal of crushed rock by road.	**(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors				No impact	There is no scope to use non-road transport modes and assessment against other objectives has addressed possible dust impacts.	**o**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water		?	?	Limited if any likelihood	A small watercourse (probably a drainage ditch) runs along the southern edge of the extension, but this should not be affected by excavation below ground level unless that interferes with groundwater supply. There are no other natural open waterbodies in the immediate vicinity; any adverse impact appears unlikely.	**?**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	Low quality agricultural land; restoration may, therefore, be for habitat creation and improvement. Soil contamination appears unlikely, as workings will be below ground level; a risk would only arise in extremely windy weather, and could be addressed to some extent by normal dust suppression measures.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working		√	√	Moderate	Extension will provide for continued supply of crushed rock to serve markets in this part of the county and, therefore, safeguarding the resource adjacent to existing workings is appropriate.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment		√	√	Very likely, if not inevitable	Will protect jobs in the local quarrying sector and maintain the supply of building materials to support the local construction industry.	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	Offers no scope for job creation and its rural location means it is not accessible by non-car modes. It may be accessible by foot or cycle if some employees live locally.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
This allocation is a small scale extension of an existing operational limestone quarry, which provides a unique supply of crushed stone for this part of the county. It is assumed to be worked once the existing reserves are exhausted and, therefore, has limited potential to increase existing impacts of quarrying in the area, though impacts will be prolonged for a modest period. The principal adverse impacts can be addressed through best practice mitigation, though some matters will need further evaluation.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified Cumulative impacts: none identified provided the extension is only worked once the existing reserves are exhausted. Synergistic: scope for habitat creation when the site is restored, possibly reflecting UK, county or local priorities.							
Mitigation Proposed							
Existing mitigation measures should be sufficient to deal with operational impacts, though a future planning application will need to provide evidence to this effect. Specific mitigation may be needed to address localised impacts on protected species, the AONB and the World Heritage Site (visually), and additional surveys (and mitigation proposals as necessary) will be required in support of any future application.							

M11 –Land adjacent to Kirkhouse Quarry, near Brampton (Carlisle) - Area of Search: extension of sand and gravel quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact), this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**O**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope for alternative transport, although this is a generic issue for many minerals sites. The site is well connected between Carlisle and Brampton, which may promote a sustainable option to commute.	**O**
SP3:To provide everyone with a decent home	-To help meet local housing need	√	√	√	Very likely	It is estimated that the remaining reserves at Kirkhouse will be exhausted before the end of 2023. The sand extracted is manufactured to produce a variety of fine aggregates including for use of building, plastering concrete and asphalt sands. Extension of the existing site would provide material to meet housing needs in the local/Carlisle area.	**+**
SP4: To improve the level of skills, education and training	-Education and training		√	√	No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Very likely, possibly inevitable	The additional area proposed, could increase the exposure of nearby residents in Farlam to noise and dust emissions. Extraction would be likely to either extend the duration, or increase intensity of the impacts. Relevant industry standard mitigation measures (buffering and/or bunding, possibly with vegetation screening) would be necessary.	**-(-)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity, arts, heritage, dialect, sport				No impact		**O**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources		√	√	Inevitable	There are no significant designations present on or in close proximity of site. There is a stretch of woodland in the allocation to the north west, which is designated as National Inventory of Woodland and Trees, and a small stretch of UK Priority Habitat deciduous woodland in the same area. These woodlands may have potential for foraging/commuting bats, a European protected species, and further ecological surveys would be required. This a popular area for farmland birds including black grouse, curlew, grey partridge, lapwing, redshank, snipe, tree sparrow and yellow wagtail. The extension of the quarry will inevitably have some impact on the receptors identified; appropriate mitigation will be needed.	**-(-)**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Very likely	Some visible impact is inevitable from neighbouring villages such as Farlam and Kirkhouse, although the area has already been used for extraction previously, so to some degree this may be accepted as an appropriate land use. The visual impacts from Talkin Tarn Country Park should be minimal as the lake is surrounded by Tarn Wood. Ground-level impacts can be addressed by bunding or vegetation screening that can be planned as part of the restoration of the site. Extraction from near the ground surface should not require plant that will be visible over long distances and there should only be low buildings (e.g. temporary accommodation for the site office on the site).	**-**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area		√	√	Limited likelihood	There are no designated built heritage assets on site, the nearest are listed buildings in Farlam and Kirkhouse. The majority of site is in a low flood risk zone, the exception being in the northern part of site where a ford runs parallel to and is an area of medium to high risk. The extraction area will allow any overland flow to accumulate, implying that there is unlikely to be a risk to adjacent land and property. There is evidence that this is the best and most versatile agricultural land, so restoration to agriculture may be a priority.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	?	?	?	Quite likely	Workings clearly have the scope to increase dust emissions from extraction and traffic movements. Road transport is the only option for moving material off the site. By extending Kirkhouse Quarry, particularly if the intensity and output of the site was increased, the potential for dust emissions to reach sensitive receptors in Farlam increases. The site does not fall within an Air Quality Management Area (AQMA).	**-**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact	There is one small pond located on site. The main potential risk is from dust contamination (resulting in siltation) of water sensitive habitats and designations in the vicinity of the site, but this should be capable of being mitigated using standard measures.	**(-)**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat		√	√	Very likely	There is 60% likelihood that the site is Best and Most Versatile agricultural land, and the topsoil should be stored to enable restoration to this use. Any loss could be compensated by ecological and other benefits from alternative restoration proposals for the site.	**-(-)**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√	√	Very likely	The site provides sand and gravel, and an additional Area of Search assists in maintaining the landbank for Cumbria.	**+(+)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	?	?	?	Very unlikely	In order to reduce impacts, it may be necessary to phase working of the rest of this site and this would limit the scope for new jobs to be created.	**O**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	See above.	**O**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**O**

Summary of Assessment

This site has been proposed for an extension to the existing extraction of sand and gravel. The two proposed Areas of Search constitute an extensive area; further geological and environmental assessments would be undertaken, in order to define a more specific area, prior to the submission of any planning application. Consideration could be given to excluding that part of M11 through which Milton Beck flows, which is in flood zones 2 and 3, although sand and gravel extraction can be water compatible. The Areas of Search are greenfield and there are significant areas of UK Priority Habitat semi-natural woodland nearby; therefore, a restoration scheme appropriate to this distribution should be considered.

The existing quarry is well located to the road network, with good access to the A689 and A69. Access to the newly proposed areas would be via the existing quarry access, as the minor roads to the south of M11 are narrow.

The closest residential properties, including three Grade II Listed Buildings, are in Farlam, less than 330m south of the site. The site is approximately 750m from the North Pennines AONB, which lies in higher ground to the south and east; therefore, landscape and visual impact assessment is likely to be required.

Secondary, Cumulative & Synergistic Impacts

Secondary: as with other aggregates sites, this one can contribute to the supply of local aggregates supporting the local construction/development sectors.

Cumulative: impacts should decline if one of the Areas of Search is worked after the other parts of the quarry are exhausted. In the event that it has to be developed in tandem, the planning application will need to pay particular attention to cumulative impacts in terms of road traffic, emissions, dust and noise.

Synergistic: none

Mitigation Proposed

Existing mitigation measures should be sufficient to deal with operational quarrying impacts, though a future planning application will need to provide evidence to this effect; this will include buffering, bunding, visual screening, noise suppression on equipment, wheel washing and dust suppression during dry periods, etc. A programme of phasing would need to be agreed, in order to limit possible cumulative impacts with the existing quarry. Surveys may be needed to check for use or occupancy of the land by any of the various local protected species. Mitigation will be required if there is any loss of woodland.

M12 – Roosecote Quarry (Barrow) – Area of Search: new sand and gravel extraction

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope to use alternative modes to remove material from the site	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need		√	√	Very likely	The site can contribute to maintaining the supply of sufficient primary aggregate to meet needs in the southwest of the county.	**+**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people		√	√	Very likely	The closest human receptors are in Roosecote approximately 200m to the northwest, and some visual mitigation may be necessary due to the elevated position of the site. Otherwise the location implies movement of aggregate past the properties and through the major road network of the town. Noise, vibration, emission and dust impacts would result, though it is not clear that they would exceed those experienced from the existing workings, unless both parts of the wider "Roose" site are being worked at the same time.	**-**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources		(√)	(√)	Limited likelihood	HRA concluded that there is no risk of impact on the Morecambe Bay SAC (although best practice mitigation of dust blow-off risk and appropriate drainage design would still be required). Similar mitigation measures are necessary to limit any risk of contamination to nearby county wildlife sites, and the effect of excavation on local water table levels and water-sensitive wildlife sites may need further investigation. Although the site offers some potential for restoration to provide biodiversity improvement, it appears to be good quality agricultural land and restoration to this use would be a priority.	**(-)**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity		√	√	Quite likely	The site is not remote but is semi-rural. It is in a more elevated position in the surroundings compared to the existing site and some mitigation (screening) may be necessary to limit the visual impact when viewed from the north and east.	**-**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriate development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area		√	√	Quite likely	There are some ground-level heritage assets in the vicinity that require a survey as part of a planning application, and possible mitigation. It would be prudent to propose possible mitigation of impacts on Moor Head Cottages. The site is in the lowest flood risk zone, but a site drainage plan would be necessary to mitigate any risks of material being washed off the site onto adjacent agricultural land and to assess the impact of working on local groundwater levels.	**(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors		?	?	Quite likely	As with other minerals sites, there is inevitable scope for dust and other emissions from extraction and vehicle movements, but these can be controlled with best practice mitigation and limited if this site cannot be worked until the existing site to the west is no longer operating (i.e. to avoid cumulative impacts). Movement of materials by other modes is not possible.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water		√	√	Limited likelihood	The nearest open flowing water is Sarah Beck about 250m to the northeast (and downhill) of the site. There are ponds in the curtilage of the existing site and on the east side of Roosecote. A more important consideration may be the scope to affect groundwater and surface water movements and its effect on water levels and movement of contaminants off the site. These matters would need to be addressed at the planning application stage.	**-**
NR3: To restore and protect land and soil	-To reduce contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat		(√)	(√}	Inevitable but impermanent	Development would take good quality agricultural land of which around 2/3rds appears to be in arable use and the rest unoccupied pasture. This loss would not be permanent and there would be scope to return the site to its original use if and when extraction ends.	**(-)**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working		√	√	Very likely	The site has the potential to maintain the supply of aggregate to the local area in the event that the existing sand quarry has to close, and its allocation safeguards its potential use.	**(+)**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment		?	?	Limited likelihood	The site provides a contingency in the event that Roose Quarry closes; therefore, it is likely that jobs would be re-located if this occurs, with no increase in employment. (See additional comment under Secondary impacts in the summary section.)	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need		?	?	Limited (probably no) impact	The site is currently served by regular public transport , though employees may need a car, depending on start and finish times.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/ no effect/depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
This site is assessed as largely sustainable, provided that it is initiated only to compensate for the cease of capacity at the existing, operational Roose Quarry. If they were to operate simultaneously, this assessment would change substantially, as this outcome would give rise to cumulative impacts affecting noise, dust, traffic, vibration and possibly visual impact. Its main advantage is judged in planning terms, insofar as it provides a contingency to maintain a supply of aggregate to serve the Furness peninsula and the south west of the county. The site occupies a more elevated position than the existing Roose Quarry, and this will require re-assessment of the efficacy of any existing mitigation measures, which should not just be transferred without review. Specific issues include visual impacts on Roosecote hamlet and the land to the northeast, and the implications of its elevated location on ground and surface water movement onto surrounding land. Extraction would result in the temporary loss of a modest area of good quality agricultural land, and would have to be justified on the basis of maintaining the county landbank of sand and gravel.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: none identified, provided a planning condition is applied to ensure that the site is only brought into use in the event that Roose Quarry closes prematurely (though it may be prudent to allow further review of this requirement during the Plan period). Synergistic: none identified.							
Mitigation Proposed							
The key mitigation requirement would be a condition limiting scope to work the site simultaneously with the existing quarry, in order to limit possible cumulative impacts and to avoid other possible issues (including road safety implications of traffic moving from one site to the other, across Rampside Road). Other best practice mitigation measures appropriate to sand and gravel extraction would be required. Specific consideration should be given to site drainage and its impact on surrounding agricultural land and ecological assets.							

M15 – Land adjacent to Peel Place Quarry (Copeland) – Area of Search: extension of sand and gravel quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope for alternative transport, although this is a generic issue for many minerals sites.	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need	√	√	√	Very likely	The quarry is one of only two sources of construction standard aggregates in the south west of the county and, therefore, provides a local source of material for any expansion or regeneration in this and adjacent districts. Without this source, aggregates would have to be moved over longer distances, raising costs and impacts.	**++**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Very likely, possibly inevitable	Extended working would continue the exposure of residents in Hallsenna and the farms surrounding the quarry to the effects of extraction. However, the proposed allocation shifts working away from the greater concentration of residential properties around the existing workings, with the main impacts being on High House Farm and occupants of the caravan park on the east side of the A595. Relevant industry standard mitigation measures (buffering and/or bunding, possibly with vegetation screening) would be necessary.	**-(-)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact	Impacts on the immediate community are addressed in assessments against other objectives.	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species	√	√	√	Quite likely	Possible use of the site by protected species and there are risks of dust contamination of nearby BAP priority habitat and ancient woodland, which necessitate use of dust suppression measures.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
	-Enhancement of natural/ecological resources					HRA has concluded that there is no risk of impact to the more distant Drigg Coast SAC. The existing quarry contains a RIGS and there may be scope to preserve further parts of the new workings if these are also of note.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	√	Very likely	Some visible impact is inevitable along the edge bordering the National Park and the site is overlooked from high ground to the east; similar issues will have been considered in evaluating the impact of opening the existing quarry. Simultaneous working will affect the visual impact seen from the Park. Ground-level impacts can be addressed by bunding or vegetation screening that can be planned as part of the restoration of the site. Extraction from near the ground surface should not require plant that will be visible over long distances and there should only be low buildings (e.g. temporary accommodation for the site office on the site).	**-**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Quite likely but some are localised	Heritage assets: main impact is on a listed building in Hallsenna; however, the extension is a greater distance from this property than the existing working and some protection with bunding or buffering could be used. Flood risk: the site is in a low flood risk zone and the extracted pit will provide an area for any overland flow to accumulate, implying there is unlikely to be a risk to adjacent land and property. Impacts: some impacts are inevitable, but these should be similar in scale to those from the existing working and, therefore, the main issue concerns the duration of impacts. Other environmental quality: the site represents an opportunity for restoration for biodiversity improvement. There is no evidence that this is the best and most versatile agricultural land, so restoration to agriculture may not be a priority.	**+/-**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	?	?	?	Quite likely though difficult to define	Workings clearly have the scope to increase dust emissions from extraction and road movement of aggregate, which is the only option for moving material off the site. This is the only source of aggregates in this area of the county and, therefore, without it local developers would rely on distant (<60km) sources in the county that would probably have to be moved by road, creating far more extensive impacts, or by relying on sources outside the county.	**+/(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact	The main potential risk is from dust contamination (resulting in siltation) of water sensitive habitats and designations in the vicinity of the site, but this should be capable of being mitigated using standard measures.	**(-)**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat	√	√	√	Limited likelihood	There is low probability that the site is high quality agricultural land, though the topsoil should be stored to enable restoration to this use if it is considered the priority. Any loss could be compensated by ecological and other benefits from alternative restoration proposals for the site.	**?**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√	√	Very likely	The site provides one of only two local sources of aggregates for the south and west of the county.	**+**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	?	?	?	Very unlikely	In order to reduce impacts, it may be necessary to phase working with the rest of this site and this would limit the scope for new jobs to be created.	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	See above.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
Extended working of this site is primarily justified because it is the only sand and gravel source in the south west of the county with the potential to maintain a consistent supply of material over at least part of the Plan period. Other allocations may provide alternative supply from new sources; the County Council has concerns that the only other local resource (Roose Quarry) cannot be relied upon to provide a continuing supply of material. The assessment identifies a number of potential adverse impacts, though it should be recognised that they are assessed without mitigation, and the standard measures used to limit the impact of sand and gravel workings should be sufficient to limit or negate the impacts at this site. The main issue is the exposure of local residents to continued working in the vicinity recognising, however, that extraction is a relatively low-level activity and that noise suppression and other measures can be used to limit its audible impact. Although it is in a rural setting, the site is situated on the A595 and, therefore, has reasonable access to markets for extracted materials. Given the scope for additional impacts, it is expected that permission would require evidence of the scale of reserves to allow judgement of their importance in meeting the aggregates landbank against the implications of working the site on the surroundings. Consideration will need to be given to landscape and visual impacts, due to the site's proximity to the Lake District National Park.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: locally supplied aggregates are likely to be cheaper than those brought from more distant sources in the county or outside it, and this may have an indirect benefit on the costs of new development or regeneration projects using this material, though the actual benefit may be difficult to identify even if it indirectly helps to sustain the local economy. Cumulative: none identified, provided that this site is worked after the existing permitted area is worked out. Synergistic: none identified							
Mitigation Proposed							
Impacts on surrounding and more distant sensitive receptors will require standard mitigation measures including: bunding, buffering and vegetational screening to limit visual, noise and some dust impacts; wheel washing and dust dampening of open areas during dry periods; restricting the height of any structures on the site to a single storey to limit visual impact; noise suppression on equipment; possible use of conveyors to move material around the site to reduce vehicle noise and emissions. It is assumed that the road linking Hallsenna to the A595 used for access to the existing workings will continue to be used, in conjunction with any conditions restricting the times of day, number and routeing of movements to and from the site. In principal, this should not result in a worsening of impacts compared to those generated by the existing operations. Finally, it may be prudent to require phased working of the site so that the whole area is not exposed or excavated at the same time, in order to limit the visual impact (particularly from the National Park), providing this is logistically practicable.							

M16 – Holmescales Quarry, Old Hutton (South Lakeland) – Area of Search: extension of High Specification Aggregate quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	(√)	(√)		Inevitable	There is no scope to use alternative modes. An application to increase HGV movements at the quarry has been previously refused on the grounds of adverse accessibility and associated traffic/road safety concerns.	**(-)**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√		Very likely	The proposed extension is about 250m east of the nearest properties in Holmescales though they would have been exposed to impacts before the quarry was mothballed. The main concern is that access from the site to the strategic road network involves lorries passing dispersed properties along rural roads and some smaller settlement such as Endmoor and Gatebeck. A routeing plan was agreed and in use when the site was last in operation.	**-(-)**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport	(√)	(√)		Unclear, may only be limited likelihood	There is recreational area adjoining the existing mothballed quarry to the southwest. It is at the opposite end of the existing quarry from the extension, distance approximately 300m, which includes a wooded area. This is likely to limit some impacts that may be primarily noise (from blasting and/or plant) and road movements leaving the site travelling south. No heritage impacts have been identified. The extension site appears to be poor quality, unused land, possibly used for informal recreation.	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	√		Limited likelihood subject to further survey	A small number of designations (priority habitat, county wildlife site, etc.) lie within around 1km of the site; the scope for impact appears limited if workings involve excavating below current ground level, as for the existing site. An important great crested newt habitat has been identified nearby. The impact of the extension would need further consideration; although direct impact is unlikely, excavation might impact groundwater levels around the site and this might affecting the newts' habitat. The existing quarry is a RIGS and it is not clear that the extension provides scope for any additional exposure to be designated.	**-**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				Limited likelihood	There are no landscape designations in the immediate vicinity and it is unlikely that the excavations would have a visual impact, as the site is a considerable distance from the National Park boundary and would be below the level of the surrounding land.	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	(√)	(√)		No impact	Road traffic would generate noise, vibration, dust and emissions impacts that could affect a limited number of listed buildings in Old Hutton and along the B6254 into Kendal. However, these impacts may not occur if the previously-agreed routeing arrangement avoids this area. Other impacts are inevitable as a result of moving materials off-site by road.	**-(-)**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√		Very likely if not inevitable	Dust emissions from excavation and road movements are very likely.	**-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact	There are no streams or drainage ditches in the immediate vicinity of the site and the likelihood of working below ground limits the scope for impacts if best practice mitigation is used. Assessment against objective EN1 has identified other impacts on the groundwater resources near the site (which are reflected in the score for that objective) and the impact on the two watercourses in Hide Wood to the west of the existing quarry may need to be assessed if this was not done previously for the existing quarry.	**o**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	The site occupies land of low agricultural value and, therefore, impact appears to be limited to possible risk of material blown-off the site onto land that is in agricultural use.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√		Very likely	The site is acknowledged as a regionally important source of a particular material and restarting working on the extension would supplement other sources and secure some additional resource to meet demand within the county and adjacent areas.	**+**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√		Very likely	As the existing quarry has been mothballed, it is assumed re-opening would provide some job creation, though comments above about the duration of working the site should be noted.	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	As above. The relative remoteness of the site implies access via non-car modes	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Summary of Assessment							
The sustainability assessment for this site turns on the relative priority that must be given to its potential to supply scarce, high-quality roadstone for the county (and the wider, regional market), and the potential impact of road movement of stone off-site, which has been of concern previously. Most of the adverse impacts are quite specific and need further consideration – road traffic impacts on properties in narrow roads along the access routes to the site; and possible impact of groundwater changes on a protected species nearby. However, it is assumed that working will be primarily below ground level and this will contribute to other industry-standard mitigation in limiting other impacts on the surroundings.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: none, as the previous quarry has been exhausted so there is no risk of the two sites operating simultaneously. Synergistic: possible scope for habitat creation during restoration. The existing site includes a RIGS and it is not clear if the extension would warrant a further designation.							
Mitigation Proposed							
Use of best practice mitigation measures, in combination with excavation below ground-level, should address most of the generic impacts resulting from re-opening of this site, and the comments above identify the more specific survey and mitigation requirements needed to address possible groundwater and inevitable traffic impacts.							

M30 – Land adjacent to Roan Edge Quarry (South Lakeland) – Area of Search: extension of High Specification Aggregate quarry

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	There is no scope to use alternative transport modes; the quarry is well located to the motorway network.	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health, noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	?	?	?	Very limited likelihood	The site is remote from human receptors with the only potential impact being on users of the public footpath along the east side of the existing quarry, which would have to be relocated. The assessment score recognises the existence of the impact, but does not take account of the benefits of likely mitigation.	**-**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport				No impact	Recreational impacts are covered by the comments above.	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No impact	The nearest county-level designations are between 250m and1km away, with the closest being on the opposite side of the M6. Any risk to the air environment may be mitigated naturally, as the site is in an exposed relatively upland location, which may help to disperse pollutants (though this does not obviate the need for appropriate mitigation of these impacts). HRA has not identified any risk of impact on Natura 2000 sites.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	?	?	?	Limited if any likelihood	The site is in a relatively open semi-upland location. It may be visible from higher open ground to the east but its immediate surroundings are hummocky land, which provides a degree of natural screening (the site is not visible from the A684) and the workings are below ground-level, reducing their visibility. It is assumed the extension will have similar characteristics though it might be marginally more visible from the east (including the M6).	**?**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				No impact	There are no heritage assets in the vicinity of the site. Its remote location limits the impact of inevitable effects of quarrying, which will be addressed with continued use of existing on-site mitigation measures. The site is in the lowest flood risk zone, though note comments against Objective ON2 below.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors				No impact	Impacts from dust emissions from plant and traffic are addressed in other parts of this assessment. There is no scope for alternative transport modes, though the site is well located with respect to the strategic road network; access to the M6 motorway is very close by and this should have some limited beneficial impact on emission levels.	**o**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	?	?	?	Limited likelihood	Current extraction is below ground level, limiting the risk of contamination of adjacent waterbodies. Two small streams flow east from the land immediately to the north of the proposed extension, feeding into Killington Reservoir. It may be prudent to check the effect of extension on the local groundwater regime; mitigation measures will be needed to prevent airborne contamination of any waterbodies with silt.	**?**
NR3: To restore and protect land and soil	-To reduce amount of contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No adverse impact	The site is not assessed as high quality agricultural land and, therefore, provides an opportunity for habitat creation or improvement that would be consistent with proposals for the existing quarry. Dust blown off the site could cause contamination, but this will be	**(+)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
						limited by appropriate mitigation; the open nature of the area may assist dispersal, though the poor quality of the land implies that any impact would not be significant.	
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√	√	Very likely	The allocation would sustain the supply of locally and national scarce material and it is, therefore, prudent to safeguard its availability also.	**+**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Very likely, if not inevitable	Assumed to support existing jobs in the local quarrying sector, but not to create new ones.	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	The site is in a remote location that is unlikely to be served by public transport or easily accessible by non-car modes.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
This site has the fewest apparent impacts among the allocations. Its relative isolation limits most of the impacts on human receptors and it is located in a position sufficiently distant from possible natural receptors that maintenance of existing mitigation measures may be sufficient to deal with any impacts. It benefits from good access to the strategic road network, though it lacks access to alternative modes. It is also recognised as a locally and regionally important source of relatively scarce materials, and restrictions on extraction at other sources outside the county may increase its importance further, making allocation and safeguarding even more important. Impact on users of the right of way crossing the site is the only adverse impact identified; all others are either positive or absent.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: none identified, provided the extension is only worked once the reserves in the existing quarry have been exhausted. Synergistic: scope for habitat creation when the site is restored.							

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
Mitigation Proposed							
Continuation of best practice mitigation measures used in the existing quarry, in combination with excavation below ground level, should address most of the generic impacts resulting from extension of this site. The bridleway/footpath running between the existing quarry and the extension will need to be relocated, possibly permanently. Additional consideration may need to be given to the effect of additional below-ground level working on the groundwater regime and pattern of runoff down the slope to the east of the extension, and survey of the site to check for use by protected species may also be warranted.							

M24 – Derwent Howe slag bank (Allerdale) – Mineral Safeguarding Area

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices				No impact	Despite its position, there is no scope to move material off the site seawards. The coastal railway line runs c100m to the east, but it is not practicable to use it. Movement by road is necessary. Its contribution to recycling is assessed against Objective NR4.	**o**
SP3:To provide everyone with a decent home	-To help meet local housing need				No impact	This allocation is identified for safeguarding only.	**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	?	Very likely, probably inevitable	The site has the scope to maintain existing impacts on adjoining land uses, including housing along access routes and proposed development sites in the vicinity. Given the prevailing wind direction, there is potential for dust/noise emissions to have an impact on residents to the east of the site. However, given the distance that the residents are from site, this is not expected to be significant. In addition, there is no expectation that the whole slag bank will be extracted.	**(-)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity the arts, heritage, dialect and sport	√	√	?	Quite likely	Continued extraction would limit access to some parts of the wider bank and may generate impacts on those using areas open to public access.	**-**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	√	√	?	Very likely	Any short term adverse impacts could be limited by phased working and restoration of the site, so that any protected species using or occupying the site would be displaced for a limited period. Ongoing restoration proposals provide scope for habitat creation and improvement in an area that has been degraded historically by industrial activity; therefore, the overall assessment is positive.	**+/-**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity	√	√	?	Quite likely	Extraction in an area partly open to public access will give rise to inevitable visual impacts. Continued extraction could be regarded as having an adverse impact on this part of the coast, although it would continue an existing impact without necessarily worsening it. In the longer term, restoration would have the scope to deliver permanent improvement of the area.	**+/-**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriate development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Limited likelihood (but may be quite likely)	Heritage assets: none on the slag bank itself. Flood risk: the site adjoins an high flood risk zone, but provides a substantial sea defence that would protect some of the adjacent development sites; continued extraction would need to be planned to ensure its integrity is not reduced. Impacts: these would not increase, provided the scale of the existing working is not expanded and as long as working does not move closer to receptors on the landward side. Enhancement: the effect is neutral, insofar as continued working could provide scope for additional habitat and recreational improvements, but these could be delivered through the existing restoration proposals if extraction stopped. Such benefits would be long-term irrespective of whether the site continues to operate.	**+**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	?	?	?	Limited likelihood	There is no clear scope to use alternative transport modes and the extraction and road movement would contribute to continuing dust emissions, though both should be capable of being mitigated to an acceptable level.	**?**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water	?	?	?	Limited likelihood	Main risk is contamination of coastal water by material blown off the site. The existing mitigation measures should be capable of limiting this impact, and tidal wash may help to disperse any material.	**(-)**
NR3: To restore and protect land and soil	-To reduce contaminated land in the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat	√	√	?	Limited likelihood of adverse impact	Extraction and restoration appears to be beneficial, though dust blow-off implies some potential risk of contamination of adjacent land (not in agricultural use). Overall, the assessment is mildly positive.	**+/(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support use of co-products from minerals working	√	√	?	Inevitable	Continued extraction clearly generates secondary aggregates for use by local industry, and safeguarding provides scope for this to continue.	**++**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	?	Variable	Continued working would safeguard existing jobs without creating new ones.	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact	Any implications are covered by the comments above.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification in the waste management and minerals sectors -Stimulate innovation and research in recycling and use of co-products	(√)	?		May be quite likely	Continued extraction may impact development proposals to the northern and southern end of the site, though the slag bank was being worked at the time these applications were submitted; any potential adverse impacts should have been evident at that time.	**?**
Summary of Assessment							
This site potentially provides a source of certain types of secondary aggregate for which there is apparent local demand. The impact of safeguarding it is both positive and negative in roughly equal degrees. The scale of impacts and effectiveness of mitigation measures should not vary significantly over the current position, with the main impacts being noise, vehicle emissions and dust from operations and lorry movements. There is the risk of adverse impact on development sites at the north and south ends of the site; however, these applications were submitted at a time when extraction was already occurring and the possibility that this would continue should have been taken into account in assessing the viability (commercially and in planning terms) of these proposals. Continuation of the current mitigation would limit the impacts of continued working, while also progressing towards the eventual closure of extraction and completion of a re-modelled artificial landform to provide natural habitat, recreational space and coastal defence. It is acknowledged that all these benefits could be delivered if the site is restored with no further extraction and, therefore, the assessment of the policy turns on whether demand for the recovered materials justifies any potential additional impacts in the short and medium term.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified, as the principal impacts on adjacent land uses and development proposals, and on the benefits of restoring this site are considered to be direct impacts. Cumulative: none identified, provided continued working does not increase road traffic via the main roads in the town. Synergistic: it is not clear that continued excavation would create positive synergistic benefits in addition to those that are being delivered by the existing restoration proposals for the site.							
Mitigation Proposed							
Restrict the area under working at any one time to limit the scale of on-site (e.g. dust blow-off risk) and off-site (e.g. visual and traffic) impacts. If not already in place, agree a boundary to the area for future extraction to provide a buffer between the area being worked and adjacent land uses and receptors, and to ensure that the viability of the western side of the site for coastal defence is not compromised.							

SITES IDENTIFIED IN POLICY SAP5 FOR SAFEGUARDING OF EXISTING AND POTENTIAL RAILHEADS AND WHARVES

AL18 – Port of Workington (Allerdale) – existing railhead and wharfage – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable if used	Maintains scope for diversion of minerals and waste from road transport and for despatch by sea either to continental Europe or elsewhere in the UK	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	?	?	?	Quite likely if used, but also localised	Has the potential to reduce road-related impacts, but could give rise to increase in traffic bringing material to/from the railhead. Assessment also assumes any existing restrictions on use of the railhead would apply to limit vehicle and train movements, noise, vibration and light impacts outside normal working hours.	**+/(-)**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No impact		**o**
EN2: To preserve, enhance and manage landscape quality and	-Impact on designated landscape -Impact on areas of heritage value				No impact	Railhead is within existing working port. A Conservation Area is within 500m, but safeguarding would only result in a continuation of any impacts resulting from use of the railhead or wharf.	o

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
character for future generations	-Impact on the countryside -Recognise and respect importance of remoteness and tranquillity						
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				No impact	See comments above for potential impacts on heritage assets. Flood risk: site is in low flood risk area and protected by defences. Impacts: no impact, provided there is no extension to the hours that the railhead is used already.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable if used	Some possible localised increase in dust emissions (without mitigation), but this would be offset by much greater reduction of such impacts if material is shifted off the road network. Clearly supports sustainable transport and use of alternative modes (recognising that rail and sea transport also generate greenhouse gases).	**+(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact	Assessment assumes existing controls would apply to limit water impacts from other use of the facilities.	**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact		**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
	-Support the use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Possible	It is not clear that safeguarding specifically would help to retain jobs, but continued or new use of the facilities could increase movements through the port, supporting its economic viability.	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation safeguards an existing railhead and the port, offering the prospect of both road-rail and road-sea transfer (though the latter is primarily a benefit of allocating the wider port estate). Provided use is limited to existing working hours (to avoid introducing new noise, light, traffic, etc., impacts on the surroundings), there are no evident significant adverse impacts. Any localised impacts in terms of additional traffic would be offset by greater benefits from reduced impacts across the county road network.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none Cumulative: depends on existing level of use of the facility, though the capacity of the railhead and the line into the port will limit the extent to which impacts could accumulate at a specific time. Synergistic: none (again, benefit of road/rail or road/sea transfer derives from allocating the port).							
Mitigation Proposed							
None, provided the use for minerals and waste purposes does not result in additional use of the facility outside existing hours, as this would result in new noise, light, traffic, etc., impacts on nearby receptors.							

AL32 - Siddick (Allerdale) - potential rail sidings – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable if site is developed	Promotes sustainable transport of minerals and waste; the intention would be to retain the sidings for other industrial use	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	√	√	√	Quite likely	Potential impacts on users of recreational facilities nearby; nearest properties are about 300m away. Development of the site would introduce new impacts to this area from additional rail movements and shunting. Safeguarding is linked to use for local minerals and waste activities, which may already generate or give rise to road-related impacts.	**(+)/-**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport	?	?	?	Limited likelihood	Site is adjacent to recreational areas and bounded by a footpath; it is not evident that its development would adversely affect either, other than possibly reducing usage.	**?**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	?	?	?	Limited likelihood	There are county wildlife sites adjoining and within 400m-800m of the site; any adverse impacts are most likely to occur as a result of dust and possibly noise disturbance. No risk to distant Natura 2000 sites and no recent evidence of occupancy by protected species, though some occupy habitat in the vicinity and this matter requires further survey if the site is to be developed. The site is technically greenfield and grassland (though it is also occupied by	**(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
						several wind turbines). There is long-term scope to restore the site to provide habitat improvement.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise importance of remoteness and tranquillity	?	?	?	Very limited, if any, impact	The site is currently open, but is not in a landscape designation, and is adjoined to the northeast and southwest by industrial facilities with higher elevation and, therefore, greater visual impact than rail sidings. The same issue applies to the wind turbines on the site. Overall, the assessment is therefore neutral (i.e. no significant impact).	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area	√	√	√	Limited likelihood in most cases	Heritage assets: there are reports of assets in the vicinity so it may be prudent to require a survey of the site; however other structures nearby will already have an impact on the setting of any assets. Flood risk: in the lowest flood risk zone. Impacts: same assessment as for Objective SP5 in that development of new minerals and waste activities in the vicinity of the site would give rise to new impacts that would be adverse without mitigation.	**(+)/-**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Very likely	Dust emissions may arise, but could be worse if only road transport was available.	**+(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact	No apparent risk to water quality, provided that appropriate dust suppression is applied if necessary.	**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat	?	?	?	Depends on use	Safeguarding is related to use of the railhead by local industry and the scope to restore the site is unclear. Technically it is greenfield, though occupied by wind turbines and the agricultural quality is poor (urban).	**(-)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working				No impact		**o**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No impact	No impact (but see comments on secondary impacts in the summary)	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification in the waste and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The site is an unused area of greenfield land between industrial facilities, partly occupied by a small wind farm. The sidings would be developed to allow any new minerals and/or waste activity in the vicinity to move materials to market without using road transport, and this is the principal benefit of the site. As it is a completely new site, it has the potential to introduce new dust, noise and other impacts to a location that does not experience them currently, although it is located in an industrialised urban area. The degree of sustainability turns on the relative level and duration of any adverse impacts on the immediate surroundings when weighed against the potential impacts of moving materials by road, and its impact on the county road network, if the site is not developed for this purpose.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: most of the surrounding industry is in enclosed facilities and, therefore, the sidings could have a substantial cumulative impact in terms of dust, vibration, noise, etc. Synergistic: none identified.							
Mitigation Proposed							
There is limited scope to minimise noise and similar impacts of transferring material to rail and its movement off site. The principal requirement will be to limit movements and other activity on the sidings to appropriate times of day, in order to minimise impacts on the small number of nearby properties. Additional surveys for protected wildlife species in the vicinity, and of heritage assets, would also be required.							

AL38 Innovia rail sidings, Wigton (Allerdale) – safeguarding of existing railhead

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No effect	Any impact would occur as a result of involvement in the application determination process	**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Very likely	Safeguarded for continued use in connection with the existing manufacturing activity on site. Facility not anticipated for wider use and is not proposed to open the site up to other users, but if it was, then potential for positive impact upon this objective.	**(+)**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No effect		**o**
SP4: To improve the level of skills, education and training	-Education and training				No effect		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No effect	This is an existing rail head and facility serving a large manufacturing business. No change to existing use as railhead.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No effect	This is an existing rail head and facility serving a large manufacturing business. No change to existing use as railhead.	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No effect	This is an existing rail head and facility serving a large manufacturing business. No change to existing use as railhead.	**o**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No effect	This is an existing rail head and facility serving a large manufacturing business. No change to existing use as railhead.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				No effect	This is an existing rail head and facility serving a large manufacturing business. No change to existing use as railhead.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Very likely	Safeguards current sustainable transport practices of existing manufacturing business.	**+**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No effect		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No effect		**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable forms of energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working				Very limited	Safeguards current sustainable transport practices of existing manufacturing business. Seeks to ensure railhead is safeguarded so that it could be made available for other bulk movements in the future.	**(+)**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No effect	No direct impact on job creation.	**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No effect	No direct impact on access to jobs.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No effect	No direct impact.	**o**
Summary of Assessment							
The assessment has assumed that the rail siding is safeguarded for continued use in connection with the manufacturing business and there are no major proposed changes. It is, therefore, safeguarded for general uses, including the high volume of waste movements that the company processes generate. The safeguarding has no effect on the majority of the SA objectives, as it represents no change on the current position. The proposal does have an indirect benefit in safeguarding the railhead used by a large employer and manufacturing business in Cumbria.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: safeguards current sustainable transport practices of existing manufacturing business, a specialist plastic manufacturer. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
None, provided continued use does not result in additional use of the facility outside existing hours, as this would result in new noise, light, traffic, etc., impacts on nearby receptors.							

AL39 Silloth Port (Allerdale) – safeguarding of existing wharves

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No effect	Any impact would occur as a result of involvement in the application determination process	**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices		√	√	Limited likelihood	Safeguarded port for continued use, with potential for movement of mineral and waste materials. Port not currently used for such movements, as principally serves the adjacent milling activity.	**+**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No effect		**o**
SP4: To improve the level of skills, education and training	-Education and training				No effect		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No effect	No change to existing use and activity proposed, no direct change as a result of the policy.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No effect	No change to existing use and activity proposed, no direct change as a result of the policy.	**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No effect	No change to existing use and activity proposed, no direct change as a result of the policy.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No effect	No change to existing use and activity proposed, no direct change as a result of the policy.	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				No effect	No change to existing use and activity proposed, no direct change as a result of the policy.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Very likely	Safeguards current sustainable transport practices of those using the Port facility.	**+**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No effect	No change to existing use and activity proposed, no direct change as a result of the policy.	**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and Greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No effect	No change to existing use and activity proposed, no direct change as a result of the policy.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible		√	√	Limited likelihood	Safeguarding port for continued use, with potential for movement of mineral and waste materials. Port not currently used for such movements, as principally serves the adjacent milling activity.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
	-Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	√	√	√	Very likely	Safeguards port activity in the longer term.	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No effect	No direct impact.	**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	√	√	√	Very likely	Safeguards port activity in the longer term.	**+**
Summary of Assessment							
The assessment has assumed that the port is safeguarded in the longer term for a range of uses, not just minerals and waste. The safeguarding has no effect on the majority of the SA objectives, as it represents no change on the current position. The proposal does, however, perform strongly against the economic objectives, as it is safeguarding the operations of the port, and those objectives promoting sustainable transport practices.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
None, provided continued use does not result in additional use of the facility outside existing hours, as this would result in new noise, light, traffic, etc., impacts on nearby receptors.							

BA26 – Barrow Port - railhead and wharves – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Provides for continued use of road/rail and road/sea transfer of materials, which are currently used by a number of minerals and waste businesses within the port estate.	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	?	?	?	No new impact	Allocation does not introduce new impacts, as the railhead and other transfer facilities are already used by minerals and waste businesses. Any impacts are likely to arise as a result of new businesses being attracted to the port and would have to be assessed at the planning application stage. This neutral assessment assumes that any new development would not result in the use of the railhead outside of current hours of operation, as this could give rise to additional impacts.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No impact	There are a number of local wildlife designations nearby and the site adjoins an SSSI and Natura 2000 sites. HRA has concluded that the allocation should not present risks to these assets, provided existing mitigation measures are maintained. The viability of such measures would need to be reviewed if continued	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
						use of the facilities attracted new land uses. Any impacts would most likely be the result of new uses of the site (and addressed through the planning application process) and not from the facilities themselves.	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	Railhead is within existing working port.	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid impacts on the built heritage from mineral working -appropriateness of development relative to flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance degraded urban and rural environment within the area				No impact	Heritage assets: there is a Conservation Area immediately to the north of the port estate, but safeguarding the railhead would not have any additional effect on the current impacts from a range of industrial uses within the port estate. Flood risk: site is in high flood risk area by virtue of being a port. Impacts: no impact, provided there is no extension to the hours that the facilities are used already. Enhancement: continued operation of the facilities might attract new uses, giving scope to redevelop those parts of the port that are currently unused.	**(+)/?**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	Clearly supports sustainable transport and use of alternative modes (recognising that rail and sea transport also generate greenhouse gases). Additional dust emissions are only likely to arise as a result of increased use of the facilities, which would occur because of other development proposals rather than due to safeguarding.	**+(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact	Assessment assumes existing controls would apply to limit water impacts from other uses of the facilities.	**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working				No impact		**o**
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Possible	Safeguarding would not help to retain jobs, but continued or new use of the railhead could increase movements through the port, supporting its economic viability, whilst it might also attract new businesses, generating new jobs.	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation safeguards an existing railhead and the port, offering the prospect of both road-rail and road-sea transfer (though the latter is primarily a benefit of allocating the wider port estate). Provided use is limited to existing working hours (to avoid introducing new noise, light, traffic, etc., impacts on the surroundings), there are no evident significant adverse impacts. Any localised impacts in terms of additional traffic would be offset by greater benefits from reduced impacts across the county road network. The benefits of continued or increased use of the railhead would be weighed against the likely corresponding increase in certain impacts within the port estate and its surroundings.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: main issue is whether continued certainty of operation of the railhead could attract new businesses to help in the regeneration of the port, bringing new jobs (but possibly additional impacts). Cumulative: depends on existing level of use of the facility, though the capacity of the railhead and the line into the port will limit the extent to which impacts could accumulate at a specific time. Any benefit from attracting new business or stimulating additional use of the rail facility will create cumulative impacts. Synergistic: benefit of road/rail or road/sea transfer co-located with an area supplying industrial land.							
Mitigation Proposed							
No mitigation required, provided use for minerals and waste purposes does not result in additional use of the facility outside existing hours, as this would result in new noise, light, traffic, etc., impacts on nearby receptors.							

CO35 – Low Level Waste Repository (Copeland) - rail spur – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Supports wider strategy of seeking to maximise use of rail to deliver LLW to the repository from sources across the country.	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				Inevitable	Allocation would maintain existing use of the facility without any risk of increased impacts and use of any existing mitigation measures that are appropriate. Continued use of the facility will prevent long-distance road movements of the wastes, resulting in some minor incremental benefit over a wide area.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No new impact	As for Objective SP5	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	Safeguarding is to maintain, but not expand, an existing facility; therefore, there is no additional impact of safeguarding it.	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				No impact	As for Objective SP5	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	Clearly supports sustainable transport; the site serves a national catchment.	**++**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact		**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
	-Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No impact		**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation safeguards the existing rail interchange facilities, which enable the majority of the LLW brought to the site to arrive by rail. The allocation does not result in any change to the scale or nature of operations, construction of new facilities, etc., and, therefore, it would not result in any new impacts that would need additional mitigation. Continued use of the facility will make a minor incremental contribution to reducing long-distance road movements and the associated impacts.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: see comments above. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
None, provided the continued use does not result in additional use of the facility outside existing hours, as this would result in new noise, light, traffic, etc., impacts on nearby receptors.							

CO36 - Sellafield (Copeland) - rail spur – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Safeguards existing facility for moving waste off site or materials on site, avoids transfer by road	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No new impact	Safeguarding would maintain existing use of the facility without any risk of increased impacts and use of any existing mitigation measures that are appropriate.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No new impact	As for Objective SP5	**o**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	Safeguarding is to maintain, but not expand, an existing facility; therefore, there is no additional impact.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				No impact	As for Objective SP5	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	Clearly supports sustainable transport.	**+(+)**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact		**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment				No impact		**o**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation safeguards the existing rail interchange facilities on the seaward side of the Sellafield site, which is used primarily to move radioactive wastes. Allocation does not result in any change to the scale or nature of operations, construction of new facilities, etc., and, therefore, it would not result in any new impacts that would need additional mitigation.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: indirect benefit from avoiding movement of wastes by road. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
None, provided the continued use does not result in additional use of the facility outside existing hours, as this would result in new noise, light, traffic, etc., impacts on nearby receptors.							

M34 – Kingmoor (Carlisle) - existing rail sidings – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable if used	Provides continued scope for movement of waste materials without road transport,and current associated waste use involves recycling waste materials.	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people	?	?	?	No new impact	Safeguarding does not promote any new impacts. Diversification (including use of the facility by other companies and for other purposes) would need further investigation if a planning application is submitted.	**+/?**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No impact	No additional impact, if the site continues in its current use.	**o**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	No impact, provided no new structures are built on the site, although it does lie within a partly industrialised area and on a plot with long-standing (historic) rail use.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and land use -Enhance the degraded urban and rural environment within the area				No impact	No additional impact, provided there is no extension to the hours that the railhead is used already (and it is assumed its position on the West Coast Main Line places some limitation on the times when trains can enter and leave the site).	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	Clearly supports sustainable transport and use of alternative modes. Probably has limited localised benefit, which is spread over a much wider area (the site currently takes materials from across the North West region) so the benefit in any one location is likely to be minimal.	**+**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact		**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working				No impact		**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	?	?	?	Limited likelihood	Safeguarding the railhead would protect jobs, though the scale is unclear. Potential benefits would be greater if the sidings could be used by other local industries, as this might attract additional investment to the locality.	**?**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products	?	?	?	Depends on future use	See comments for Objective EC1.	**o**
Summary of Assessment							
The allocation safeguards existing sidings that are used primarily for a ballast recycling facility operated by Network Rail. In principle, this means that wastes can be brought to the site from across the North West, resulting in beneficial road traffic impacts. The safeguarding maintains the existing use and, therefore, does not give rise to new impacts, recognising that the site has been in long-standing rail use and is adjacent to other industrial areas in an urban location.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: none identified. Cumulative: none identified, provided site continues in current use only. Synergistic: possible benefit from using the sidings for movement of materials related to other local industries.							
Mitigation Proposed							
None, provided continued use does not result in additional use of the facility outside existing hours, as this would result in new noise, light, traffic, etc., impacts on nearby receptors.							

M35 – Shap Beck Quarry (Eden) - existing rail sidings – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Safeguarding allows continued use of rail line to move materials from the adjacent quarry (although the site does have good access to the strategic road network).	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No impact	Safeguarding will allow continued use of an existing loading facility and, therefore, should not give rise to any additional impacts, provided there is no change to the scale or timing of loading activities, and in the expectation that existing mitigation is effective. There is one property about 300m to the east that may be affected by any activity on the site.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats/species -Enhancement of natural/ecological resources	?	?	?	Not yet assessed	Potential nature conservation impacts were assessed when planning permission to use the rail siding was granted, but this may have pre-dated legislation requiring HRA and, therefore, this matter may need to be addressed.	**?**
EN2: To preserve, enhance and manage landscape quality and	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside				No impact	Some visual intrusion and disturbance will occur already, as a result of the loading facility and nearby quarrying; safeguarding should not have any additional adverse impact provided the scale	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
character for future generations	-Recognise importance of remoteness and tranquillity					and timing of operation is unchanged.	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				Quite likely	Heritage assets: no new impacts. Flood risk: an area of high flood risk (zone 3a) abuts immediately to the east, but it is understood defences are already in place to protect the sidings and the adjacent West Coast Main Line. Impact: any impacts will result from existing operations and no new ones are anticipated.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	As for Objective SP2.	**++**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	The site is existing brownfield industrial land. It is assumed existing mitigation measures will prevent any materials being blown from the loading area onto adjacent farmland and that these would continue to be used.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working	√	√	√	Inevitable	Safeguarding will help to maintain the supply of stone and/or aggregate to a national market.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Limited impact	Will help to safeguard jobs at the quarry, which is known to be particularly important to the local economy (though this could still occur if the site relied on road transport instead).	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation would safeguard the existing loading facility for the movement of quarried materials to elsewhere in the county or to a wider market, avoiding road transport impacts on local and strategic routes. The policy merely continues the existing use of the site and this is not expected to give rise to any new impacts; those impacts that do exist are expected to be mitigated effectively as at present.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: principal benefit is avoidance of road transport of the material and incremental reduction in any impacts elsewhere on the strategic road network in the county and beyond. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
No mitigation required, provided existing mitigation is effective and that use of the rail loading facility will not increase in scale or occur at different times of the day when new impacts might arise.							

M36 – Shapfell Quarry (Eden) - existing rail sidings – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Safeguarding allows continued use of rail line to move materials from the adjacent quarry (although the site does have good access to the strategic road network).	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No impact	Safeguarding will allow continued use of an existing loading facility and, therefore, should not give raise to any additional impacts, provided there is no change to the scale or timing of loading activities, and in the expectation that any existing mitigation is effective. There is a single property 250m to the east that may be affected by any existing activity.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	?	?	?	Not yet assessed	Potential nature conservation impacts were assessed when planning permission to use the rail siding was granted, but this may have pre-dated legislation requiring HRA and, therefore, this matter may need to be addressed.	**?**
EN2: To preserve, enhance and manage landscape quality and	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside				No impact	Some visual intrusion and disturbance will occur already, as a result of the loading facility and nearby quarrying, but safeguarding should not have any additional adverse impact, provided the scale	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
character for future generations	-Recognise and respect importance of remoteness and tranquillity					and timing of operation is unchanged.	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment within the area				Quite likely	Heritage assets: no new impacts. Flood risk: a small area of flood risk zone 3 runs across the northern edge of the railhead; this is the furthest point from the junction of the siding with the West Coast Main Line, leaving the rest of the facility in a low flood risk area. Impact: any impacts will result from existing operations and no new ones are anticipated.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	As for Objective SP2.	**++**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	Site is existing brownfield industrial land. It is assumed existing mitigation measures will prevent any materials being blown from the loading area onto adjacent farmland and that these would continue to be used.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working	√	√	√	Inevitable	Safeguarding will help to maintain the supply of aggregate to a national market.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Limited impact	Will help to safeguard jobs at the quarry, which is known to be particularly important to the local and national economy (though this could still occur if the site relied on road transport instead).	**+**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation would safeguard the existing loading facility, which enables movement of quarried materials to elsewhere in the county or to a wider market, avoiding road transport impacts on local and strategic routes. The policy merely continues the existing use of the site and this is not expected to give rise to any new impacts; those impacts that do exist are expected to be mitigated effectively as at present.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: principal benefit is avoidance of road transport of the material and incremental reduction in any impacts elsewhere on the strategic road network in the county and beyond. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
No mitigation required, provided existing mitigation is effective and that use of the rail loading facility will not increase in scale or occur at different times of the day when new impacts might arise.							

M37 – Shap Blue Quarry (Eden) - rail siding – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (ie. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Safeguarding allows continued use of rail line to move materials from the adjacent quarry (although the site does have good access to the strategic road network).	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	-Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No impact	Safeguarding will allow continued use of an existing loading facility and, therefore, should not give rise to any additional impacts, provided there is no change to the scale or timing of loading activities, and in the expectation that any existing mitigation is effective. There is a small row of cottages about 250m to the east that may be affected by any existing activity on the site though, impacts from the adjacent West Coast Main Line are likely to be more significant.	**o**
SP6: To create vibrant, active, inclusive and open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources	?	?	?	Not yet assessed	Potential nature conservation impacts were assessed when planning permission to use the rail siding was granted, but this may have pre-dated legislation requiring HRA and, therefore, this matter may need to be addressed.	**?**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise and respect importance of remoteness and tranquillity				No impact	Some visual intrusion and disturbance will occur already, as a result of the loading facility and nearby quarrying, but safeguarding should not have any additional adverse impact, provided the scale and timing of operation is unchanged.	**o**
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and associated land use -Enhance the degraded urban and rural environment in the area				Quite likely	Heritage assets: no new impacts. Flood risk: the site is in the lowest zone of flood risk. Impact: any impacts will result from existing operations and no new ones are anticipated.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	As for Objective SP2.	**++**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	Site is existing brownfield industrial land. It is assumed existing mitigation measures will prevent any materials being blown from the loading area onto adjacent farmland and that these would continue to be used.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand -Protect/conserve mineral resource from sterilisation as far as possible	√	√	√	Inevitable	Safeguarding will help to maintain the supply of stone and/or aggregate to a national market.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
	-Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working						
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Limited impact	Will help to safeguard jobs at the quarry, which is known to be particularly important to the local economy (though this could still occur if the site relied on road transport instead).	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation would safeguard the existing loading facility, which enables movement of quarried materials to elsewhere in the county or to a wider market, avoiding road transport impacts on local and strategic routes. The policy merely continues the existing use of the site and this is not expected to give rise to any new impacts; those impacts that do exist are expected to be mitigated effectively, as at present.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: principal benefit is avoidance of road transport of the material and incremental reduction in any impacts elsewhere on the strategic road network in the county and beyond. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
No mitigation required, provided existing mitigation is effective and that use of the rail loading facility will not increase in scale or occur at different times of the day, when new impacts might arise.							

M38 – Kirkby Thore gypsum works (Eden) - rail sidings – safeguarded

Symbols in the 'Duration' column only indicate whether an impact is likely to occur (i.e. a √ does not imply a positive impact, this is shown in the 'Score' column)

Assessment framework		***Permanence***			***Characteristics of impacts***		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
SP1:To increase the level of participation in democratic processes	-To encourage and empower local people to become involved				No impact		**o**
SP2: To improve access to services, facilities, countryside and open spaces	-To improve access to recycling and composting services -Using sustainable transport choices	√	√	√	Inevitable	Safeguarding allows continued use of rail line to move materials and products from the factory, avoiding use of local and strategic roads.	**++**
SP3:To provide everyone with a decent home	-To help meet local housing need by ensuring that good quality, resource efficient, affordable housing with reduced environmental impact is available to all				No impact		**o**
SP4: To improve the level of skills, education and training	Education and training				No impact		**o**
SP5: To improve the health and sense of well being of people	-Impact on human health e.g. noise and dust emissions -Proximity to sensitive receptors -Impact on the sense of well being of people				No impact	Safeguarding will allow continued use of an existing loading facility and, therefore, should not give raise to any additional impacts, provided there is no change to the scale or timing of loading activities, and in the expectation that any existing mitigation is effective.	**o**
SP6: To create vibrant, active, inclusive open-minded communities with a strong sense of local history	-community identity - social cohesion and help continue valued local traditions -To promote recreational and cultural activity embracing the arts, heritage, the environment, dialect and sport				No impact		**o**
EN1: To protect and enhance biodiversity	-Impact on relevant habitats and species -Restoration of habitats and species -Enhancement of natural/ecological resources				No impact	No new impacts are anticipated, provided that the existing scale of operation is unchanged.	**o**
EN2: To preserve, enhance and manage landscape quality and character for future generations	-Impact on designated landscape -Impact on areas of heritage value -Impact on the countryside -Recognise importance of remoteness and tranquillity				No impact	Some visual intrusion and disturbance will occur already, but safeguarding should not have any additional adverse impact, provided the scale and timing of operation is unchanged.	**o**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EN3: To improve the quality of the built environment	-Impact on historic environment and to avoid adverse impacts on the built heritage from mineral working -appropriateness of development re flood risk -Reduce noise, light pollution, dust emissions etc. arising from minerals developments and land use -Enhance the degraded urban and rural environment within the area				Quite likely	Heritage assets: no new impacts. Flood risk: site is in the lowest flood risk area. Impact: any impacts will result from existing operation of the factory and rail sidings, and no new ones are anticipated.	**o**
NR1: To improve local air quality and reduce greenhouse gas emissions	-Control dust emissions -Sustainable transport of waste and minerals where feasible to help reduce emissions -Stimulate the development and application of clean/carbon efficient technologies -Energy from waste facilities and contribute to the use of renewable energy sources -promote climate change adaptation in the minerals and waste sectors	√	√	√	Inevitable	As for Objective SP2.	**++**
NR2: To improve water quality and water resources	-Adequate protection for waterbodies and the marine environment and promote the efficient use of water				No impact		**o**
NR3: To restore and protect land and soil	-To reduce the amount of contaminated land within the area -Loss of high grade agricultural land and greenfield sites -Potential to cause soil degradation, pollution - the use of peat				No impact	Site is existing brownfield industrial land. It is assumed existing mitigation measures will prevent any materials being blown from the loading area onto adjacent farmland and that these would continue to be used.	**o**
NR4: To manage mineral resources sustainability and minimise waste	-Reflect the waste management hierarchy -Promote the use of renewable energy -Provide flow of minerals to meet demand within the area -Protect / conserve mineral resource from sterilisation as far as possible -Encourage use of secondary aggregate rather than primary materials -Support the use of co-products from minerals working	√	√	√	Inevitable	Safeguarding will help to maintain the supply of the products manufactured at the plant to a national market.	**+**

Assessment framework		*Permanence*			*Characteristics of impacts*		
SA Objective	**Evaluation criteria**	**Duration**			**Certainty**	**Nature/scale of impact(s)**	**Score**
		0-5 yrs	6-15 yrs	>15 yrs	Inevitable/very or quite likely/limited likelihood/no effect/ depends on use	Explain the nature/scale for each impact as necessary	
EC1: To retain existing jobs and create new employment opportunities	-Retain existing jobs and stimulate new ones in the waste and minerals sectors -Support local business development or investment	(√)	(√)	(√)	Limited impact	Will help to safeguard jobs at the plant (though this could still occur if the site relied on road transport instead).	**(+)**
EC2: To improve access to jobs	-Increase access for all to a range of jobs -Encourage the location of employment opportunities in areas of greatest need				No impact		**o**
EC3: To diversify and strengthen the local Economy	-Stimulate private investment -Stimulate diversification within the waste management and minerals sectors -Stimulate innovation and research in waste, minerals recycling and use of co-products				No impact		**o**
Summary of Assessment							
The allocation would safeguard the existing loading facility, which enables distribution of gypsum-based products from the site to a national market, avoiding road transport impacts on local and strategic routes. The policy merely continues the existing use of the site and this is not expected to give rise to any new impacts; those impacts that do exist are expected to be mitigated effectively, as at present.							
Secondary, Cumulative & Synergistic Impacts							
Secondary: principal benefit is avoidance of road transport of the material and incremental reduction in any impacts elsewhere on the strategic road network in the county and beyond. Cumulative: none identified. Synergistic: none identified.							
Mitigation Proposed							
No mitigation required, provided existing mitigation is effective and that use of the rail loading facility will not increase in scale or occur at different times of the day, when new impacts might arise.							

APPENDIX 6:

STRATEGIC ALTERNATIVES TABLE

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
Strategic Policies						
SP1	Presumption in favour of sustainable development	New to 2013 draft MWLP; no change since	Create a new policy on the presumption in favour of sustainable development	Include new policy	No alternatives	N/A
SP2	Provision for waste	Revision of adopted Core Strategy Policy CS8	Make changes to CS8 in light of changes in national policy, guidance and evidence base or carry forward policy CS8 without amendment Continue review of SP2, in light of changing national policy	Make changes to CS8 Revise policy SP2	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS8. Strategic alternatives to CS8 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies, and not revisited.	Revised policy (SP2) appraised as set out in Appendix 3. Strategic alternatives to CS8 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA Report.
SP3	Waste capacity	Revision of waste element of adopted Core Strategy Policy CS9 and further revision of SP3 in 2017 Main Modifications to MWLP	Make changes to CS9 in light of changes in national policy, guidance and evidence base or carry forward policy CS9 without amendment Continue review of SP3, in light of changing national policy	Make changes to CS9 Revise policy SP3	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS9 in light of changes to evidence base. Strategic alternatives to CS9 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies, and not revisited. The revision of SP3 took into account a significant revision to the 2015 draft MWLP since the 2013 draft MWLP, a small revision in 2016, and a re-ordering of detail in the Main Modifications to the MWLP in 2017. The strategic locational restrictions on new landfill capacity introduced in the	Revised policy (SP3) appraised as set out in Appendix 3. Strategic alternatives to CS7 and CS9 were appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA Report.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
					adopted 2009 (Core Strategy policy CS7) policies and the strategic locational criteria for time extensions for landfill sites set out in the 2013 draft MWLP were removed. From 2015, no priority was given to new landfill capacity in the south of the county, but the criteria in SP3 and in DC10 would enable any demonstrable local shortage to be taken into account. There is no Site Allocations Policy on landfill. The way forward was selected because the overall void space requirement for the Plan period is now known to be close to the currently permitted void space, leaving less room for locational selection criteria, because there is no empirical evidence that the policy would minimise traffic movements, and there are few realistic policy options to implement the previous policy preferences. The re-ordering of text in 2017 was to show the priority of time extensions to existing landfill before new capacity is considered.	
SP4	Transparent decision making	New policy in 2015 draft MWLP, revised in 2016 draft and in 2017 Main Modifications to MWLP	Included as a new policy in 2015 on general principles for all radioactive waste proposals; amended in 2016 in light of discussion with nuclear industry and regulators. Amended in 2017 to be consistent with Plan's other radioactive waste policies.	Include new policy. Revise policy SP4	No, other than to have or not have a policy (do nothing scenario).	Revised policy (SP4) appraised as set out in Appendix 3.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
SP5	Development criteria for low level radioactive waste sites	Revision of CS12 & SP6/SP7 (2013 and 2015 drafts of MWLP)	Three options considered. Include one policy covering development criteria for all LLW; include two policies in the Plan (one on higher activity LLW and one for lower activity LLW) as was consulted on in 2013 draft MWLP or carry forward policy CS12, without amendment, that deals with Low Level Waste Repository near Drigg only.	Include one policy	Yes, as part of development of adopted policy CS12 and in preparing draft MWLP 2013; small update in 2016 draft. Strategic alternatives to the adopted Policy CS12 developed in the light of: i. the mechanisms available for implementation ii. potential overlap with other regulatory regimes iii. changes in national policy including clarification of the status of national policies such as the NDA Strategy April 2011 iv. consultation responses to the Feb 2013 draft, and v. experience of dealing with an apparent proliferation of planning applications for additional LLW facilities within Cumbria. Keeping with two policies in the 2015 draft MWLP was discounted because policies are consistent for all types of LLW proposals and conform to the NPPF, yet enable any proposed proliferation of LLW provision in Cumbria to be considered under the relevant material planning considerations. The policy approach would be implemented with the support of Site Allocation Policy SAP3.	Revised policy (SP5) appraised as set out in Appendix 3. Strategic alternatives to CS12 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA Report.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
SP6	Higher activity radioactive wastes treatment, management and storage	Revision of CS10 and SP5 (2013 and 2015 drafts of MWLP). Revised in 2017 Main Modifications to MWLP.	Two options considered. The first was to make changes to CS10 in light of changes in national policy; guidance and evidence base or carry forward policy CS10 without amendment. Amended in 2017 to be consistent with Plan's other radioactive waste policies.	Revise policy	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS10. Strategic alternatives to CS10 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited.	Revised policy (SP6) appraised as set out in Appendix 3. Strategic alternatives to CS10 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP7	Minerals provision	Revision of CS14 and SP9 (2013 and 2015 drafts of MWLP). Revised in 2017 Main Modifications to MWLP.	Two options considered. The first was to make changes to CS14 in light of changes in national policy, guidance and evidence base and considering inclusion of areas for High and Very High Specification Aggregates (HSA) or carry forward policy CS14 without amendment. Amended in 2017 – split into two policies (SP7 Minerals provision and SP8 Minerals safeguarding).	Makes changes to policy CS14 and include provision for HSA and VHSA. Revise policy SP7.	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS14 in light of changes to evidence base and issues considered at earlier stages in the plan making process. Strategic alternatives to CS14 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited.	Revised policy (SP7) appraised as set out in Appendix 3. Strategic alternatives to CS14 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP8	Minerals safeguarding (previously part of SP7)	Revised in 2017 Main Modifications to MWLP.	Amended in 2017 – split into two policies (SP7 Minerals provision and SP8 Minerals safeguarding) to provide clarity of approach.	Split SP7 Minerals provision and safe-guarding (2015 draft MWLP)	No, other than to split or not split policy SP7 (do nothing scenario).	Revised policy (SP8) appraised as set out in Appendix 3.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
SP9	Strategic areas for new mineral development	Revision of the minerals element of CS7. Included as own policy SP8 in 2013 and 2015 drafts of MWLP. Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP9.	Carry forward the minerals element of CS7 in light of changes in national policy, guidance and evidence base and to include additional strategic areas or carry forward policy CS7 unchanged.	Carry forward	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS7. Strategic alternatives to CS7 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited.	Revised policy (SP9) appraised as set out in Appendix 3. Strategic alternatives to CS7 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP10	Marine dredged aggregates	Revision of CS15 and SP10 (2013 and 2015 drafts of MWLP). Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP10.	Carry forward CS15 with minor amendment in light of changes in national policy, guidance and evidence base or take CS15 forward unchanged.	Revise policy	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS15. Strategic alternatives to CS15 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited	Revised policy (SP10) appraised as set out in Appendix 3. Strategic alternatives to CS15 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP11	Industrial limestones	Revision to CS16 and SP11 (2013 MWLP draft, no change to 2015 draft). Due to split of policy SP7 in	Carry forward CS16 with amendment in light of changes in national policy, guidance and evidence base or take CS16 forward unchanged.	Carry forward	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS16. Strategic alternatives to CS16 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited.	Revised policy (SP11) appraised as set out in Appendix 3. Strategic alternatives to CS16 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
		2017 Main Modifications to MWLP, renamed SP11.				Development Control Policies and no further assessment has been undertaken in this SA report.
SP12	Peat	New to 2015 draft MWLP, minor change since. Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP12.	Two options were considered. The first was to accept proposal to include Solway Moss as either a Preferred Area or Area of Search and the second was to insert a DC Policy on Peat.	New policy	Identifying specific sites rejected, as it would be contrary to NPPF and is not a reasonable alternative. The second option of including a DC policy would be similar in scope to proposed approach and it was deemed that given the nature of the policy it should be included within the strategic policies of the Plan. Policy DC22 covers the restoration and aftercare of peat extraction sites.	New policy SP12 appraised as set out in Appendix 3.
SP13	Climate change mitigation and adaptation	Revision of CS1 and SP14 (2013 draft MWLP, minor change to 2015 draft). Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP13.	Carry forward CS1 with amendment in light of changes in national policy, guidance and evidence base or take CS1 forward unchanged.	Revise policy	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS1. Strategic alternatives to CS1 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies, and not revisited.	Revised policy (SP13) appraised as set out in Appendix 3. Strategic alternatives to CS1 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP14	Economic benefit	Revision of CS2 and SP15 (2013 draft MWLP, minor change to 2015 draft).	Carry forward CS2 with amendment in light of changes in national policy, guidance and evidence base or take CS2 forward unchanged.	Revise policy	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS2. Strategic alternatives to CS2 considered as part of preparation of MWDF Core	Revised policy (SP14) appraised as set out in Appendix 3. Strategic alternatives to CS2 appraised (Appendix 7) as part

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
		Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP14.			Strategy and Generic Development Control Policies, and not revisited	of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP15	Environmental assets	Revision of CS3 and SP17 (2013 draft MWLP, major change to 2015 draft). Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP15. Some modification at this stage, to align with NPPF.	Carry forward CS3 but clarify the policy and update in line with changes in national policy and to incorporate enhancement, ecosystems services and green infrastructure and reference to include AONBs, RAMSAR and European Wildlife Sites and SSSIs or take CS4 forward unchanged. At 2015 draft, insert new sections on landscape, geodiversity and marine designations.	Revise policy Revise policy SP15	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS4. Strategic alternatives to CS4 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies, and not revisited.	Revised policy (SP15) appraised as set out in Appendix 3. Strategic alternatives to CS3 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP16	Restoration and aftercare	Revision of CS4 and SP18 (2013 draft MWLP, minor change to 2015 draft). Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed	Carry forward CS4 with amendment in light of changes in national policy, guidance and evidence base and update in line with changes in national policy.	Revise policy Revise policy SP16	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS4. Strategic alternatives to CS4 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited	Revised policy (SP16) appraised as set out in Appendix 3. Strategic alternatives to CS4 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
		SP16. Name change (from afteruse) at this stage, to align with NPPF.				
SP17	Section 106 planning obligations	Revision of CS5 and SP19 (2013 draft MWLP, minor change to 2015 draft). Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP17. Some modification at this stage, to align with NPPF.	Three options considered: carry forward CS5 with amendment in light of changes in national policy, guidance and evidence base; delete Policy DC20 Planning Obligations of the adopted Core Strategy; or take CS5 forward unchanged. At 2017 Main Modifications, insert text on the exceptional circumstances where financial guarantees should be provided.	Revise policy Revise policy SP17	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of CS5. Strategic alternatives to CS5 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited	Revised policy (SP17) appraised as set out in Appendix 3. Strategic alternatives to CS5 appraised (Appendix 7) as part of preparation of MWDF Core Strategy and Generic Development Control Policies and no further assessment has been undertaken in this SA report.
SP18	Monitoring and enforcing planning control	New policy (draft MWLP 2013 - SP20; minor change to 2015 draft). Due to split of policy SP7 in 2017 Main Modifications to MWLP, renamed SP18.	Include a policy on monitoring and enforcing planning control or not to include a policy.	Include a policy	No, other than to have or not have a policy (do nothing scenario).	Policy SP18 appraised as set out in Appendix 3.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
Development Control Policy						
DC1	Traffic and transport	Revision of adopted Core Strategy Policy DC1	Make an amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged.	Make amendment to existing DC policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC1) appraised as set out in Appendix 4.
DC2	General criteria	Revision of adopted Core Strategy Policy DC2. Revised in 2017 Main Modifications to MWLP.	Make an amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged. At 2017 Main Modifications, insert text to clarify Air Quality Management Areas.	Make amendment to existing DC policy Revise policy DC2	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC2) appraised as set out in Appendix 4.
DC3	Noise	New Policy (draft MWLP 2013; minor change to 2015 draft)	Include a specific policy on noise or not to include specific policy	Include a specific policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC3) appraised as set out in Appendix 4.
DC4	Quarry blasting	New Policy (draft MWLP 2013; minor change to 2015 draft). Revised in 2017 Main Modifications to MWLP.	Include a specific policy on quarry blasting or continue without a specific policy on quarry blasting. At 2017 Main Modifications, insert text to clarify the robust justification needed.	Include a specific policy Revise Policy DC4	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC4) appraised as set out in Appendix 4.
DC5	Dust	New Policy (draft MWLP 2013; minor change to 2015 draft)	Include a specific policy on dust Continue without a specific policy on dust	Include a specific new policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC5) appraised as set out in Appendix 4.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
DC6	Cumulative environmental impacts	Revision of adopted Core Strategy Policy DC3 Revised in 2017 Main Modifications to MWLP.	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged. At 2017 Main Modifications, amend text to provide flexibility in the policy.	Make amendment to existing DC policy Revise policy DC6	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC6) appraised as set out in Appendix 4.
DC7	Energy from Waste	New Policy (draft MWLP 2015; no change since)	Include a new policy or continue without a specific policy on energy from waste	Include a specific new policy	No, other than to have or not have a policy (do nothing scenario).	New policy (DC7) appraised as set out in Appendix 4.
DC8	Renewable energy use and carbon reduction on existing minerals and waste sites	New Policy (draft MWLP 2015; minor change to 2015 draft). Revised in 2017 Main Modifications to MWLP.	Include a new policy or continue without a specific policy on energy from waste. At 2017 Main Modifications, insert text to ensure consistency with June 2015 Ministerial Statement on wind turbines.	Include a specific new policy Revise policy DC8	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC8) appraised as set out in Appendix 4.
DC9	Criteria for waste management facilities	Revision of adopted Core Strategy Policy DC4. Revised in 2017 Main Modifications to MWLP.	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged. At 2017 Main Modifications, insert text to provide clarity and ensure consistency across the policy criteria.	Make amendment to existing DC policy Revise policy DC9	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC9) appraised as set out in Appendix 4.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
DC10	Criteria for landfill and landraise	Revision of adopted Core Strategy Policy DC5. Revised in 2017 Main Modifications to MWLP.	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged. At 2017 Main Modifications, amend text to remove duplication.	Make amendment to existing DC policy Revise policy DC10	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC10) appraised as set out in Appendix 4.
DC11	Inert waste for agricultural improvement	New Policy (draft MWLP 2015; minor change to 2015 draft)	Include a new policy or continue without a specific policy on inert waste for agricultural improvement	Include a specific new policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC11) appraised as set out in Appendix 4.
DC12	Criteria for non-energy minerals development	Revision of adopted Core Strategy Policy DC6. Revised in 2017 Main Modifications to MWLP.	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged. At 2017 Main Modifications, insert text on Areas of Search.	Make amendment to existing DC policy Revise policy DC12	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC12) appraised as set out in Appendix 4.
DC13	Criteria for energy minerals	Revision of adopted Core Strategy Policy DC7. Revised in 2017 Main Modifications to MWLP.	Five options were considered: include a single, but detailed, strategic policy to include all oil and gas, i.e. including CBM, shale gas and UCG; OR include a series of separate strategic policies on different hydrocarbons; OR include a single strategic policy, covering all oil and gas, including unconventional proposals, but separate phases of development; OR	No strategic policy but DC policy with four separate sub policies on exploration and appraisal of oil and gas, UCG and	No new strategic alternatives considered in preparation of MWLP, as approach chosen was a modification of DC7 and takes into account changes in national policy and guidance. Strategic alternatives to DC7 considered as part of preparation of MWDF Core Strategy and Generic Development Control Policies and not revisited	Revised policy (DC13) appraised as set out in Appendix 4.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
			include a strategic policy on hydrocarbons, but include a DC policy separately covering the different phases of oil and gas development; OR have no strategic policies on hydrocarbons but a DC policy covering the different phases of oil and gas development including coal. At 2017 Main Modifications, add text to provide clarity on approach to coal, and to ensure consistency with national policy.	coal. Revision to adopted policy DC7. Revise policy DC13		
DC14	Review of Mineral Permissions	Revision of adopted Core Strategy DC8	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged.	Make amendment to existing DC policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC14) appraised as set out in Appendix 4.
DC15	Minerals safeguarding	Revision of adopted Core Strategy policy DC9	Amend to clarify the policy in light of national policy and consultation responses or carry policy forward unchanged	Revise policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC15) appraised as set out in Appendix 4.
DC16	Biodiversity and geodiversity	Revision of adopted Core Strategy policy DC10. Revised in 2017 Main Modifications to MWLP.	Make a minor amendment to clarify the policy in light of national policy and consultation responses or carry policy forward unchanged. At 2017 Main Modifications, insert text to provide clarity.	Revise policy Revise policy DC16	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC16) appraised as set out in Appendix 4.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
DC17	Historic environment	Significant revision of adopted Core Strategy DC11. Revised in 2017 Main Modifications to MWLP.	Make significant revisions to Policy DC11 or carry policy forward unchanged. At 2017 Main Modifications, amend text to ensure consistency with national policy.	Revise policy Revise policyDC17	No reasonable alternative to this policy due to the need to reflect national policy, but to incorporate the Cumbria context or to not have a policy (do nothing scenario).	Revised policy (DC17) appraised as set out in Appendix 4.
DC18	Landscape and visual impact	Revision of adopted Core Strategy policy DC12	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged	Make amendment to existing DC policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC18) appraised as set out in Appendix 4.
DC19	Flood risk	Revision of adopted Core Strategy policy DC13	Amend existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged	Make amendment to existing DC policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC19) appraised as set out in Appendix 4.
DC20	The water environment	Revision of adopted Core Strategy policy DC14	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged	Make amendment to existing DC policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC20) appraised as set out in Appendix 4.
DC21	Protection of soil resources	Revision of adopted Core Strategy policy DC15	Make a minor amendment to existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged	Make amendment to existing DC policy	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC21) appraised as set out in Appendix 4.

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
DC22	Restoration and aftercare	Revision of adopted Core Strategy policy DC16. Revised in 2017 Main Modifications to MWLP.	Amend existing DC policy for clarification and to take account of changes in national legislation or carry the existing DC policy forward unchanged. At 2017 Main Modifications, amend policy title (from after use) to ensure consistency with national policy.	Make amendment to existing DC policy Revise policy DC22	No, other than to have or not have a policy (do nothing scenario).	Revised policy (DC22) appraised as set out in Appendix 4.
Site Allocations Policies						
SAP1	Household Waste Recycling Centres (HWRC)	New (draft MWLP 2013) but builds upon RSAP 2012 document. Revised in 2017 Main Modifications to MWLP.	Include a policy on HWRC allocations or not include a policy. At 2017 Main Modifications, insert text to provide clarity on which sites will be supported by the policy.	Include sites AL37 and SL1B in policy Revise policy SAP1	No, other sites discounted in site assessment process. Sites included only reasonable alternatives.	Policy SAP1 appraised, as set out in Appendix 5
SAP2	Waste treatment and management facilities	New (draft MWLP 2013) but builds upon RSAP 2012 document. Revised in 2017 Main Modifications to MWLP.	Include a policy on waste treatment and management facility allocations or not include a policy. At 2017 Main Modifications, insert text to provide clarity on which sites will be supported by the policy.	Include sites AL3; AL8; AL18, CA11; CA30; CA31; CO11; BRO1; BRO2; BRO3; BRO4; BRO5 in policy. Revise policy	No, other sites discounted in site assessment process. Sites included only reasonable alternatives.	Policy SAP2 appraised, as set out in Appendix 5

MWLP 2016	Policy Title	Status of Policy	Options considered in developing MWLP	Chosen approach	Strategic alternative to proposed approach	Approach to appraising strategic alternative in SA Reports
SAP3	Radioactive wastes treatment, management storage and disposal	New (draft MWLP 2013) but builds upon RSAP 2012 document. Revised in 2017 Main Modifications to MWLP.	Include a policy on low level radioactive waste facility allocations or not include a policy; OR amend to encompass all levels of radioactivity. At 2017 Main Modifications, insert text to provide clarity on the policy approach to use of land adjacent to the Sellafield complex (site allocation CO32).	Include sites CO32; CO35; and CO36 in policy; amend to encompass all radioactivity levels. Revise policy SAP3	No, other sites discounted in site assessment process. Sites included only reasonable alternatives.	Policy SAP3 appraised, as set out in Appendix 5
SAP4	Areas for minerals	New (draft MWLP 2013) but builds upon RSAP 2012 document. Revised in 2017 Main Modifications to MWLP.	Include a policy on allocations for mineral areas or not include a policy. At 2017 Main Modifications, insert text to provide clarity on how to enable a steady and adequate supply of minerals.	Include sites M5; M6; M8; M10; M11; M12; M15; M16; M18; M24; M27; and M30 in policy Revise policy SAP4	No, other sites discounted in site assessment process. Sites included only reasonable alternatives.	Policy SAP4 appraised, as set out in Appendix 5
SAP5	Safeguarding of existing and potential railheads and wharves	New (draft MWLP 2013; no change since 2015 draft) but builds upon RSAP 2012 document	Include a policy on safeguarding railheads and wharves or not include a policy	Include sites AL18; AL32;AL38; AL39; BA26; CO35; CO36;M34; M35; M36; M37; M38	No, other sites discounted in site assessment process. Sites included only reasonable alternatives.	Policy SAP5 appraised, as set out in Appendix 5

APPENDIX 7:

AUDIT TRAIL OF OPTIONS CONSIDERED FOR THE 2009 ADOPTED CORE STRATEGY AND 2009 ADOPTED GENERIC DEVELOPMENT CONTROL POLICIES

TABLE OF POLICY ALTERNATIVES CONSIDERED AS PART OF THE 2009 ADOPTED CORE STRATEGY AND DEVELOPMENT CONTROL POLICIES SUSTAINABILITY ASSESSMENT

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
Overall Strategy Policies			
CS1: Sustainable location and design Proposals for minerals and waste management developments should demonstrate that: • energy management, environmental performance and carbon footprint have been determining design factors • their location will minimise, as far as is practicable, the "minerals or waste road miles" involved in supplying the minerals or managing the wastes unless other environmental/ sustainability and, for minerals, geological considerations override this aim • all proposed waste management developments with gross floor space of over 1000 square metres gain at least 10% of energy supply, annually or over the design life of the development, from on-site or decentralised renewable or low	**Yes in Sustainability Appraisal Issues and Options Report.** **Waste Issue 2: Strategic approach to the location of waste facilities.** **Waste Option 2A**; Centralised provision of two large scale waste facilities, located adjacent to rail network access points or major roads. **Waste Option 2B**: Decentralised network of waste facilities, provided close to waste sources (e.g. urban areas, centres of industrial and commercial activity).	The alternatives to this policy considered in previous stages of the Sustainability Appraisal relate to the location of the minerals and waste management developments considered in the SA Issues and Options Report (Waste Issue 2: Strategic approach to the location of waste facilities and Minerals Issue 3: Strategic location of minerals sites). Alternatives relating to other provisions within this policy (e.g. sustainable design) have not been appraised previously as they generally reflect national and regional policies.	**Justification/Reasoning** Policy included in accordance with national and regional policy. The selection of a decentralised model for waste management as opposed to a centralised one suits the geographic characteristics of Cumbria and its dispersed pattern of settlements. **Compliance with previous SA findings** The Submission Draft policy is in line with the findings of the Issues and Options SA findings. In relation to waste, although the decentralised waste option was appraised to have more potentially negative effects in environmental

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
carbon energy supplies. Any exceptions to this should demonstrate that this would not be viable for the specific development and that the development would form part of an integrated process for reducing greenhouse gas emissions or for carbon-offsetting measures. • mineral working proposals should demonstrate a life cycle analysis ("cradle to grave") of product and process emissions • construction of buildings minimises waste production and use of primary aggregates and makes best use of products made from recycled/re-used materials Work will be undertaken, in conjunction with stakeholders, to develop life cycle analysis criteria that are relevant for minerals developments.	**Minerals Issue 3: Strategic Location of minerals sites.** **Minerals Option 3A**: Active redistribution of quarrying away from problem areas with, subject to proper consideration of environmental effects, new sites identified in areas where extraction was previously non existent or limited. **Minerals Option 3B**: No redistribution of sites, allowing for extensions and new sites in areas where there are current concerns about transport and amenity impacts. Exploration of mitigation measures and the use of planning agreements with mineral operators to set in place further compensatory measures for communities.	In relation to minerals, the findings of the assessment of options highlighted that locational choices for minerals extraction are relatively constrained. Both options scored comparably against most of the SA objectives, with the exception of Option 3A (i.e. redistribution) performing less strongly against the landscape quality objective. It however left a question open for consideration in further stages in relation to the appropriateness of a policy emphasis on the concentration of extraction where it is already taking place or, alternatively, on the promotion of a different pattern of extraction. As for waste, the appraisal concluded that a centralised approach to providing waste management facilities could benefit the development of the sector itself, but could	terms with a greater number of sites required, there were also mixed impacts of the alternative centralised model as this concentrated social and environmental impacts at the local level. The policy has also incorporated the SA recommendation to integrate "waste miles minimisation". With respect to minerals, although it was concluded that locational choices for minerals extraction are relatively constrained, the policy is in line with Option 3B (no redistribution of sites) which scored slightly more positively in relation to landscape objectives. **Progression to Submission Version** The policy was revised from the Core Strategy Preferred Options (February 2007) to the 2nd Draft Changes to Core Strategy Preferred

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
		also have mixed impacts by concentrating social and environmental impacts at the local level. The alternative of a decentralised approach to provision of waste management facilities was also found to have impacts that could potentially be distributed more widely throughout the area. Common to both options, however, was the need to minimise potential impacts derived from waste transporting and the importance of reducing waste miles. Most of the negative impacts of waste management were associated with the transport of waste. Recommendations from SA Issues and Options report therefore concluded that further modelling would assist in further clarifying the relative potential impacts of both options and including	Options (August 2007) to reflect the increasing emphasis on the climate change agenda with this, the primary objective of the Core Strategy, referring to the climate change issues which are significant for minerals and waste management developments. It also integrated the “minimising road miles” policy driver which was included as an individual policy at the Core Strategy Preferred Options (February 2007). The Submission Draft policy has also been amended since the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) to incorporate the life-cycle analysis requirement for mineral working proposals to reflect efficient resource management.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
		"reducing waste miles" as a policy driver.	
CS2: Economic Benefit Proposals for new minerals and waste developments should demonstrate that they would realise their potential to provide economic benefit. This will include such matters as the number of jobs directly or indirectly created or safeguarded and the support that proposals give to other industries and developments. It will also be important to ensure that minerals and waste developments would not prejudice other regeneration and development initiatives.	**Yes in Sustainability Appraisal Issues and Options Report.** **Waste Issue 1: Overall approach to waste management, energy from waste, number of sites required and recycling/ composting targets** **Waste Option 1A** (Provide for more than Cumbria's wastes) **Waste Option 1B** (Provide only for Cumbria's wastes - net self-sufficiency) **Waste Option 1C** (Provide for less than Cumbria's wastes) **Minerals Issue 1: RAWP apportionment, recycling/ secondary materials targets and sites required**	Although specific policy alternatives to this were not assessed in previous stages of the SA, provisions within this policy relate to the "do maximum" and "do minimum" options both considered in the SA Issues and Options report (Waste Issue I and Minerals Issue 1). In relation to waste, the findings of the Issues and Options SA report highlighted that whilst Option W1A would provide some major benefits, it would also have the potential to generate some minor negative effects at the site level. Option W1B also performed well, but it was stressed that some benefits provided by W1A would be significantly lower, and that there would be similar	**Justification/Reasoning** To optimise economic and community benefits from minerals and waste management developments, implying a balancing exercise with other interests. **Compliance with previous SA findings** The policy is in line with the findings of the SA report which highlighted the economic benefits associated with Waste Option 1A and Minerals Option 1A. The policy does also highlight the need for minerals and waste developments to take into consideration other regeneration and development initiatives, aiming to balance, therefore, the potential negative effects of these options.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
	Minerals Option 1A: Exceed RAWP sub apportionment figures, **Minerals Option 1B:** Provide for the RSS's apportionment of 700,000 tonnes of sand and gravel per annum. **Minerals Option 1C:** Provide for less than 700,000 tonnes of sand and gravel per annum.	potential issues arising at the site selection and development level. On the grounds of the SA findings, it was concluded that Option W1C could be discounted from further assessment. With regard to minerals, the SA findings concluded that Option M1A would provide some clear economic benefits and would support the further development of the minerals and waste sector in Cumbria. However, these would need to be balanced with potentially higher environmental effects overall, particularly taking traffic movements into consideration. In relation to Option M1B, the Issues and Options SA highlighted that it would be relatively neutral, but could be considered insufficient if development of this industry sector was considered to be a	**Progression to Submission Version** This policy was introduced at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) stage to ensure that local advantage is taken of the investment in minerals and waste management development and to ensure the plan's contribution towards the achievement of Objective EC3: To diversify and strengthen the local economy. The policy has since been modified for the Submission Draft plan and no longer relates to "community benefits from nuclear industry" as a new policy has been provided in the Submission Draft plan to cover this (see below).

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
		fundamental political aspiration in Cumbria. In the light of the SA findings, it was recommended to exclude Option M1C from further consideration.	
CS3: Community Benefits Where large national or regional waste management facilities are proposed, particularly for the nuclear industry, the County Council will expect that packages of community benefits will be provided to help to offset the impacts of hosting such facilities.	**No**	It was considered that there would be no reasonable alternative for this. The alternative would be not to have such community benefits in place which would not acknowledge the impacts of hosting these facilities in Cumbria.	**Justification/Reasoning** With recent planning permission being granted for additional waste storage at the Low Level Radioactive Waste Repository near Drigg and with the prospect of further nuclear waste streams arising from nuclear decommissioning over the next century, this policy reflects the County Council's positive intention to offset any potential impacts arising from hosting these facilities. **Compliance with previous SA findings** N/A.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			Progression to Submission Version This policy was integrated with the Local Economic Benefit policy at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) stage and has now been incorporated into the Submission Draft plan as a standalone policy to highlight the importance of community packages being put in place to offset any potential impacts arising from hosting nuclear waste management facilities.
CS4: Environmental Assets Minerals and waste management developments should aim to: • protect, maintain and enhance overall quality of life and the natural, historic and other distinctive features that contribute to the environment of Cumbria and to the character of its landscapes and places; • improve the settings of the features;	**Yes in Sustainability Appraisal Issues and Options Report.** **Waste Issue 1: Overall approach to waste management, energy from waste, number of sites required and recycling / composting targets** **Waste Option 1A** (Provide	It is considered that there would be no reasonable alternatives for this policy, as these would not be in accordance with national or regional policies. However, provisions within this policy relate to the "do maximum" and "do minimum" options both considered in the SA Issues and Options report	**Justification/Reasoning** This policy is intended to provide the appropriate level of protection to Cumbria's environmental assets, in accordance with international, European, national or regional policies.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
and • the linkages between them and buffer zones around them, where this is appropriate; • realise the opportunities for expanding and increasing environmental resources, including adapting and mitigating for climate change. **Areas and features identified to be of international or national Importance.** Planning application proposals within these, or that could affect them, must demonstrate that they comply with the relevant national policies as set out in Planning Policy Statements. Wherever practicable, they should also demonstrate that they would enhance the environmental assets. **Environmental assets not protected by national or European legislation** Planning permission will not be granted for development that would have a significant adverse effect on these environmental assets, on its own or in combination with other developments,	for more than Cumbria's wastes) **Waste Option 1B** (Provide only for Cumbria's wastes - net self-sufficiency) **Waste Option 1C** (Provide for less than Cumbria's wastes) **Minerals Issue 1: RAWP apportionment, recycling/ secondary materials targets and sites required** **Minerals Option 1A:** Exceed RAWP sub apportionment figures, **Minerals Option 1B:** Provide for the RSS's apportionment of 700,000 tonnes of sand and gravel per annum. **Minerals Option 1C:** Provide for less than 700,000 tonnes of sand and gravel per annum.	(Waste Issue I and Minerals Issue 1). In relation to waste, the findings of the Issues and Options SA report highlighted that whilst Option W1A would provide some major benefits, it would also have the potential to generate some negative environmental and social effects at the site level. Option W1B also performed well, but it was stressed that some benefits provided by W1A would be significantly lower, and that there would be similar potential issues arising at the site selection and development level. On the grounds of the SA findings, it was concluded that Option W1C could be discounted from further assessment. With respect to minerals, the SA findings concluded that Option M1A would provide	**Compliance with previous SA findings** The policy is in line with the findings of the Issues and Options SA report which highlighted the need to balancing potential environmental impacts with economic benefits. **Progression to Submission Version** The Environmental Assets policy changed from the Core Strategy Preferred Option (February 2007) to the one presented in the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) to relate only to those environmental assets that are not protected by international and national legislation. It was also updated at this stage to provide for improvement of the settings of these, and to realise the opportunities for expanding and increasing environmental resources

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
unless: • it is demonstrated that there is an overriding need for the development, and • that it cannot reasonably be located on any alternative site that would result in less or no harm, and then, • that the effects can be adequately mitigated, or if not, • that the effects can be adequately and realistically compensated for through offsetting actions. All proposals would also be expected to demonstrate that they include reasonable measures to secure the opportunities that they present for enhancing Cumbria's environmental assets. Guidance on implementing this policy will be provided by the Landscape Character and Highway Design Supplementary Planning Documents.		some clear economic benefits and would support the further development of the minerals and waste sector in Cumbria. However, these would need to be balanced with potentially higher environmental effects overall, particularly taking traffic movements into consideration. In relation to Option M1B, the Issues and Options SA highlighted that it would be relatively neutral, but could be considered insufficient if development of this industry sector was considered to be a fundamental political aspiration in Cumbria. In the light of the SA findings, it was recommended to exclude Option M1C from further consideration.	including adapting and mitigating for climate change. The policy has changed from the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) to the Submission version to include again the protection of the areas and features of international and national importance.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
CS5: Afteruse and restoration Restoration and aftercare schemes for mineral working and waste management sites should demonstrate that full advantage has been taken of their potential to help deliver sustainability objectives relating to the environment and the economy of the county.	**No**	It was considered that there would be no reasonable alternative for this policy. Whilst an alternative to this policy would be only to consider the environmental acceptability of submitted restoration proposals, this would not help deliver results in accordance with national and regional policy	**Justification/Reasoning** The policy aims to comply with national and regional policy by seeking to ensure that afteruse and restoration proposals fully deliver sustainability objectives. **Compliance with previous SA findings** The Preferred Option is repeated in the Submission Draft (see below), with the SA findings provided in Appendix 6. **Progression to Submission Version** This policy was slightly modified at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) to include aftercare in addition to restoration measures. The policy has not been modified further for the

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			Submission version.
CS6: Planning Obligations Where it is not possible to achieve the necessary control through the use of planning conditions, the County Council will seek to negotiate planning obligations that ensure that development proposals: • Meet the reasonable costs of new infrastructure made necessary by the proposal including transport, utilities and community facilities; • Secure long term management of environmental assets; • Provide financial guarantees except where an appropriate national industry guarantee fund is already in place; • Make a positive contribution to enhancing, maintaining or promoting sustainable communities.	**No**	The plan is required to have policies relating to Planning Obligations. There is no reasonable alternative to this.	**Justification/Reasoning** The policy provides the context for securing detailed mitigation measures for particular aspects of minerals and waste management developments. It seeks to ensure that development proposals internalise any potential costs associated with future infrastructure development requirements, and make a positive contribution to sustainable communities or environmental assets. **Compliance with previous SA findings** The Preferred Option is included in the Submission Draft with minor modifications to wording (see below), and the SA findings provided in Appendix 6. **Progression to Submission Version**

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			This policy was introduced at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) stage to reflect Planning Circular 05/2005 which states that Development Frameworks should include high level policies that set out the matters to be covered by planning obligations and factors to be taken into account when considering the scale and form of contributions. The policy has been modified at the Submission Draft stage to clarify that financial guarantees will be provided where it is not possible to achieve the necessary control through the use of planning conditions, except where an appropriate national industry guarantee fund is already in place.

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CS7: Strategic Areas for New Developments Carlisle and the Workington/Whitehaven area in the north, and Barrow in Furness and the Kendal area in the south are identified as the strategic locations for major new Mechanical and Biological Treatment plants or Transfer Stations, and the Penrith area for a Transfer Station for the Municipal Waste Management Strategy's preferred solution for managing municipal waste. The Kirkby Thore/Long Marton area is identified as the only location for further supplies of gypsum. Land next to High Greenscoe Quarry is identified as the only location for further supplies of mudstones for the Askam in Furness brickworks. The igneous rocks near Ghyll Scaur Quarry are identified as the only location for further supplies of very high specification roadstone. Supply and production areas, strategic locations and preferred sites for further supplies of sand and gravel and crushed	**Yes in Sustainability Appraisal Issues and Options Report.** **Waste Issue 2: Strategic approach to the location of waste facilities.** **Waste Option 2A**; Centralised provision of two large scale waste facilities, located adjacent to rail network access points or major roads. **Waste Option 2B**: Decentralised network of waste facilities, provided close to waste sources (e.g. urban areas, centres of industrial and commercial activity). **Minerals Issue 3: Strategic Location of minerals sites.** **Minerals Option 3A**: Active redistribution of quarrying away from problem areas with, subject to proper consideration of	There has been consideration of alternative strategic approaches to the location of waste management facilities (Waste Issue 2 Options 2A *Centralised* and 2B *Decentralised*) in the Issues and Options SA report; however alternative strategic areas have not been appraised. Minerals Issue 3 considered the option of redistribution of quarrying from current extraction sites (3A) against no redistribution of sites (3B). Both options scored comparably against most of the SA objectives, with the exception of Option 3A (i.e. redistribution) performing less strongly against the landscape quality objective. It however left a question open for consideration in further stages in relation to the appropriateness of a policy emphasis on the	**Justification/Reasoning** In relation to the proposed pattern of waste management facilities, these need to accord with broad locations that have been identified in the Regional Spatial Strategy and need also to reflect details of the emerging Municipal Waste Management Strategy and the long term municipal waste contract. Provisions relating to gypsum have been included as the Submission Draft MWDF needs to identify additional resources of gypsum before the underground gypsum mine closes. The County Council's Preferred Sites will be identified in the Site Allocations Development Plan Document which is programmed for consultation in the autumn of 2008.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
rock for general aggregate use will be identified in the Site Allocations Development Plan Document and Proposals Map	environmental effects, new sites identified in areas where extraction was previously non existent or limited. **Minerals Option 3B**: No redistribution of sites, allowing for extensions and new sites in areas where there are current concerns about transport and amenity impacts. Exploration of mitigation measures and the use of planning agreements with mineral operators to set in place further compensatory measures for communities. **Minerals Issue/Option 4: Ghyll Scaur Quarry** **Minerals Option 4A:** actively acknowledging Ghyll Scaur Quarry as a nationally significant resource, thereby implying a presumption in favour of further extraction at the site, subject to site level	concentration of extraction where it is already taking place or, alternatively, on the promotion of a different pattern of extraction. Alternatives/options in relation to the extraction of gypsum were not considered at the Issues and Options SA report as the Discussion Paper noted that new no new consents for mining gypsum will be required until towards the end of the plan period. Provisions for anhydrite would only be necessary in terms of protecting entrances and workings from sterilisation by other forms of development. In relation to High Greenscoe Quarry, Mineral Issue 6 from the Issues and Options SA report, considered the extension of the Quarry (Option 6A) against the identification of new sites for the extraction	However, as it is likely that planning applications for some of the new municipal waste management facilities would need to be submitted before then; potential sites are identified in the Waste Core Strategy. **Compliance with previous SA findings** There is limited flexibility in the locations for minerals development as they can only be worked where they occur. Alternatives were considered in the Issues and Options SA; the findings of which accord with provisions included in policy CSP7 which support the extraction of mudstone and very high specification roadstone in their current locations. One of the key findings of the Preferred Options SA (February 2007) was the need to establish a clearer spatial view on whether appropriate sites for both

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
	assessments. **Minerals Option 4B:** no active acknowledgement of Ghyll Scaur Quarry as a nationally significant resource within the plan. This may lead to future consents being refused in the area. Minerals Issue / Option 6: Brick making mudstone **Minerals Option 6A:** allow extension of High Greenscoe Quarry, subject to appropriate provision of mitigation and compensation/enhancement measures by the minerals operator. **Minerals Option 6B:** active encouragement of new sources of brick making mudstone away from High Greenscoe Quarry, in recognition of the specific environmental constraints of the site.	of mudstones (Option 6B). The findings of the SA identified the extension of High Greenscoe Quarry (Option M6A) as the Preferred Option overall, provided that adequate mitigation/ compensation was identified for the potential woodland loss. Regarding Ghyll Scaur Quarry, Mineral Issue 4 considered the options of further extraction at the site (Option 4A) against not allowing future extraction consents (Option 4B). The outcome of the assessment highlighted that, if Cumbria is seeking to maximise the contribution of the minerals sector to the economy, and if there are few concerns about the sensitivity of the site itself, Option M4A (further extraction at the site) would be preferable.	minerals extraction and waste management can be identified in Cumbria (paragraph 6.2). This policy represents an important step forward. As stated above however, Plan provisions in relation to site allocations and the accompanying SA implications will be addressed the Proposed Changes to the Preferred Options Site Allocations document (programmed for consultation in autumn 2008). **Progression to Submission Version** This policy was put in place at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) stage for the identification of strategic areas for the development of Mechanical and Biological Treatment plants or Transfer Stations for waste, the extraction of gypsum, brickmaking

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			mudstones, high specification roadstone and sand and gravel and crushed rock. The policy has not been amended for inclusion at the Submission Draft stage.
Waste Core Strategy Policies			
CS8: Provision for waste Provision will be made for the management of all of Cumbria's wastes (net self-sufficiency) within the county. Any proposals to manage wastes from outside the county would have to demonstrate that the local social and economic benefits outweigh other sustainability criteria. These other criteria include the impacts of the additional "waste miles" and the principles of managing waste as close as possible to its source with each community taking responsibility for its own wastes. Any proposals would have to demonstrate that their environmental impacts are acceptable. This policy does not relate to radioactive	**Yes, in Issues and Options SA report.** **Waste Issue 1**: Overall approach to waste management, energy from waste, number of sites required and recycling/ composting targets. **Option 1A**: Provide for more than Cumbria's wastes **Option 1B**: Provide only for Cumbria's wastes **Waste Option 1C**: Provide for less than Cumbria's wastes	The different approaches to waste management (to provide for more than Cumbria's waste vs to provide only for Cumbria's wastes vs to provide for less than Cumbria's wastes) were assessed as part of the Issues and Options SA which concluded that the option of providing for more than Cumbria's wastes would potentially appear as the most sustainable option if Cumbria's local economy was the key political driver. However, whilst the predicted benefits of providing for only Cumbria's	**Justification/Reasoning** A model of net self sufficiency within the County Council appears to be the most appropriate as there is concern about the capacity of the area to absorb the level of development and the associated transport movements that would flow from an approach which provides for more than Cumbria's waste. **Compliance with previous SA findings** The policy corresponds most closely with Option 1B and is in line with the findings of the

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
wastes which are considered separately		wastes turned out to be lower, this option appeared to be the most appropriate where there is concern about the capacity of the area to absorb the level of development and the associated transport movements that would flow from such an approach.	Issues and Options SA report. This option appeared to be the most appropriate where there is concern about the capacity of the area to absorb the level of development and the associated transport movements that would flow from such an approach. **Progression to Submission Version** The policy was modified at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) to include reference to the negative effects derived from the increased "waste miles" when managing waste from outside the County and to reflect concerns about climate change (as highlighted in Objective 1). The policy has not been modified further for inclusion at the Submission Draft stage.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
CS9: Waste Capacity Capacity will be provided for managing and treating between 340,000 and 462,000 tonnes/year of municipal waste and between 659,000 and 750,000 tonnes/year of commercial and industrial waste by the end of the plan period. Around 7 million cubic metres of landfill capacity will be provided, including the void space remaining in sites that have planning permission. **An Integrated Network** Sufficient sites will be identified for an integrated network of a range of appropriate and necessary waste management facilities across the county, and preference will be given to sites that can accommodate more than one type of facility. Any proposal for the alternative of a centralised network will be considered in the context of the Generic Development Control policies. **Waste Facilities** To enable the waste capacity and integrated network to be provided the plan will seek to identify: • eleven sites of around 2ha for waste	**Yes in Issues and Options SA Report.** **Waste Capacity:** **Waste Issue 1:** Overall approach to waste management, energy from waste, number of sites required and recycling/composting targets. **Option 1A:** Provide for more than Cumbria's wastes **Option 1B:** Provide only for Cumbria's wastes **Waste Option 1C:** Provide for less than Cumbria's wastes **Waste Issue 4**: Landfill thresholds. **Option 4A:** Retain existing landfill thresholds **Option 4B**: Support reduction of landfill thresholds and movement of waste up the hierarchy.	In relation to **Waste Issue 1**, the findings of the Issues and Options SA report highlighted that whilst Option W1A would provide some major economic benefits, it would also have the potential to generate negative environmental and social effects at the site level. Option W1B also performed well, but it was stressed that some benefits provided by W1A would be significantly lower, and that there would be similar potential issues arising at the site selection and development level. On the grounds of the SA findings, it was concluded that Option W1C could be discounted from further assessment. **Option W4B** emerged as being the most sustainable option in relation to landfill thresholds, with relative benefits particularly in relation to waste	**Justification/Reasoning** The policy includes a range of figures for waste management to reflect the Waste Strategy 2007 and the draft Regional Spatial Strategy. **Compliance with previous SA findings** This policy amalgamates different policy provisions considered in the 2nd Draft Changes to Core Strategy Preferred Options (August 2007). Therefore, individual policy components will be treated separately in order to discuss compliance with SA findings. ***Waste Capacity:*** The policy is in line with the findings of the SA which concluded that whilst providing for more of Cumbria's wastes would score strongly against economic criteria, the option

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
treatment facilities, (these could include Materials Recovery Facilities, Mechanical and Biological Treatment plants or Transfer/bulking stations), and • two sites of between 2 and 4.5ha for Energy from Waste gasification plants or incinerators, and • an additional 2 million cubic metres of landfill capacity in addition to the void space remaining in existing permitted sites, and • nine new or enlarged Household Waste Recycling Centres, with innovative solutions or alternative sites kept under review for smaller communities.	**Option 4C**: Provide for the RSS's 10 year estimate of need which would effectively result in an increase in landfill capacity from the present provision. **An Integrated Network:** **Waste Issue 2:** Strategic approach to the location of waste facilities **Waste Option 2A**: Centralised provision of two large scale waste facilities, located adjacent to rail network access points or major roads. **Waste Option 2B**: A decentralised network of waste facilities, provided close to waste sources (e.g. urban areas, centres of industrial and commercial activity). **Waste Facilities:** Related to potential impacts associated with waste	management, economic and social objectives. It was also highlighted, however, that any negative issues of concern in relation to Options W4A and W4C could be addressed at the site level, assisted by effective public communication/ participation and through good working practices. Option 4B performed most strongly because it was assumed that this will lead to less waste being landfilled in Cumbria. However, the key question raised in considering the Preferred Option, was whether a reduced threshold would actually lead to a reduction in new/extended landfill sites and / or whether other policy initiatives might be better placed to achieve this, including wider regulatory and fiscal measures.	of net self sufficiency would be most appropriate where there is concern about the capacity of the area to absorb the level of development and the associated transport movements that would flow from the providing for a higher level of provision. With specific reference to landfill, the Issues and Options SA report reviewed different thresholds for determining when new landfill consents should be granted (Waste Issue 4) rather than absolute capacities. Provisions within this policy correspond most closely to Option 4C, which has been included to reflect the landfill capacity requirements presented in the draft Regional Spatial Strategy. The SA implications of this will require further review at the Site Allocations stage.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
	management sites at a more strategic level (**Waste Issue 4**: Landfill Thresholds) discussed above.	Overall, however, the SA acknowledged that it is likely that the Preferred Option would need to reflect regionally and nationally set targets for landfill in the area, as a legitimate means of waste management, albeit as a 'last resort' (Option W4C). Whilst this could generate more negative impacts in relation to some sustainability objectives, these should be weighed up against the potentially more severe repercussions for sustainability that falling short of providing sufficient landfill capacity within Cumbria would generate. With respect to the Integrated Network, the SA highlighted that **Option W2A** would perform well in terms of supporting employment and innovation within the sector, developing opportunities for energy	***An Integrated Network:*** On the grounds of viability (and therefore deliverability) Policy CSP9 is based on a decentralised model. The potential effects in environmental terms will need to be considered further at the Site Allocations stage. **Progression to Submission Version** Each of the policy provisions are considered separately in turn below: ***Waste Capacity:*** The figures presented in the 2nd Draft Changes to the Core Strategy Preferred Options (August 2007) Waste Capacity changed from those presented in the Core Strategy Preferred Options (February 2007) to reflect higher maximum figures for managing municipal and commercial and industrial waste by the

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
		from waste, and also minimising potential overall environmental impacts. **Option W2B** was shown to have more potentially negative effects in environmental terms with a greater number of sites required.	end of the plan period. The figure for landfill capacity did not change significantly from the one proposed in the Core Strategy Preferred Options (February 2007), as the addition of the two additional million cubic metres to the estimated capacity presented in the Scoping Report would provide for around 7 million cubic metres of landfill capacity (figure presented in the Core Strategy Preferred Options February 2007). The Scoping Report (July 2006) stated that "*capacity for municipal waste is estimated at 5.5 million cubic metres*". Policy provisions have not changed for inclusion in the Submission Draft Core Strategy. ***An Integrated Network:*** Policy changed slightly in the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) to include the words "appropriate and

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			necessary" before waste management facilities. The policy has not been modified for inclusion in the Submission Draft Core Strategy. ***Waste Facilities:*** The policy on Waste Sites did not change significantly from the Core Strategy Preferred Options (February 2007) to the 2nd Draft Changes to Core Strategy Preferred Options (August 2007). The only new addition to the policy was clarification that the 2 million cubic metres of landfill capacity was in addition to the void space remaining in existing permitted sites. The policy has been slightly modified for inclusion in the Submission Draft Core Strategy to increase the capacity range of waste treatment facilities.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
CS10: High and Intermediate Level Radioactive Wastes Storage Developments involving the interim storage of these wastes at Sellafield will only be permitted where criteria are satisfied relating to: • benefit clearly outweighing the detrimental effects; • compliance with national standards and best practice for environment, safety and security, which, if appropriate, are independently reviewed; • reasons are explained for rejecting alternative locations and methods that have been considered; and • that there are no overall adverse impacts on the local economy. Permission will be granted only if: • all possible measures are taken to minimise the adverse effects of development and associated infrastructure; and • where appropriate, provision is made to meet local community needs; • acceptable measures are secured for	**No.**	No alternatives were considered at the Issues and Options stage as the topic was subject to a national level review. Exploration of alternatives in the absence of clear overall requirements was considered to be inappropriate.	**Justification/Reasoning** In the light of uncertainties about national policy for managing higher level wastes, the plan includes a policy for such proposals, using Structure Plan Policy ST4 as the basis for the policy as it is likely that further planning applications will be submitted in connection with interim storage of higher level wastes at Sellafield. **Compliance with previous SA findings** The findings of the assessment presented in the Preferred Options (February 2007) SA report highlighted that: • a better understanding of the 'waste miles' (road and rail) associated with the transport of high and intermediate level radioactive waste would

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
decommissioning and site restoration; and • arrangements are made for suitable local community involvement during the development, decommissioning and restoration.			assist in the assessment of the likely effects of the policy as there were a number of potential 'global' and 'local' environmental and social impacts associated with the transportation of this waste; and • the policy may impact on the sense of well being of people living close to the facility, given public concerns about radioactive waste. When Policy CSW 6 from the Core Strategy Preferred Options (February 2007) was assessed against SA objectives, the likely location of the high and intermediate level radioactive waste management facility was unknown. However, it was assumed to be Sellafield as, this is the only location within Cumbria with the facilities to storage high and

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			intermediate level radioactive waste. It was also assumed that the policy related to storage rather than disposal as means of the latter are under national review. Therefore the findings of the assessment presented in the Preferred Options SA report remain valid even though the policy changed slightly at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) as explained below. Policies presented in the Submission Draft Core Strategy policies have addressed the issues raised at the Core Strategy Preferred Options (February 2007) through CSP 1: Sustainable location and design and CSP 3: Community Benefits respectively.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			Progression to Submission Version The policy on High and Intermediate Level Radioactive Waste Storage was modified at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) to specifically refer to the "interim storage" of high and intermediate level radioactive wastes at Sellafield and not management. The policy has not been modified for inclusion at the Submission Draft Core Strategy.
CS11: High and Intermediate Level Radioactive Waste Geological Disposal If an area of suitable geology within Cumbria is volunteered for consideration as a possible geological disposal facility, separate planning applications will be expected to be submitted at three stages:	**No.**	No alternatives were considered at the Issues and Options stage as the topic was subject to a national level review. Exploration of alternatives in the absence of clear overall requirements was considered to be	**Justification/Reasoning** The development of a geological disposal facility within Cumbria for higher level wastes is not proposed. It is not considered that, as worded, the policy itself would construe policy support for the construction

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• **Proposals for surface based site investigation including boreholes.** At this stage, the planning criteria will be similar to those for exploratory works for other types of development. These relate to the usual environmental impact considerations including traffic, working hours, noise, visual impact, period of operations, water resources and wildlife. • **Proposals for underground rock characterisation shafts and tunnels and an underground research laboratory.** Planning considerations at this stage will need to include not just the environmental impacts of the proposed operations themselves, but also the details of a generic design for a disposal facility and of its likely impacts. The planning criteria will relate to the inventory of wastes; environmental impacts; benefits clearly outweighing detrimental impacts; compliance with best international standards and best practice for the environment, safety and security; the offsetting benefits package; impacts on the local economy; and community needs.		inappropriate.	of new nuclear related facilities in Cumbria. In addition, it is not known if there are areas of the county where the geology is suitable for such a facility and further research is needed on this critical aspect. However, as the Government intends to commence the siting programme in 2008, it is therefore considered to be necessary to include a policy that relates to that programme and to the procedures that it will involve. The policy would only come into play if a community in Cumbria volunteered to participate in the process of finding a site and if any possible sites passed the initial screening out of areas of unsuitable geology. **Compliance with previous SA findings** The Preferred Option is

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• **Proposals for a disposal facility and transport links, monitoring, site closure and restoration.** At this stage, there will be a reasonable expectation that planning permission will be granted. That is unless new information or material considerations demonstrate otherwise, or there are material differences from the scheme that has been developed over a considerable period of time up to this stage. Planning criteria will relate to the environmental impacts of the proposed construction and operation of the facility; the inventory of wastes to be brought to the facility; to transport matters; arrangements for local community involvement; monitoring and reporting; contingency and emergency planning issues; the offset benefits package; site decommissioning, clean-up and closure proposals; and restoration/afteruse of the site.			repeated in the Submission Draft (see below), with the SA findings provided in Appendix 6. **Progression to Submission Version** This policy was introduced at the 2nd Draft Changes to Core Strategy Preferred Options stage (August 2007) to provide procedures should radioactive waste geological disposal be proposed in Cumbria. The policy has not been modified for inclusion in the Submission Draft Core Strategy.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
CS12: Low Level Radioactive Waste Provision will be made for the Low Level Repository near Drigg to continue to fulfil a role as a component of the UK's radioactive waste management capability. Proposals for very long term storage or disposal of waste will have to demonstrate that they are feasible in relation to the long term integrity of the site with regard to sea level rise and coastal erosion. Proposals for additional storage or disposal facilities will have to demonstrate that they are within the site's radiological capacity. ***[Proposals to expand LLWR storage facility have been approved recently]***	**N**	No alternatives were considered at the Issues and Options stage as the topic was subject to a national level review. Exploration of alternatives in the absence of clear overall requirements was considered to be inappropriate.	**Justification/Reasoning** Policy included to acknowledge that, with its reduced role in terms of the types of waste, the Repository will continue to be an integral component of the UK's waste management capability, in accordance with Government policy. **Compliance with previous SA findings** The SA of the Preferred Options concluded that the policy performed positively against economic criteria and highlighted that nuclear technology is considered to be a carbon efficient technology with no associated carbon emissions. However, whilst compliance with national standards and best practice for environment, safety and security is assumed, a

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			number of potential 'global' and 'local' environmental and social impacts associated with the transportation of this waste were highlighted. As the Repository will now continue to play a limited national role (see below), a better understanding of the 'waste miles' (road and rail) associated with the transport of low level radioactive waste to the LLWR would assist in assessing this further. **Progression to Submission Version** The wording of the policy changed slightly at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007). A second paragraph was added to the policy to include the short term provision of capacity for the storage of Low Level Radioactive waste arising from larger users such as nuclear power stations and MoD.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			The wording of the policy has changed since the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) for inclusion in the Submission Draft Core Strategy to refer to the long term storage and disposal of low level waste. This change was introduced to reflect the nuclear industry's representations relating to the role of the Low Level Waste Repository (LLWR) near Drigg as a national repository for the short term only, five years, as proposed in the Preferred Options, or for the longer term. The Nuclear Decommissioning Authority (NDA), and others, also considered the policy to be out of line with Government policy for the management of Low Level Waste. Government policy requires the NDA to make optimal use of the LLWR as part of the national radioactive waste

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			management capability. More information is now available about the NDA's strategy and plans for making optimal use of facilities at the LLWR. Details are also emerging of the proposals for making more effective use of the facilities that have been put forward by the new company that will soon be taking over the management of the Repository. The NDA has given assurances that any further capacity would be used only for those wastes that need such an engineered facility and details provided of the measures that are being taken in connection with the waste hierarchy to minimise wastes. A new national LLW Strategy Group is being set up, of which the County Council will be a member. In the light of these, it was considered that the policy

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			should be amended, to acknowledge that, with its reduced role in terms of the types of waste, the Repository will continue to be an integral component of the UK's waste management capability, in accordance with Government policy.
Minerals Core Strategy Policies			
CS13: Supply of Minerals Provision will be made to: • meet the Regional Spatial Strategy's apportionment to Cumbria of crushed rock and sand and gravel production, but • further apply that apportionment to take account of Cumbria's pattern of quarries and the areas they supply, and its dispersed settlement pattern and transport routes; • identify areas sufficient to maintain landbanks of permitted reserves for supply/production areas equivalent to seven years annual average sales for sand and gravel and ten years for	**Yes- In Issues and Options SA Report.** **Minerals 1ssue 1**: RAWP apportionment, recycling/ secondary materials targets and sites required. **Option 1A:** Exceed RAWP sub apportionment figures, also exceed target for aggregates from recycled/ secondary sources recycling facilities. **Option 1B**: Provide for the RSS's apportionment of 700,000 tonnes of sand and gravel per annum. Increase production levels for	The Issues and Options SA findings concluded that **Option M1A** would provide some clear economic benefits and would support the further development of the minerals and waste sector in Cumbria. However these would need to be balanced with potentially higher environmental effects overall, particularly taking traffic movements into consideration. In relation to Option M1B, the Issues and Options SA highlighted that it would be relatively neutral,	**Justification/Reasoning** This policy has been included to ensure that the plan makes provision for a steady and adequate supply of minerals in accordance with national (Minerals Planning Statement 1) and regional policy. **Compliance with previous SA findings** Policy CSP 13 amalgamates Minerals Issues 1, 2, 3, 4 and 6 as considered in the Issues and Options SA Report.

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
crushed rock for general aggregate use, throughout the plan period, and • recognise that the high and very high skid resistance roadstone quarries, gypsum resources and High Greenscoe brick making mudstone quarry are regionally or nationally important, • enable at least one quarter of the aggregates used within Cumbria to be met by secondary or recycled aggregates.	recycled / secondary aggregates to meet national target and RAWP targets. **Option 1C**: Provide for less than regional apportionment on the grounds of practicality and environmental acceptability. **Minerals Issue 3: Strategic Location of minerals sites.** **Minerals Option 3A**: Active redistribution of quarrying away from problem areas with, subject to proper consideration of environmental effects, new sites identified in areas where extraction was previously non existent or limited. **Minerals Option 3B**: No redistribution of sites, allowing for extensions and new sites in areas where there are current concerns about transport and amenity impacts. Exploration of mitigation measures and the	but could be considered insufficient if development of this industry sector was considered to be a fundamental political aspiration in Cumbria. In the light of the SA findings, it was recommended to exclude Option M1C from further consideration. **Minerals Issue 3** considered the option of redistribution of quarrying from current extraction sites (3A) against no redistribution of sites (3B). Both options scored comparably against most of the SA objectives, with the exception of Option 3A (i.e. redistribution) performing less strongly against the landscape quality objective. It however left a question open for consideration in further stages in relation to the appropriateness of a policy emphasis on the concentration of extraction	It corresponds with Option 1B from the Issues and Options SA report and is in line with the SA findings which highlighted that although this level of production could be insufficient if economic development of Cumbria's minerals resource was considered to be a fundamental imperative, Option B provided a greater balance of economic, social and environmental considerations. The policy also provides for the consideration of the dispersed pattern of quarries and settlements. This links with Mineral Issue 3 which discussed the redistribution of quarrying from current extraction sites against no redistribution of sites. The outcome of this discussion was that locational choices for mineral extraction are relatively constrained and,

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
	use of planning agreements with mineral operators to set in place further compensatory measures for communities. **Minerals Issue/Option 2: Landbanks** **Minerals Option 2A:** maintain current landbank policies for crushed rock and sand and gravel in Cumbria - at least 15 and 7 years respectively. Do not seek to reduce over time. **Minerals Option 2B:** actively seek to reduce current landbanks for crushed rock to 10 years, by exploring scope to revoke consents which could collectively have greatest environmental impacts. **Minerals Issue 4**: Ghyll Scaur Quarry. **Option 4A**: Actively acknowledging Ghyll Scaur Quarry as a nationally significant resource, thereby	where it is already taking place or, alternatively, on the promotion of a different pattern of extraction. Assuming a corresponding fall in extraction, **Option M2B** would perform relatively positively in terms of the key objective for sustainable mineral extraction, and, if it further encouraged aggregate recycling as a consequence, against the sustainable waste management objective. It would also have potentially positive effects on amenity and wellbeing, and would contribute positively to most environmental objectives, as it would reduce the risk of future environmental effects. However, Option M2B would not perform as well against economic objectives, including employment retention and generation. Assuming a fall in extraction	given that both options scored comparably, left a question open in relation to the appropriateness of a policy emphasis on the concentration of extraction where it is already taking place or, alternatively, on the promotion of a different pattern of extraction. The policy approach appears to support extraction where it is already taking place, although aspects of this, particularly in relation to sand and gravel extraction, will require confirmation through the Site Allocations. In relation to landbanks, policy provisions correspond to those considered in Minerals Issue Option 2B to reduce current landbanks for crushed rock to 10 years. This option scored better against sustainability objectives although the findings of the Issues and Options Stage SA report

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
	implying a presumption in favour of further extraction. **Option 4B**: No active acknowledgement of Ghyll Scaur Quarry as a nationally significant resource within the plan. This may lead to future consents being refused in the area. **Alternatives/options in relation to the extraction of gypsum were not considered at the Issues and Options SA report** as the Discussion Paper noted that new no new consents for mining gypsum will be required until towards the end of the plan period. Provisions for anhydrite would only be necessary in terms of protecting entrances and workings from sterilisation by other forms of development. **Minerals Issue 6**: Brick making mudstone.	levels, Option M2B performed generally better in relation to sustainability objectives with the exception of economic considerations. However, in the absence of a site-specific review of consented landbank reserves, it was suggested that no significant adverse impacts were flagged up with Option M2A that would justify Option M2B, given the difficulties and potential financial costs that could arise in its implementation. Although there may be individual sites within the current landbank that could not be exploited without significant environmental impacts, it was suggested that these are dealt with on a site-by-site basis. Regarding Ghyll Scaur Quarry, **Mineral Issue 4** considered the options of further extraction at the site	suggested that no significant adverse impacts were flagged up with Option M2A that would necessitate Option M2B. The reduction to 10 years for the crushed rock landbank however has been introduced to comply with Minerals Policy Statement 1 (Annex 1). Policy provisions in relation to Ghyll Scaur Quarry correspond to Minerals Option 4A which is in line with the SA findings. These highlighted that this would be the preferred option if Cumbria is seeking to maximise the contribution of the minerals sector to the economy, and if there are few concerns about the sensitivity of the site itself. In relation to the High Greenscoe brickmaking mudstones, the policy also recognises these as national or regional resources. Findings of the Issues and

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
	Option 6A: Allow extension of High Greenscoe Quarry, subject to appropriate provision of mitigation and compensation/enhancement measures by the minerals operator. **Option 6B**: Active encouragement of new sources of brick making mudstone away from High Greenscoe Quarry, in recognition of the specific environmental constraints of the site.	(Option 4A) against not allowing future extraction consents (Option 4B). The outcome of the assessment highlighted that, if Cumbria is seeking to maximise the contribution of the minerals sector to the economy, and if there are few concerns about the sensitivity of the site itself, Option M4A (further extraction at the site) would be preferable. In relation to High Greenscoe Quarry, **Mineral Issue 6** from the Issues and Options SA report, considered the extension of the quarry (Option 6A) against the identification of new sites for the extraction of mudstones (Option 6B). The findings of the SA identified the extension of High Greenscoe Quarry (Option M6A) as the Preferred Option overall, provided that adequate mitigation/ compensation	Options SA report highlighted this as the preferred option overall, provided that adequate mitigation/ compensation was identified for the potential woodland loss on the site. **Progression to Submission Version** The Supply of Minerals policy was expanded at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) stage to also take into account locational and spatial considerations for quarries and crushed rock and sand and gravel landbanks supply, and to emphasise the role of secondary or recycled aggregates. The policy has not changed in content for inclusion in the Submission Draft Core Strategy, however the wording has changed slightly to refer specifically to

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
		was identified for the potential woodland loss.	"primary land won" crushed rock and sand and gravel.
CS14: Minerals Safeguarding Mineral resources will be safeguarded by identifying: • Preferred Areas and/or Areas of Search to enable a landbank of at least seven years sales at the Regional Spatial Strategy's apportionment level for sand and gravel to be maintained throughout the plan period; • A Preferred Area or Area of Search for extending Ghyll Scaur quarry for very high specification roadstone; • An Area of Search for extending High Greenscoe quarry for brickmaking mudstones; • A Preferred Area and/or Area of Search for working additional gypsum and a Mineral Safeguarding Area for the remaining gypsum resources; • Mineral Safeguarding Areas for the indicative sand and gravel and hard rock resources identified by the	**No.**	There were not considered to be any reasonable alternatives to minerals safeguarding. In relation to Mineral Consultation areas, paragraph 6.10 of the Issues and Options Discussion Paper stated that "these areas (designated following the Local Government and Planning Act 1980) require review. This is an important issue, but would not generate appropriate options for testing through the SA process. The issue should be considered further by CCC in the process of formulating the plan".	**Justification/Reasoning** This policy has been introduced to reflect national planning requirements to ensure that adequate supplies of minerals can continue to be provided for future generations, by preventing minerals resources being sterilised by other forms of development. Policy provisions will help achieve provisions of policy CSP 13 *Supply of Minerals*. **Compliance with previous SA findings** The Preferred Option is repeated in the Submission Draft with only minor wording alterations (see below), with the SA findings provided in Appendix 6. **Progression to Submission**

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
British Geological Survey; • Mineral Safeguarding Areas for resources of local building stones; • Mineral Consultation Areas, which will include buffer zones around the Preferred Areas, Areas of Search and Mineral Safeguarding Areas. The need to safeguard other mineral resources, secondary aggregate resources and potential railheads and wharves, will be considered in the Site Allocations Development Plan Document.			**Version** This policy was newly introduced at the 2nd Draft Changes to the Core Strategy Preferred Options (August 2007) to safeguard mineral resources for sand and gravel, roadstone, brickmaking mudstones, gypsum and hard rock, thus helping to achieve *Supply of Minerals* policy intentions. The policy has been expanded for inclusion in the Submission Draft Core Strategy to also include provision for the inclusion of "Mineral Safeguarding Areas for resources of local building stones".
CS15: Marine Dredged Aggregates Planning permission will be granted for developments at appropriate locations, and which do not have unacceptable environmental impacts, that would enable the increased use of marine dredged aggregates as substitutes for	**No**	In the Issues and Options SA, it was decided that although this issue could influence conclusions drawn on levels and sources of sand from primary / recycled / secondary aggregates, no	**Justification/Reasoning** To make planning provision for marine dredged aggregates, as allowed for by the Regional Aggregates Working Party before assessing the need for

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
land won ones.		alternative options focusing on this issue alone would be explored.	primary land won aggregates. **Compliance with previous SA findings** The Preferred Option is repeated in the Submission Draft (see below), with the SA findings provided in Appendix 6. **Progression to Submission Version** The policy has remained unchanged since the Core Strategy Preferred Options (February 2007).
CS16: Industrial Limestones Planning permission for the extraction of high purity limestone will not be granted unless it is primarily for non-aggregate uses, and national or regional need has been demonstrated, or where significant benefits would accrue to local communities and/or the environment.	**No**	No reasonable alternatives were considered to the requirement to demonstrate national and regional need for the extraction of high purity limestone within Cumbria.	**Justification/Reasoning** To make planning provision for the extraction of high purity limestone where national or regional need has been demonstrated. **Compliance with previous SA findings** The Preferred Option is repeated in the Submission Draft (see below), with the

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
			SA findings provided in Appendix 6. **Progression to Submission Version** The policy has remained unchanged since the Core Strategy Preferred Options (February 2007).
CS17: Building Stones Planning permission will be granted for proposals that would help to provide the full range of local building stones that are needed to maintain Cumbria's local distinctiveness, and that have acceptable environmental impacts.	**Yes in Issues and Options SA Report.** **Minerals Issue/Option 5: Local building stone** **Minerals Option 5A**: Maintaining the status quo with respect to supplying local building stone and slate. Focus on small-scale operations and extensions where there are no other reasonable alternatives. This option implies that a degree of importation may be required to meet needs arising within Cumbria. **Minerals Option 5B**: Positive promotion of extraction of a greater range	The findings of the Issues and Options SA revealed that should the selection of the option be environmentally led, it should be borne in mind that whilst Option M5B involves higher levels of extraction, it could provide potential significant benefits for the built environment within Cumbria, and reduce transport impacts associated with importation. Should Option M5B be progressed, it was suggested that it would be useful to explore whether this particular type of mineral resource coincides	**Justification/Reasoning** Policy complies with draft RSS policy which states that plans should identify and protect sources of building stone for use in repairing and maintaining historic buildings and public realm improvements. **Compliance with previous SA findings** Policy CSP I7 is in line with the findings of the SA Issues and Options Report and corresponds with Option 5A, although it is not certain whether importation may be required.

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	of local building stones to secure supplies, as far as possible, to meet Cumbrian needs. This could result in the opening of new quarries and / or significant extensions to existing operations.	with areas with particular environmental sensitivities, thereby further increasing the potential environmental impacts associated with this policy.	**Progression to Submission Version** This policy was newly introduced at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) stage, although the need for sourcing specific local stone in defined areas did arise at the Issues and Options stage. The policy has not been modified for inclusion in the Submission Draft Core Strategy.
CS18: Oil and Gas and Coal Bed Methane Planning permission will be granted for proposals associated with the exploration and development of onshore and offshore oil and gas and coal bed methane in appropriate locations, and which do not have unacceptable environmental impacts.	**No**	Oil and gas were not considered in the Issues and Options SA as these were not considered to be a key issue as existing policies relating to these sectors were defined in the Discussion Paper. These generally noted that permission could be granted where applications are in line with wider schemes for the appraisal and	**Justification/Reasoning** To reflect national policy. The Energy White Paper proposes that UK Continental Shelf and onshore oil and gas reserves should be sustained and exploited in the interest of maintaining security of supplies. Also to clarify the planning policy position should applications for the

Adopted Core Strategy Policy	Alternative Appraised Yes/No	Discussion	Justification for selecting the related Preferred Option/s and progression to Submission Draft
		development of these resources. It was reported, however, that consideration to these would be given at subsequent stages of the MWDF preparation. The extraction of coal bed methane was not highlighted as an issue at this stage.	extraction of coal bed methane be submitted. **Compliance with previous SA findings** The Preferred Option for Coal Bed Methane is repeated in the Submission Draft (see below), with the SA findings provided in Appendix 6. **Progression to Submission Version** This was a newly introduced policy at the 2nd Draft Changes to Core Strategy Preferred Options (August 2007) stage. However, it only referred to Coal Bed Methane at that stage. The policy has been expanded since to also include provisions for oil and gas exploitation.