

Appendix A

Minerals & Waste Development Plan Document - Issues Paper

Cheshire East Local Plan

March 2017

Introduction and Purpose

The Council is committed to putting in place a comprehensive set of up to date planning policies to support our ambition of making the Borough an even greater place to live, work and visit. The first part of the Council's Local Plan, the Local Plan Strategy (LPS), has reached the Main Modifications stage in its examination process. This Minerals and Waste Development Policies Document (MWDPD) will form the third part of the Council's Local Plan and the publication of this Issues Paper is the first opportunity in recent times for you to tell us what you think it should contain and the direction its policies should take. There will be further opportunities for you to help shape this Plan as it is developed.

This Issues Paper is divided into two main sections, with each providing essential background information and a policy context, before raising relevant key issues around the development of minerals and waste policy in Cheshire East. The first section is concerned with how the Council can plan for the sustainable supply of minerals, while the second section is concerned with how it can plan for the management of waste. Three key issues are identified in each section and these are accompanied by related questions for which the Council seeks your views. There are opportunities within the Issues Paper for you to highlight anything else that you think the MWDPD should cover.

Overall the MWDPD will:

- Allocate sites and areas which will enable the Council to meet its minerals and waste needs; and
- Set out detailed policies to guide planning application decisions in the Borough.

Upon adoption, the MWDPD will form part of the statutory development plan. The policies of the development plan are important because they are legally the starting point for deciding planning applications. National planning policy says that planning application decisions should be plan-led.

Together, the LPS and MWDPD will replace the saved policies contained within the separate Mineral and Waste Local Plans prepared by Cheshire County Council, which currently still form part of this Council's Statutory Development Plan.

The Cheshire East Local Plan

In Cheshire East, the Local Plan will be made up of three documents:

- The Local Plan Strategy (LPS). This sets out the vision and overall planning strategy for the Borough. It includes strategic policies and allocates 'strategic sites' for development for the period up to 2030. For further information about the LPS, please see the LPS examination library.

- The Site Allocations and Development Policies Document (SADPD). This allocates additional non-strategic sites for development (such as housing, employment, retail and leisure) and sets out more detailed policies to guide planning application decisions in the Borough on matters other than minerals and waste. An Issues Paper for the SADPD was recently consulted on for six weeks between 27 February and 10 April 2017; and
- The Minerals and Waste Development Plan Document.

Many local communities across the Borough are also preparing Neighbourhood Plans. These provide an opportunity for local people to put in place planning policies to guide new development, in a way that reflects local circumstances, including locally identified priorities. The Council will continue to work closely with Town and Parish Councils and the steering groups preparing Neighbourhood Plans. This will include providing advice about the relationship between emerging Neighbourhood Plans and the emerging Local Plan, taking account of national planning policy.

Seeking Your Feedback

The consultation on the MWDPD Issues Paper will run for six weeks – from XXXXXXXX to 5pm on XXXX.

At the same time, the Council is also undertaking a 'call for sites' for mineral and waste uses. A separate 'call for sites' for other purposes was recently undertaken in association with the Issues Paper for the SADPD.

Call for Sites

Local residents, landowners, developers and other parties are also being invited to put forward sites to the Council that they consider are suitable and available for future minerals and waste related development in the Borough. This information will be used by the Council to help inform any further land allocations in the MWDPD.

The Council previously undertook a call for mineral sites and areas during 2014. This resulted in landowners and the minerals industry submitting a total of 29 sites or areas. Each of these was subject to a detailed appraisal and the findings were reported in Minerals Sites and Areas Assessment Report, which can be found on the Council's website¹. It also includes recommendations on minerals safeguarding areas and indicative draft policies for minerals safeguarding areas.

The Council wishes to ensure that the information it has on potential sites and areas is as up-to-date and reliable as possible. Therefore, we are asking landowners, developers and the minerals & waste industry to submit any sites they consider to be suitable and available for development, even if they have submitted this information

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to us in the past. The submission of a site does not automatically mean that it will be allocated in the MWDPD. Further information about how to submit details of a site is available here.

Sustainability Appraisal

The Council must carry out an appraisal of the sustainability of the policies and proposals in the MWDPD. This will help the Council to demonstrate how it will contribute to the achievement of sustainable development. The first stage involves the preparation of a Scoping Report. This identifies the scope and level of detailed information to be covered in the Sustainability Appraisal report. It includes relevant environmental, economic and social issues against which potential policies and proposals can be tested.

A key aim of this scoping stage is to help ensure the Sustainability Appraisal is proportionate and relevant to the plan that is being assessed. The Council invited views on its Draft Sustainability Appraisal Scoping Report as part of the recent consultation on the SADPD and so are not inviting further comments at this stage. There will be other opportunities to comment on the Sustainability Appraisal for the MWDPD as this Plan evolves.

How to Respond

Viewing the consultation documents

You can view the MWDPD Issues Paper:

- Online at www.cheshireeast.gov.uk/localplan;
- At all libraries across the Borough; and
- At the Council's offices/Customer Service Centres:
 - Sandbach – Westfields, Middlewich Road, CW11 1HZ
 - Crewe – the Planning Helpdesk, Municipal Buildings, Earle Street, Crewe, CW1 2BJ
 - Macclesfield – Town Hall, Market Place, SK10 1EA

Making Comments

We would encourage you to respond online if you can at www.cheshireeast.gov.uk/localplan. You can also pick up a paper comments form from your local library and post it to the Council's Spatial Planning Team, Cheshire East Council, c/o Earle Street, Crewe, CW1 2BJ.

We cannot accept anonymous comments.

If you have any questions about the Issues Paper, the Call for Sites or how to respond to these, please get in touch with the Spatial Planning Team. We are here to help you.

- E-mail: localplan@cheshireeast.gov.uk
- Telephone: 01270 685893

Planning for the Sustainable Supply of Minerals

Introduction

Minerals are an essential component in the creation of both a successful economy and a good quality of life, since they help provide the infrastructure, buildings, energy and goods that the country needs. However, as minerals are a finite natural resource and can only be worked where they are found, it is important that best use is made of them to secure their long-term future.

As a Mineral Planning Authority (MPA), Cheshire East Council is responsible for ensuring that policies are in place which will enable a steady and adequate supply of the minerals found in the Borough. These include: silica sand; construction sand and gravel; hard rock; salt; coal; hydrocarbons; and clay. This paper will provide some background information on these minerals, outline the policy framework within which the Council must prepare its Plan and give an indication of the levels of provision that are required over the plan period to 2030. Three key minerals issues are identified which the Council needs to consider when drawing up its minerals policies, together with a number of related questions. Your input into these questions and considerations is requested.

Geology and Mineral Resources in Cheshire East

The British Geological Survey (BGS) report² on mineral resource in Cheshire and its accompanying map identifies the type and extent of the minerals present in the Borough.

This shows that the geology underlying Cheshire East is diverse and provides a range of mineral resources. These can be divided into those which are currently extracted and those which aren't. Silica (or industrial) sand, construction sand and gravel, sandstone, salt and peat are the resources extracted from a number of sites located across the Borough, as shown on the Map in Appendix 1. Clay and coal can also be found in the Borough but are no longer commercially worked. In addition, it is likely that forms of hydrocarbons (oils and gas) are present but further exploration is required to understand the extent of the resource and whether it can be commercially extracted. The geographical extent of the mineral resource found in the Borough is detailed on the maps in Appendix 2 (Salt), Appendix 3 (Coal & Licensed Areas for Hydrocarbon Extraction) and Appendix 4 (Other Mineral Resources). Some background information on these minerals and their extraction is provided below.

² Mineral Resource Information in Support of National, Regional and Local Planning: Cheshire (Comprising Cheshire, Boroughs of Halton and Warrington), British Geological Survey for Office of Deputy Prime Minister, 2006

Silica Sand

The silica (or industrial) sand resource found in Cheshire East is broadly located in a triangular area between Sandbach, Congleton and Chelford. High quality silica sands are relatively scarce and the Cheshire resource is identified in the BGS report as one of the most important in the country.

Silica sand is the essential raw material in a range of industrial applications, most notably glass manufacture and foundry casting. It also has horticultural and leisure uses such as sports pitch enhancement, as well as numerous other applications. Silica sand produced in Cheshire East is supplied to end users nationwide.

Four active quarries currently extract and process silica sand within the Borough. Extraction is carried out by surface quarrying. Depending on the water table level, this can be done by 'dry working' (digging) or 'wet working' (suction dredging on a lake or lagoon). The processing of silica sand can be complex and is dependent on its end use. Specialist plant facilities are required at or close to quarries for this processing purpose.

Maintaining a supply of silica sand is a national issue and there are few locations in the UK where high quality silica sand deposits occurs in enough quantities to be economically viable to extract.

Construction Sand and Gravel

Sand and gravel resources can be found across Cheshire East. They are extracted principally for construction purposes. This can be for a fine aggregate in concrete, mortar and asphalt or as fill material. There are no quarries in Cheshire East which exclusively produce construction sand and gravel at present. However, this resource is produced as an ancillary product from the activities associated with quarrying silica sand in the Borough. The amount produced varies depending on the nature of the reserve at the site.

Hard Rock

In Cheshire East 'hard rock' resources refer to sandstone (including gritstone). Resources are predominately found to the east of the Borough, lying roughly along the Pennine Fringe. Sandstone is principally used as a building material, although quantities are also crushed to produce an aggregate, depending on the nature of the reserves and operations at each site.

There are currently eight permitted hard rock quarries located in the Borough. However, the operation of these quarries is small in scale and they are unlikely to have the infrastructure to be able to supply enough rock for any large scale construction schemes. Quarrying is typically carried out using a mechanical digger.

The stone is then either crushed and screened or cut and dressed to the specification of the end user.

Salt

Cheshire East, along with the neighbouring Cheshire West & Chester MPA, contains some of the most significant underground salt resources in the country. Salt has a wide variety of applications, notably as an essential raw material in both chemical manufacturing and food production. Salt (in the form of brine) produced from brinefields near Warrington directly supplies the British Salt works at Cledford Lane, Middlewich. The salt products produced here supply end users nationwide.

Modern underground solution mining techniques are used in the Borough to extract salt and maintain surface stability. This involves injecting water into the salt beds and pumping out the saturated salt solution (brine). In some instances, the underground cavities that are created are also being converted for the purposes of natural gas storage and brine wastes.

Peat

Peat deposits can be found in areas across Cheshire East. It is used primarily in the horticultural industry either as a growing medium or soil improver. Over recent years the use of alternatives to peat has significantly increased due to the environmental, nature conservation, geodiversity, archaeological and climate change issues relating to its extraction. There are currently two long standing sites located in the Borough that have extracted peat, although their production is relatively small in scale.

The government has publicised its intention to phase out peat production in the UK by 2030. National planning policy indicates that no new sites or extensions to existing sites should be identified for peat extraction.

Coal

Coal is an important national energy resource and is present beneath much of Cheshire East. However, it is mostly buried at great depths beneath younger geological layers. There are currently no active coal workings in the Borough, although there is a history of mining around Poynton and Mow Cop where coal seams come closer to the surface.

Hydrocarbons (Oil and Gas)

Reserves of oil and gas are referred to as either conventional or unconventional hydrocarbons depending on the nature of the geology where they are found and, as a result, how easy they are to extract. Conventional hydrocarbons are oil and gas deposits which have migrated from their source rock (such as shale) into permeable or porous rock such as sandstone but are now prevented from migrating further by

impermeable rock. This traps the hydrocarbon beneath the impermeable rock where it collects and forms a reservoir. This resource is relatively easy to extract through conventional oil and gas wells. The process of on shore extraction has been undertaken within the UK for over 100 years and there are currently around 2,100 of these wells in the UK³. While some hydrocarbon exploration has taken place in the past, there are no wells or planning permissions associated with conventional hydrocarbon activity in Cheshire East.

Unconventional hydrocarbons refer to oil and gas which is trapped within rocks of low permeability and, as a result, these hydrocarbons are more difficult to extract. The unconventional reserves likely to be of most relevance to Cheshire East are shale gas and coalbed methane. Shale is formed from muddy sediments rich in organic matter deposited in seas millions of years ago. As these sediments were buried, they were heated and turned into rock and the organic matter was converted into gas and oil which is trapped in the rock. Hydraulic Fracturing commonly known as “fracking” is a technique used in the extraction of gas from shale rock. Coalbed methane occurs when methane is bound within coal by a process known as adsorption i.e. where gas molecules adhere to surfaces or fractures within the coal. It is extracted by borehole in a similar process to shale gas but, instead of injecting water at high pressure to fracture the rock, the gas is released from the coalbed by pumping out the water that occurs naturally in coal seams.

The exploration, appraisal and extraction of hydrocarbons are controlled by the Government through a licensing system, with relevant consents being required from the Minerals Planning Authority, Environment Agency and Health and Safety Executive. The latest round of Petroleum Exploration and Development Licences (PEDL) were announced in December 2015, with companies invited to bid for exclusive rights to specific areas. Appendix 3 shows the location of the 7 PEDL areas, covering 11 grids of land within or partly within Cheshire East, that were issued through this 14th Onshore Licensing round. The licences convey no permission for operations on land, but give exclusivity for exploration operations against other oil and gas exploration companies within a defined area. The PEDLs issued in Cheshire East have an initial term which expires in July 2021.

No sites in Cheshire East have planning permission to explore, appraise or extract unconventional hydrocarbons such as shale gas. However, the recent issuing of the PEDLS within the Borough means that hydrocarbons are a resource which needs to be considered within the MWDPD.

Clay

Boulder clay covers large areas of Cheshire East, although it varies considerably in thickness and quality. It has historically been extracted for purposes including soil improvement and supply to the brick making industry. More recent uses are as an

³ Planning for Shale Gas and Oil – Briefing Note March 2016, PAS

engineering material in the capping of waste landfill sites. Permission exists at Maw Green near Crewe for extraction of clay and for its use as a landfill capping material on site and for off site use elsewhere. It may not be possible to predict areas where extraction is commercially viable without investigating specific sites.

Question 1 – Have all workable and viable mineral resources present in Cheshire East been identified and is the information provided accurate?

Policy Context

The strategy, policies and allocations contained within the MWDPD must be prepared within the policy context established by national, sub-national (regional/strategic) and local guidance. Key considerations and policy drivers are briefly outlined in the section below.

National

The Government's planning policies for minerals are principally contained within the National Planning Policy Framework (NPPF) published in March 2012. This places a number of requirements on minerals planning authorities when preparing Local Plans. These include the need to identify policies which:

- Manage the extraction of mineral resource of local and national importance;
- Consider the contribution that substitute, secondary and recycled minerals can make to the supply of materials;
- Define and safeguard known locations of specific mineral resources that are of local and national importance;
- Safeguard key supporting infrastructure and facilities used for the handling and processing of minerals;
- Outline criteria against which planning applications will be assessed to address unacceptable adverse impacts caused by development, and;
- Ensure worked land is reclaimed at the earliest opportunity

MPAs are also required to plan for the steady and adequate supply of both aggregates⁴ and industrial minerals. In the case of aggregates, this means preparing an annual Local Aggregate Assessment (LAA) based on a rolling average of 10 years sale data and other relevant local information. All aggregate supply options are considered as part of the assessment including secondary and recycled sources,

⁴ Aggregates refers to sand and gravel, and hard rock

imports and exports, and land won resources. In the case of industrial minerals, it means providing a resource stock or landbank of at least 10 years for individual silica sand sites or at least 15 years where a silica sand site requires significant new capital.

For oil and gas development, MPAs are expected to distinguish between the three phases of hydrocarbon development (exploration, appraisal and development) and address constraints on production and processing within areas that are licensed for oil and gas exploration or production. MPAs should also encourage underground gas and carbon storage and associated infrastructure where geologically feasible.

The NPPF should be read in conjunction with other relevant mineral guidance and advice such as: Planning Practice Guidance⁵; guidelines for aggregates provision in England⁶; good practice advice on mineral safeguarding⁷; and National Policy Statements for Energy⁸, particularly those relating to oil and gas supply and storage.

Sub-National

The Localism Act establishes a ‘Duty to Co-operate’ on planning authorities to ensure that they work together on strategic issues such as minerals planning. The Council does this through participation in the North West Aggregates Working Party (NWAWP), which reports on mineral data activity in the area and ensures that the region and its constituent MPAs meet identified aggregate needs. In addition, the Council must liaise with more distant MPAs where they either also produce or are significant recipients of silica sand, since this is identified as a nationally significant resource. This is to ensure that the implications of any proposed policy changes can be considered on a more strategic basis, particularly if they may result in an overall reduction in supply.

Local

Mineral planning policies in Cheshire East are currently provided by the ‘saved policies’ in the legacy Cheshire Replacement Minerals Local Plan (CRMLP), which was prepared by Cheshire County Council and adopted in 1999. The Cheshire East Local Plan Strategy contains a strategic policy (Policy SE10) on the sustainable provision of minerals. This states that “Cheshire East will make provision for an adequate and steady supply of minerals in support of sustainable economic growth without unacceptable adverse impacts on the environment having considered the need to conserve finite resources as far as possible and safeguard them for future generations”. The policy then outlines 13 specific ways in which this will be achieved. The MWDPD will provide the detailed policies required to achieve the approach that is outlined.

⁵ Planning Practice Guidance is a living online document published by CLG

⁶ National and Regional Guidelines for Aggregate Provision in England: 2005-2020, CLG, 2009

⁷ Mineral Safeguarding in England: Good Practice Advice, British Geological Survey, 2011

⁸ <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/national-policy-statements/>

Current Mineral Demand and Supply Targets

The only targets for the supply of minerals in Cheshire East relates to the production of aggregates and the requirement mentioned earlier for there to be a minimum landbank of at least 10 years for silica sand reserves on individual silica sand sites. The most recently published Local Aggregates Assessment report is the 2014 LAA⁹ which covers the period 1st January to 31st December 2013. This looked at the demand for and supply of aggregates in Cheshire East for the Plan period. This analysis can be divided into sand and gravel, crushed hard rock and other factors impacting on aggregate supply and demand which requires consideration.

Sand and Gravel

The 2014 LAA found that average sales demand for sand and gravel from Cheshire East over the last 10 years had been 0.46 million tonnes per annum and over the last three years had been 0.36 million tonnes. A further 5.17 million tonnes of sand and gravel had planning permission for extraction in the Borough at the end of December 2013 (referred to as the permitted reserve). This meant that there was a remaining aggregate landbank of 11.24 years when calculated against the 10 year sales average or 14.36 years when using the most recent 3 year average sales. This can be compared with the older forecasts that had been made about demand at the national¹⁰ and regional¹¹ level which required Cheshire East to plan for meeting a demand to 2020 of 0.71 million tonnes per annum (referred to as the sub-regional apportionment). This calculation of demand indicates that the Borough had a remaining aggregates landbank of some 7.28 years. All three methods of calculating demand showed that Cheshire East was providing the minimum 7 year landbank requirement identified in the NPPF.

In terms of supply, the LAA also considered how much more reserves of sand and gravel would be needed for the Council to meet either its average 10 year sales demand or its sub-regional apportionment figure for the Plan period to 2030. This meant calculating the supply figure for a 27 year period i.e. the 20 years of the Local Plan period and a further 7 years for the provision of the required landbank. It identified that the total provision needed to meet demand, based on 10 year average sales, would be 12.42 million tonnes. Taking away the existing permitted reserve of 5.17 million tonnes from this figure meant that the Local Plan would need to make provision for a minimum additional reserve of 7.25 million tonnes of sand and gravel. The calculation based on the sub regional apportionment figure showed that the total provision for the Plan period was 19.17 million tonnes, which required a minimum additional reserve of 14 million tonnes.

⁹ Local Aggregates Assessment 2014, Cheshire East Council, April 2015

¹⁰ National and Regional Guidelines for Aggregate Provision in England: 2005-2020, CLG, 2009

¹¹ The Future of Sub-Regional Apportionment in the Cheshire Sub-Region, Cheshire West & Chester Council, 2011

Crushed Rock (Sandstone)

The 2014 LAA found that average sales demand for crushed rock from Cheshire East over the last 10 years had been 0.019 million tonnes per annum and over the last three years had been 0.001 million tonnes. There was a permitted reserve of 4.29 million tonnes of crushed rock at the end of December 2013. This meant that there was a remaining landbank of 226 years when calculated against the 10 year sales average or 429 years when using the most recent 3 year average sales. This can be compared with the older sub-regional apportionment forecasts which required Cheshire East to plan for meeting a demand to 2020 of 0.04 million tonnes per annum. This calculation of demand indicates that the Borough had a remaining crushed rock landbank of some 107 years over the Plan period to 2030. All three methods of calculating demand showed that Cheshire East was providing a considerably higher landbank than the minimum 10 years required by the NPPF.

In terms of supply, the LAA also considered how much more reserves of crushed rock would be needed for the Council to meet either its average 10 year sales demand or its sub-regional apportionment figure for the Plan period to 2030. This meant calculating the supply figure for a 30 year period i.e. the 20 years of the Local Plan period and a further 10 years for the provision of the required landbank. It identified that the total provision needed to meet demand, based on 10 year average sales, would be 0.57 million tonnes. Taking away the existing permitted reserve of 4.29 million tonnes from this figure shows that the Local Plan would not need to make any additional provision for crushed rock, as there was an identified surplus of 3.72 million tonnes. The calculation based on the sub regional apportionment figure showed that the total provision for the Plan period was 1.2 million tonnes, which resulted in an identified surplus of 3.09million tonnes.

Other Aggregate Factors

The consideration of factors other than past demand and older apportionment forecasts are becoming increasingly more important in determining the extent to which MPAs should plan for the provision of aggregates. The NPPF refers to this as other relevant local information and it is something which the North West Regional Aggregates Working Party and its constituent MPAs are giving greater thought to when preparing their LAAs. This is intended to provide a more forward looking and robust analysis of likely potential aggregate demand for land won or primary aggregates and will provide the evidence base upon which Local Plans can be prepared.

These factors will consider the implications on aggregate demand from a range of information sources including the following: up to date local and national forecasts for the economy; the increasing use of secondary and recycled aggregates; the potential to increase the supply of marine dredged aggregates; the levels of growth planned for in adjoining authorities and the associated impact this may have on

aggregate imports and exports from the Borough; and proposals for significant infrastructure projects in the vicinity which could significantly increase aggregate demand. These factors will be taken account of as the MWDPD is developed. The Council is currently preparing the 2015 LAA which covers aggregate figures for the 2014 calendar year. Initial findings indicate that there has been a substantial increase in sand and gravel sales over this period with a consequential reduction in the size of the remaining landbank. This emphasises the need for a robust approach to planning for aggregate supply in the MWDPD.

Silica Sand

The 2014 LAA reported that approximately 1.04 million tonnes of silica sand from Cheshire was sold in 2011, although the more recent 2012 Annual Raised Inquiry showed a drop in sales to 0.92 million tonnes in Cheshire. The figure is not split between the two MPAs in Cheshire. In addition, only two of the four silica sand sites in Cheshire East were reported to hold the permitted reserve stock of at least 10 years required by national planning policy. This would indicate the likely need for further provision to be made for silica sand in the MWDPD, either through the expansion of existing sites or the formation of new sites. This would also contribute to the overall aggregate landbank in the Borough, since aggregate production in Cheshire East is currently only an ancillary product of silica sand quarrying.

Question 2 – Do you have any comments on the demand and supply of mineral resources, particularly aggregates and silica sand, in Cheshire East which the Council should consider in preparing the MWDPD?

Key Issue 1 – Ensuring an Adequate and Steady Supply of Minerals from Cheshire East

The first key issue which the Council needs to consider when preparing its MWDPD relates to the vision, priorities and strategy that should be developed to ensure that the Borough produces an adequate and steady supply of minerals. This needs to be achieved within the policy context and targets described above.

Vision & Priorities

The Local Plan Strategy (LPS) already contains a vision for Cheshire East which refers to the supply of important natural mineral resources such as silica sand and

salt being achieved in the most sustainable way possible. In order to deliver its vision the LPS sets out four strategic priorities, namely:

- Promoting economic prosperity by creating conditions for business growth;
- Creating sustainable communities, where all members are able to contribute and where all the infrastructure required to support the community is provided;
- Protecting and enhancing environmental quality of the built and natural environment; and
- Reducing the need to travel, managing car use and promoting more sustainable modes of transport and improving the road network.

Minerals extraction in Cheshire East impacts on all four of these strategic priorities. Strategic Priority 1 specifically refers to the direct benefit that mineral working brings to the rural economy which helps promote economic prosperity. Strategic Priority 2 refers to the need to ensure that suitable infrastructure, including energy, is provided to support the community. Strategic Priority 3 refers specifically to providing a supply of mineral resources including suitable alternatives in the most sustainable way possible without unacceptable environmental costs. It also refers to the need for the Local Plan to include "safeguarded land" which can meet the longer term development needs of the Borough stretching beyond the plan period. Ensuring high quality restoration and aftercare of mineral workings will also help enhance the natural environment. While encouraging the sustainable transport of minerals would also help meet Strategic Priority 4.

The vision and strategic priorities identified in the LPS are also supplemented by two policies which detail how the Council will achieve sustainable development in Cheshire East (Policy SD1) and what the sustainable development principles are that must be met by all development in the Borough (Policy SD2).

Question 3 – Does the MWDPD require the development of a more detailed vision and priorities for minerals or are those already included in the LPS sufficient? If you think a more detailed vision and priorities are required, please explain why and indicate what these should cover.

Strategy

The Council proposes to develop detailed policies in the MWDPD to help achieve the elements outlined in Policy SE10 of the LPS, as this provides the overarching policy steer for minerals. Of particular focus will be the need to ensure that a strategy is developed which will enable sufficient additional reserves of silica sand and sand &

gravel to come forward to meet identified needs during the plan period, since the LAA is showing there to be a shortfall in their supply.

There are four possible approaches to achieving this as follows:

- *Identify specific sites for mineral extraction including extensions to existing sites.* This provides a high degree of certainty for the industry and local community as to where mineral extraction might take place but would offer little flexibility. Extensions to existing sites can have benefits over new sites such as reduced environmental disturbance and more efficient use of resources including the full recovery of minerals;
- *Identify 'Preferred Areas' for mineral extraction.* These areas are focussed on where the minerals reserve can be most viably extracted. It provides a more balanced approach to certainty and flexibility when considering where mineral extraction might take place. Evidence provided by the minerals industry will be used by the Council to help identify these areas;
- *Identify 'Areas of Search' for mineral extraction.* These are geographically larger areas than Preferred Areas. Areas of Search provide flexibility but give less certainty as to the possible locations for minerals extraction as they are based on weaker geological evidence; and
- *Criteria based.* Mineral planning applications would be determined on a case by case basis in accordance with identified criteria. This approach relies on sites coming forward during the Plan period. Therefore, it provides less certainty that new provision will be made or where it will be located, although it provides the greatest flexibility to the industry. This approach is the least likely to ensure that the Council meets its targets for ensuring an adequate and steady mineral supply.

The adopted approach is likely to be a combination of these approaches. The current Cheshire Replacement Minerals Local Plan identifies Preferred Areas for future workings of silica sand, sand and gravel, and salt; an Area of Search for sand and gravel; and sets criteria for future working of clay, coal, hydrocarbons and peat. The 2014 LAA notes that less than 1% of the total allocated Areas of Search, some 5,310 hectares, have been taken up by subsequent permission. The focus of both silica sand and sand and gravel development had been within Preferred Areas. These were mostly associated with existing quarries.

Question 4 – What approach do you think should be taken for each of the minerals present in Cheshire East to ensure that the MWDPD delivers an adequate and steady supply of minerals?

Key Issue 2 – Ensuring the Prudent, Efficient and Sustainable Use of Mineral Resources

This issue involves considering how mineral resources can be used appropriately to reflect the fact that they are a finite resource. It is concerned with how and to what extent the MWDPD should ensure the prudent, efficient and sustainable use of Cheshire East's primary minerals and how to encourage the recycling of suitable materials to minimise primary extraction.

National planning guidance identifies the importance of making best use of minerals to secure their long-term conservation. Current policies in the CRMLP encourage the use of secondary aggregates or substitute aggregate materials, particularly recycled waste material, whilst not permitting applications for the winning and working of minerals where it would involve the use of high quality minerals for low grade purposes.

Policy SE10 of the Emerging Local Plan Strategy encourages the provision of suitable alternative materials to land won minerals in order to minimise the need for new primary extraction and conserve finite natural resources.

Encouraging and enabling the provision of suitable recycled materials will need close integration with policy concerning the provision of waste management facilities in Cheshire East. Recycled construction and demolition waste can be used as an aggregate material offering a suitable alternative to land-won minerals depending on the specifications needed. The nature and extent of this waste stream in Cheshire East is discussed later in this paper, although it is worth noting that the Mineral Products Association consider that recycled and secondary materials now account for 28% of the Great Britain aggregates market¹². In addition, policy concerning sustainable construction can contribute to minimising the requirement for new primary extraction through the re-use of materials.

Silica sands have a wide range of uses from industrial applications such as glass making and foundry casting to leisure based such as sport pitch enhancement. As Cheshire East's silica sand resource is a scarce, high quality material, consideration will need to be given to ensuring its appropriate end use. Silica sand and products manufactured from it can be re-used and recycled together with some newly dug sand.

Another possibility to conserve primary land won aggregate would be to explore the greater use of marine aggregate. According to information provided by the Crown Estate & British Marine Aggregate Producers Association¹³, 0.25 million tonnes of construction aggregate were extracted from the marine licensed areas in the North West during 2015, with 97% of the tonnage being delivered to the North West. In

¹² The Minerals Product Industry at a Glance, The Mineral Products Association, 2016 Edition

¹³ The Crown Estate & British Marine Aggregate Producers Association Extraction Report 2015

addition, the area licensed for marine aggregate extraction in the North West has increased during 2015. It is not known to what extent marine aggregates landed in the dredging areas across the North West currently contribute to fulfilling the demand in the Borough. Further work will need to be undertaken as part of the LAA to gain an understanding of the contribution marine aggregates is currently making and may have in the future.

Question 5 – Do you have any comments on how the Council can ensure the prudent, efficient and sustainable use of minerals resources through its policies in the MWDPD?

Key Issue 3 – Safeguarding Mineral Resources

As minerals can only be worked where they are found, it is important that any proven resources are not needlessly sterilised by other forms of surface development. With increased pressure on land use, the MWDPD will need to consider how it will approach safeguarding resources to ensure that they are available to meet the mineral needs of future generations. This will require, in line with national guidance, the definition of 'Mineral Safeguarding Areas' (MSAs) to alert the presence of mineral resources.

MSAs are a designation and not an allocation whose purpose is to alert interested parties to the existence of proven mineral deposits that are, or may become, of economic importance in the future. There is no presumption that resources in a MSA will be worked nor that other forms of development will be precluded, but they ensure that the presence of a mineral resource is taken into account during the decision making process. This includes by developers when they put together non-mineral development proposals on a site where minerals are likely to be present or by the local planning authority when it is required to determine such an application.

The NPPF requires local planning authorities to safeguard infrastructure associated with the bulk transport of mineral resources by rail or other non road means, including related storage, handling and processing facilities. Safeguarding can also apply to the handling, processing and distribution of substitute, recycled and secondary aggregates. This will require co-ordination with policies concerning the provision of waste management facilities in Cheshire East, for example aggregate recycling.

The NPPF also requires MPAs to set out policies to encourage prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place in MSAs and to prevent unnecessary sterilisation of minerals.

Planning Practice Guidance requires MPAs to adopt a systematic approach for safeguarding mineral resources which:

- Uses the best available information on the location of all mineral resources in the authority area. This may include use of British Geological Survey maps as well as industry sources;
- Consults with the minerals industry, other local authorities, local communities and other relevant interests to define Mineral Safeguarding Areas;
- Sets out Mineral Safeguarding areas on the policies map that accompanies the local plan; and
- Adopts clear development management policies which set out how proposals for non-minerals development in Mineral Safeguarding Areas will be handled, and what action applicants for development should take to address the risk of losing the ability to extract the resource. This may include policies that encourage the prior extraction of minerals.

Detailed advice on mineral safeguarding may be found in the British Geological Survey report “Mineral Safeguarding in England: Good Practice Advice”. This recommends a six stage methodological approach to defining MSAs in unitary authority areas like Cheshire East. With the later stages being undertaken following both a consultation of the draft MSAs and the Sustainability Appraisal of options.

There are two other factors which need to be considered in relation to safeguarding. The first relates to mineral resources that lie across authority boundaries. In these cases a joined up approach will be necessary with the neighbouring Minerals Planning Authority(s) to ensure that development in one MPA does not needlessly sterilise resources in an adjacent MPA area. The second relates to whether it is necessary to define ‘buffer zones’ around safeguarded areas depending on the mineral that is being safeguarded. This would alert developers and others to the potential of mineral resources being sterilised by incompatible neighbouring development taking place close to the resource.

Question 6:

(a) Which mineral resources in Cheshire East do you consider warrant safeguarding?

(b) Should Mineral Safeguarding Areas cover the full extent of the available resource or should it exclude existing urban areas?

(c) Should buffer zones be used and should any distinction be made between different mineral resources and the buffer distances that apply?

(d) Which mineral related infrastructure in the Borough should be considered for safeguarding?

Planning for the Management of Waste

Introduction

The production or consumption of goods and services in the economy and wider society naturally results in the creation of waste. This needs to be appropriately managed. The way waste is managed has changed significantly in recent times with the emphasis being on achieving the Government's key aim of moving towards a 'zero waste economy'¹⁴ as part of the transition to a sustainable economy. In such an economy, material resources are re-used, recycled or recovered wherever possible, and only disposed of as the last option. To achieve this, waste must be managed according to the principles of the 'Waste Hierarchy'¹⁵, whereby options for management are prioritised in order according to their environmental impact.

The most sustainable and environmentally friendly option for managing waste is to reduce the amount of waste that is produced in the first place. For example, this could be achieved by using less material in the design and manufacture of a product or by keeping products for longer. When waste is created, priority should then be given to its preparation for re-use (including repairing and refurbishing), followed by recycling (including composting), then recovery (including energy generation), and last of all disposal (for example, to landfill).

In preparing its part 3 Local Plan, the Council is seeking to develop appropriate planning policies that will enable the sustainable management of waste in Cheshire East. The Council must do this within the policy context established by EU directives, national legislation, regulation and guidance, as well as by taking account of appropriate strategic and local considerations.

Key aspects of the current waste policy context are identified below, together with background information on the various types of waste generated and processed in the Borough. The latest estimates for the additional capacity required to meet the forecasted needs for managing the Borough's waste to 2030 is also provided for information. This has led to the Council identifying three key issues which need to be considered when drawing up its waste policies, together with a number of related questions. Your input into these questions and considerations would be welcome.

Policy Context

European

The 2008 revised European Waste Framework Directive provides the overarching legislative framework for the management of waste. In addition to the Waste Hierarchy principle already mentioned above, the Directive introduces the principles

¹⁴ As set out in the Waste Management Plan for England, December 2013, DEFRA

¹⁵ A legislative requirement under Article 4 of the revised EU Waste Framework (Directive 2008/98/EC) transposed through the Waste (England and Wales) Regulations 2011.

of 'self-sufficiency' and 'proximity' into waste management. This requires sufficient capacity to be developed to reduce waste movements and enable waste to be managed in the most appropriate way to reduce its adverse impacts on human health and the environment. The Directive has been enshrined in law through the Waste (England and Wales) Regulations 2011.

National

At the national level, the Waste Management Plan for England explains how the Government intends to work towards a more sustainable and efficient approach to resource management. It also explains how the Government will help support implementation of the objectives and provisions of the revised European Union Waste Framework Directive (2008/98/EC).

The Government's planning policies for waste are principally contained within the document 'National Planning Policy for Waste' (NPPW) which was published by CLG in October 2014. It sets out the guidance which planning authorities should take account of when discharging their responsibilities to plan for the strategic and sustainable management of waste. The NPPW is divided into the following five areas:

- Using a proportionate evidence base;
- Identifying the need for waste management facilities;
- Identifying suitable sites and areas;
- Determining planning applications; and
- Monitoring and reporting

The NPPW should also be read in conjunction with other relevant guidance particularly the National Planning Policy Framework¹⁶, Planning Practice Guidance¹⁷, the Waste Management Plan for England¹⁸, and the National Planning Policy Statements for Waste Water¹⁹ and Hazardous Waste²⁰.

Strategic

The Localism Act 2011 establishes a 'Duty to Co-operate' on planning authorities' to ensure that they work together on strategic issues such as waste planning. Therefore, the Council must understand the current waste flows into and out of the Borough and whether the Local Plan should seek to accommodate further waste management facilities or can rely to some extent on existing or planned facilities in another authority area to accommodate some of its waste. Any significant use of

¹⁶ National Planning Policy Framework, CLG, March 2012

¹⁷ Planning Practice Guidance – a living online document published by CLG

¹⁸ Waste Management Plan for England, DEFRA, December 2013

¹⁹ NPPS for Waste Water, DEFRA, February 2012

²⁰ NPPS for Hazardous Waste, DEFRA, June 2013

another authority's waste management capacity should be discussed with that authority as part of the plan making process.

Local

Waste planning policies in Cheshire East are currently provided by the 'saved policies' in the legacy Cheshire Replacement Waste Local Plan, which was prepared by Cheshire County Council and adopted in 2007. The Cheshire East Local Plan Strategy contains a strategic policy (Policy SE 11) on the sustainable management of waste requiring proposals to accord with the principles and priorities of the waste hierarchy and for the third part of the Local Plan (i.e. the MWDPD) to show how the waste management needs of the Borough will be met.

Waste Arisings and Streams

The amount of waste generated in an area is referred to as the 'waste arisings' and this is broken down by types referred to as 'waste streams'. Waste that is subject to legislative control in either its handling or disposal is call controlled waste. The principal controlled waste streams are:

- Local Authority Collected Waste;
- Commercial and Industrial; and
- Construction, Demolition and Excavation

Other waste streams include Hazardous, Agriculture, and Low Level Radioactive. Further information on these waste streams is provided below. Table 1 summarises the latest information on the current levels of these waste arisings in Cheshire East and gives a forecast for what these levels may be in at the end of the plan period in 2030. All information on waste arisings and forecasts in this paper is taken from the Council's 2014 Waste Management Needs Assessment document unless otherwise indicated²¹.

Table 1 – Principal Waste Arisings and forecasts for Cheshire East as reported in the Council's 2014 Waste Management Needs Assessment.

Waste Stream	Current Arisings (Tonnes)	% of Total²²	Forecast Arisings at 2030 (Tonnes)
Local Authority Collected Waste ²³	194,549	13	Between 129,000 and 205,000
Commercial and Industrial Waste	523,700	36	543,000
Construction, Demolition	113,316	8	141,000

²¹ Cheshire East Waste Management Needs Assessment, LRS Consultancy, 2014

²² Rounded to nearest whole number

²³ Source for Current Arisings: Local Authority Collected and Household Waste Statistics 2014 to 15, data.gov.uk

and Excavation Waste			
Hazardous Waste	28,546	2	40,000
Agricultural Waste ²⁴	581,000	41	613,000
Radioactive Waste	200	0	282
Total	1,441,311		Between 1,466,282 and 1,542,282

Local Authority Collected Waste (LACW)

This refers to all waste collected by the Local Authority and was previously referred to as 'Municipal' or 'Municipal Solid Waste'. It comprises mostly the waste collected from households and from Household Waste Recycling Centres. As shown in Table 1, a total of 194,459 tonnes of LACW was collected in 2014/15 comprising just under a quarter of all waste arisings in the Borough. The majority of this type of waste is collected from households, some 181,268 tonnes in 2014/15, of which 56.8% was either recycled, composted or reused, and 43% was sent to landfill for disposal²⁵.

In common with national trends, the total collected volume of this type of waste fell by 5.3% in Cheshire East between 2009 and 2013. The recycling rate increased slightly over this period, from 49% to 53%. The impact of both factors therefore saw residual waste (black bin) collections reduce by 12.5%, from 96kt to 84kt, during this same period.

More recent information on LACW to that reported in the WMNA is now available²⁶. This shows that 197,198 tonnes of waste material was collected by Cheshire East, of which 183,337 tonnes was collected from households across the Borough. This marks a 1% increase from the previous year. Of the total amount, 55.3% was sent for either recycling or composting. The remainder was sent to landfill or incinerated (with energy generated). This recycle rate ranks the Council in the top 10% nationally for the seventh year in a row. When comparing unitary authorities, Cheshire East is the sixth best in England and the second best Unitary Council in the North West. The average amount of household waste collected per head of population in Cheshire East in 2015/16, that was neither recycled, reused nor composted, was 484.8kg. This marks a small increase on the previous year's amount of 467kg.

The collection of LACW in Cheshire East is undertaken by ANSA on behalf of the Council and managed at contracted facilities. It is based on a three bin alternative collection service. The dry recyclable component (silver bin) is bulked up in the Borough prior to transportation to the UPM Material Recovery Facility at Shotton near Deeside. The green or garden waste (brown bin) is transported to several

²⁴ Only 1,000 tonnes of this waste requires off site management

²⁵ Source: Local Authority Collected and Household Waste Statistics 2014 to 15, data.gov.uk

²⁶ Source: DEFRA, Local Authority collected waste statistics - Local Authority data (England) 2015/16

contracted composting facilities both within and outside the Borough. In 2015/16, just over 60% of the residual non-recyclable or compostable waste (black bin) was landfilled at the facility in Maw Green, Crewe. The remainder of this waste was transported for incineration at an energy from waste facility in Stoke.

The Council is moving away from the use of landfill as a form of waste management in response to the requirements of European Legislation and national policy on waste which has resulted in the introduction of the Landfill Escalator Tax (currently set at £84.40 per tonne in 2016). The Council approved a Municipal Waste Management Strategy in October 2014 which covers the period to 2030. This identifies a number of high level strategic objectives for the future collection, treatment and disposal of waste in Cheshire East including the following:

- Making waste prevention, reduction and reuse a priority over recycling and disposal;
- Working to reduce the total amount of household waste produced per annum and per person in Cheshire East;
- Continuing to exceed national targets for recycling (currently 50% by 2020);
- Reducing organic waste arisings by giving priority to promoting home composting solutions for garden and food waste;
- Utilising energy generation to process 40,000 tonnes of kerbside collected organic waste by sustainable bio technologies, such as anaerobic digestion, to generate heat and power; and
- Reducing to zero the disposal of residual waste to landfill and instead redirecting this waste so that 100% is managed by using waste to energy generation as a disposal method.

The Council's 2014 Waste Management Needs Assessment produced three forecasts for LACW for the plan period to 2030 based on population growth, household growth and an analysis of historical time series data to incorporate trends. This produced an estimated range of between 129,000 and 205,000 tonnes of LACW being produced by 2030 which will require managing by a number of different methods in accordance with the waste hierarchy.

Commercial and Industrial Waste (C&I)

Commercial and Industrial waste (or 'trade waste') consists of various waste materials generated from the activities of the commercial and industrial sectors. It includes waste collected from a wide range of premises including shops, offices, hotels, catering establishments, factories and industrial plants. It does not include waste produced by agriculture or quarry and mining activities. It also specifically excludes waste management and recycling businesses to avoid double counting.

Arrangements for the collection and management of C&I waste are made within the private sector and are market driven. Therefore, movement of this waste is not governed by local authority boundaries and waste can be exported from one area to

another depending upon the type of waste, the location of the facility and the transport infrastructure. C&I waste arisings from Cheshire East are managed across a range of waste management facilities both within and outside the Borough.

As shown in Table 1, C&I waste was estimated to be some 523,700 tonnes in 2015 and so makes up around 36% of all waste arisings in the Borough. It is also estimated that approximately 60% of the C&I waste is re-used or recycled. It is forecast that C&I waste will increase to an annual rate of some 543,000 tonnes by the end of the plan period in 2030. These estimates have been derived by applying growth forecasts for businesses in Cheshire East to the best available information on C&I waste arisings. It should be noted that this arisings data was obtained from the most recent waste survey of commercial and industrial businesses in the North West of England undertaken in 2009 but which is now a little dated. The methodology used is fully explained in the Council's 2014 Waste Management Needs Assessment.

Construction, Demolition and Excavation Waste (CDEW)

This comprises waste arisings from the construction and demolition industries, including excavation during construction activities, and mainly consists of inert materials such as soils, stone, concrete, brick and tile. This waste stream does also contain non-inert elements such as wood, metals, plastics, cardboard and residual household like wastes. However, the inert elements make up the majority of the total tonnage due to their weight.

Understanding how much CDEW is produced is difficult to measure due to the way it is managed. There are two reasons for this. Firstly, for cost reasons (i.e. transport costs and landfill tax) significant quantities of this waste is recycled and re-used on the site where they arise and, therefore, do not enter the recorded waste stream. Secondly, a large proportion of the waste that is removed from site is managed at small scale facilities where waste management activity is exempt from the environmental permitting system monitored by the Environment Agency.

This means that data is only available for the proportion of the waste material which leaves site and is managed through permitted waste facilities. This data is recorded in the National Waste Data Interrogator (NWDI) which is the main source of information on operational permitted waste management facilities. As Table 1 shows, the NWDI reports that around 113,000 tonnes of CDEW was produced in Cheshire East in 2012 and subsequently handled by a licensed waste facility. Approximately 70% of this waste was sent to landfill and 26% was recycled or reused. The NWDI shows that the vast majority is landfilled or recycled within Cheshire East, with small volumes treated or landfilled outside of the Borough. Planning permission exists in Cheshire East for the infilling of former quarries with inert CDEW for site restoration purposes.

The Council's 2014 Waste Management Needs Assessment forecasts that CDEW will increase over the plan period to 141,000 tonnes per year by 2030.

Hazardous Waste

Waste is classified as "Hazardous" if it has characteristics that make it harmful to human health or the environment, either immediately or over time. Hazardous waste is a sub-category of the three principal waste streams discussed above, since they all can contain wastes that are hazardous. The Interrogator (NWDI) recorded that 28,546 tonnes of hazardous waste was generated in Cheshire East in 2012. This is mostly dealt with at specialist, material specific licenced facilities outside of Cheshire East. This includes, for instance, incineration of Cheshire East generated healthcare wastes in Wrexham and incineration of asbestos based construction & demolition wastes in Doncaster.

The Council's 2014 Waste Management Needs Assessment forecasts that the levels of hazardous waste would rise to 40,000 tonnes per year by 2030.

Agricultural Waste

The Environment Agency website describes agricultural waste as any substance or object from premises used for agricultural or horticulture which the holder discards, intends to discard or is required to discard. It is waste specifically generated by agricultural activities and, for example, includes: slurry; empty pesticide containers; old silage wrap; out of date medicines and wormers; used tyres; and surplus milk. However, it excludes non-agricultural waste which may be generated on a farm such as that coming from a farm shop or vegetable packing plant which would be classified as C&I waste.

Given the rural nature of large parts of the Borough considerable quantities of agricultural waste arise in Cheshire East. As shown in Table 1, an estimated 581,000 tonnes of agricultural waste was generated in Cheshire East in 2012. However, the vast majority remains on site to be composted or treated for land management purposes. Only a small proportion leaves farm holdings for management elsewhere i.e. an estimated 1,000 tonnes in 2012. The Council's 2014 Waste Management Needs Assessment forecasts that agricultural waste will increase over the plan period to 613,000 tonnes per year by 2030, although there would be no increase in the overall amount of this waste that leaves farm holdings during this time i.e. 1,000 tonnes.

Low Level Radioactive Waste

Radioactive waste is any material that is either radioactive itself or is contaminated by radioactivity and for which no further use is envisaged. Most radioactive waste is produced in connection with the operation of nuclear power stations and is referred to as 'nuclear waste'. Radioactive waste also arises from other activities such as in defence, medical, industrial and educational establishments. This is referred to as

'non-nuclear waste'. Radioactive waste is not included in the definition of hazardous waste and no data on arisings and their destinations is held by the Environment Agency as there is a different regime for its regulation. The Environment Agency's Pollution Inventory shows a single industrial producer of low level radioactive waste in Cheshire East producing around 200 tonnes in 2012. This material is currently incinerated in a specialist facility. The location of the facility is not disclosed but is likely to be outside Cheshire East.

The Council's 2014 Waste Management Needs Assessment forecasts that the level of low level radioactive waste produced in the Borough and requiring incineration is likely to increase to around 282 tonnes by 2030.

Question 7 – Do you have any comments on the Council's evidence regarding current and forecasted waste arisings?

The Waste Management Needs Assessment Findings

As detailed above, the latest WMNA forecasts that by 2030 a total of between 1.46 and 1.54 million tonnes of waste will be generated in Cheshire East. Not all of this waste will require additional waste management capacity to be provided within the Borough to process it. For example, agricultural waste will largely continue to be disposed of by land spreading and specialist facilities outside of the Borough for processing radioactive and hazardous waste are still likely to be used for economic viability reasons. The WMNA identified the capacity of existing consented waste management facilities within Cheshire East for LACW and C&I waste streams and compared this with the forecasted need at 2030. This led to the identification of waste management capacity gaps for these waste streams which the Council must plan for through its part 3 Local Plan.

Other waste streams, particularly for the processing of construction and demolition wastes, are more difficult to plan for due to lack of available data i.e. they tend to be processed at facilities that are exempt from waste permitting. While Environment Agency records show that there are over 6,000 locations within Cheshire East where waste management facilities can operate, it is not known how many of these facilities are in operation or what volumes they process. Therefore, exempt sites have been excluded from the capacity evaluation.

Waste movements between Waste Planning Authorities (WPA) will also impact on the available capacity in that area. In the case of Cheshire East, the WMNA reports

that the available data from the Interrogator (NWDI), which doesn't cover all movements or give a detailed geographical waste source in all cases, suggests around half of the 157,542 tonnes of waste generated in the Borough in 2012 appears to be processed or disposed of within Cheshire East. This is mostly by composting and non-hazardous landfill. A significant proportion of the remainder is processed outside the Borough in Staffordshire and Stockport. This is mostly for the treatment of sludge from waste water treatment. Excluded from these figures is the mixed recyclates collected from households in the Borough and sent to Deeside (Flintshire) for processing. The Council's latest information indicates that this amounted to around 39,000 tonnes in 2015/16.

Conversely, the Interrogator shows that a total of 346,545 tonnes of waste was handled in Cheshire East in 2012. The majority of this waste (79%) comes from Cheshire East itself (21%) and the former Cheshire County Area (58%). These go mainly to non-hazardous landfill and composting facilities. The rest of the inputs come mostly from Cheshire West & Chester (5.2%), the North West region (5%), Flintshire (3.7%), Norfolk (4.5%) and Stoke (3.5%). These go mostly to landfill.

It should be noted that the 58% (or 253,988 tonnes) of waste attributed to the former Cheshire County area and the 5% (or 22,051 tonnes) of waste attributed to the North West region is not broken down by the Interrogator to council area. This means that it will include waste originating in Cheshire East. This highlights the issue that information on waste is not comprehensive and that the Council must develop its MWDPD based on a robust analysis of the best available information, whilst acknowledging the information gaps that exist and any weaknesses there may be in the information that is available.

The capacity gap analysis found that:

- Organic Waste Management - There is insufficient organic waste management capacity in the Borough to manage current and future forecast organic waste arisings, particularly for food waste. Food waste is usually processed by anaerobic digestion (AD) or in-vessel composting which are more expensive treatments than the aerobic composting treatment used for garden waste. A capacity gap of up to 43,000 tonnes per annum is forecast by 2030. This could be met within Cheshire East by the development of an AD treatment site of 2 ha or two smaller facilities on sites of 0.3 ha each;
- Recycling – There is only enough recycling capacity in Cheshire East to manage 30% of the total estimated arisings of recyclable material. Facilities in other areas are currently used but additional capacity is likely to be required if recycling and re-use rates are to increase in line with EU targets. These targets may be met through improved collection methods and the use of Material Recovery Facilities (MRF) to sort recyclable waste. Current MRF

capacity amounts to 125,000 tonnes per annum compared with a requirement to re-use and recycle up to 420,000 tonnes per annum;

- Residual Waste Management – The residual (black bin) waste has traditionally been landfilled, although other treatments such as energy recovery or mechanical biological treatment are now encouraged as a way of managing waste higher up the waste hierarchy. There is a clear capacity gap with time limited landfill capacity to 2027 and no recovery facilities for residual non-hazardous waste in the Borough. This gap of between 130,000 and 232,000 tonnes per year is the equivalent of the input of 1 or 2 energy recovery or gasification facilities. It is recommended that this gap is filled either with a new strategic facility in Cheshire East (which would require a site of around 2.5ha to be allocated) or by utilising another facility nearby. However, there are a significant number of such facilities either planned or in operation in nearby authorities, several of which are likely to have sufficient capacity for the treatment of residual waste from Cheshire East. Consequently, the study identifies that it may not be economically viable to deliver a new facility in the Plan area and options for utilising other available facilities in nearby authorities should be explored;
- Construction, Demolition and Excavation Wastes – Most of the recorded element of this waste in Cheshire East is disposed of at landfill sites within the Borough. Sites for the treatment of inert wastes are often based at quarries or landfill sites and for this reason will ultimately be time-limited due to the temporary nature of quarries and landfill sites. If processing and disposal sites for this waste stream are located a significant distance from the location of waste arising, it becomes uneconomical to transport the waste there and illegal tipping is more likely to occur. Therefore, there is a need to ensure the availability of a broad distribution of appropriate sites to support the proper management of this type of waste in the Borough. This waste stream is increasingly being managed through aggregate recycling facilities. This provides a sustainable source of material for the construction sector, replacing the need to use primary minerals in construction.
- Radioactive Waste – Most of the radioactive material that arises in Cheshire East is of a low or very low level. Therefore, it can be managed at non-hazardous waste management sites unless there is a specific prohibition against doing so. The quantities of radioactive waste are small and not sufficient to justify the development of new waste management facilities. Advice from the Planning Inspectorate is that policies on the management of

this waste stream are unlikely to be needed unless there is specific interest in the development of facilities from operators in the area.

The WMNA was prepared on the basis of the levels of growth identified in the Local Plan Strategy submitted to the Secretary of State for Communities and Local Government in May 2014 i.e. 27,500 new homes and land for a minimum of 300 hectares of employment land. As a result of the examination process, the Council are now proposing modifications to the Plan which would result in the provision of 36,000 new homes and a minimum of 380 hectares of employment land between 2010 and 2030. As this is likely to lead to changes to the levels of waste being generated over the Plan period, the Council will be commissioning a new WMNA to consider the implications for waste management planning. This assessment will also take account of new waste capacity that has been implemented or granted permission since the last WMNA, including the Council's new environmental hub facility for waste management at Middlewich. These factors will be taken account of as the MWDPD is developed.

Question 8 – Do you have any comments on the capacity gap findings and recommendations identified in the Council's latest Waste Management Needs Assessment?

Key Issue 4 – Meeting the Waste Management Needs of Cheshire East

The background information on the policy context and waste management needs of Cheshire East provided above leads to the fourth key issue identified in this paper and the first to cover waste matters. This is concerned with how the Council should go about developing its MWDPD with regard to the vision, priorities and strategy for ensuring that suitable waste management facilities are available in the Borough to manage waste in the most sustainable way. This should involve a mix of types and scale of facilities. The strategy will also need to consider the extent to which it is appropriate to export waste for management at facilities outside of Cheshire East.

Vision & Priorities

The National Planning Policy for Waste requires Local Plans to identify sufficient opportunities to meet the identified needs of their area for the management of waste. This should be achieved by driving waste management up the waste hierarchy, provided this does not endanger human health or harm the environment. Local Plans should also provide a framework within which communities and businesses are engaged and take responsibility for their own waste in line with the proximity

principle. This will require the development of a collective vision and set of agreed priorities for sustainable waste management planning in Cheshire East.

The Local Plan Strategy (LPS) already contains a vision for Cheshire East which refers to waste being reduced and managed sustainably, and for it to be utilised as a resource wherever possible. In addition, Strategic Priority 2 in the LPS refers to the need to ensure that suitable infrastructure, including waste, is provided to support the community. Strategic Priority 3 refers specifically to managing waste in the most sustainable and environmentally sensitive way possible through its prevention and utilisation as a resource, driving it up the waste hierarchy. Strategic Priority 4 also refers to promoting more sustainable modes of transport which could result from the way waste is managed in the Borough.

The vision and strategic priorities identified in the LPS are also supplemented by two policies which detail how the Council will achieve sustainable development in Cheshire East (Policy SD1) and what the sustainable development principles are that must be met by all development in the Borough (Policy SD2).

Question 9 – Does the MWDPD require the development of a more detailed vision and priorities for waste management or are those already included in the LPS sufficient? If you think a more detailed vision and priorities are required, please explain why and indicate what these should cover?

Strategy and Potential Additional Facility Types to Meet Needs

As identified in the capacity gap analysis mentioned above, the findings from the Council's latest Waste Management Needs Assessment indicates that the Local Plan should develop a strategy which focuses on encouraging further waste management facilities for organic, recycling, and construction, demolition and excavation (C&I) wastes in Cheshire East. This would mean developing more anaerobic digestion (energy from waste) and aerobic composting facilities for organic waste, material recovery facilities to sort mixed recyclates, transfer/bulking stations to sort segregated recyclates, recovery facilities for some residual waste (such as mechanical biological treatment), and landfill to accommodate the element of C&I waste that is taken off site and not used or recycled. It is already the Council's strategy to stop landfilling residual waste by the end of the Plan period.

It is proposed that the other main waste streams continue to be largely managed outside of the Borough. This is because these facilities are more specialist in nature

and so would be less economically viable to provide within the Borough or because there is existing spare capacity for these facilities in nearby areas. This would include the disposal of hazardous waste, residual waste for combustion and radioactive waste. The Council will engage through Duty to Co-operate discussions with those authorities, for waste streams greater than 5000 tonnes per annum, to agree that the Council's MWDPD can take account of this capacity.

A summary of the types of waste management treatment facilities that are available is provided in Appendix 5 for information.

Question 10 – Do you have any comments on the strategy the Council should develop in its MWDPD to manage its waste needs? Do you agree the suggested approach above would be suitable?

Scale of Facilities

National guidance also indicates that Local Plans should recognise the need for a mix of types and scale of facilities. The Council acknowledges the need for a mix of facility types as already outlined above. However, consideration also needs to be given to the scale of the facilities that should be encouraged within Cheshire East. This leads to a number of questions or approaches as follows:

- Should the MWDPD seek to provide a large number of smaller waste management facilities and spread these across the Borough to meet the local needs of individual towns?; or
- Should the MWDPD seek to provide one large strategic facility to meet all the Borough's needs?; or
- Should the MWDPD seek to rely on a sub-regional facility which could accommodate waste from multiple authorities?

The answer may be different depending on the type of waste facility to be provided, the volume of the waste stream and the economics of provision. The reliance on sub-regional facilities will make Cheshire East less self sufficient and could be a less sustainable option if large volumes of waste are being transferred by a number of authorities to make it viable. In addition, for some waste streams there may not be enough waste to justify the provision of a number of smaller community facilities spread across the Borough.

Question 11 – Do you have any views on the scale of facilities that should be provided in the Borough for different waste streams?

Key Issue 5 – Identifying Suitable Sites and Areas

National planning policy guidance requires local plans to identify suitable sites and areas for new or enhanced waste management facilities to be located. In preparing plans, waste planning authorities should:

- Identify the broad type or types of waste management facility that would be appropriately located on the allocated site or in the allocated area in line with the waste hierarchy, taking care to avoid stifling innovation;
- Plan for the disposal of waste and the recovery of mixed municipal waste in line with the proximity principle, recognising that new facilities will need to serve catchment areas large enough to secure the economic viability of the plant;
- Consider opportunities for on-site management of waste where it arises;
- Consider a broad range of locations including industrial sites, looking for opportunities to co-locate waste management facilities together and with complimentary activities. Where a low carbon energy recovery facility is considered as an appropriate type of development, waste planning authorities should consider the suitable siting of such facilities to enable the utilisation of the heat produced as an energy source in close proximity to suitable potential heat customers;
- Give priority to the re-use of previously developed land, sites identified for employment uses, and redundant agricultural and forestry buildings and their curtilages.

In addition, national guidance requires waste planning authorities to assess the suitability of sites and areas for new or enhanced waste management facilities against each of the following criteria:

- The extent to which the site or area will support the other policies set out in this document;
- Physical and environmental constraints on development, including existing and proposed neighbouring land uses, and having regard to a range of factors to the appropriate level of detail needed to prepare the Local Plan²⁷;

²⁷ Namely: protection of water quality and resources and flood risk management; land instability; landscape and visual impacts; nature conservation; conserving the historic environment; traffic and access; air emissions, including dust; odours; vermin and birds; noise, light and vibration; litter; and potential land use conflict.

- The capacity of existing and potential transport infrastructure to support the sustainable movement of waste, and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport; and
- The cumulative impact of existing and proposed waste disposal facilities on the well being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential.

The approach taken in the current Cheshire Replacement Waste Plan (CRWLP) is to identify a network of sites that are considered acceptable 'in principle' for waste management facilities which, when combined with existing facilities, provide an integrated network of sites for waste arising within Cheshire. The CRWLP also seeks to locate waste management facilities in appropriate locations close to the main sources of waste arisings in order to minimise the transportation of waste.

Consideration needs to be given to the approach this Council should take in identifying suitable waste management facilities, bearing in mind current guidance and the success of the previous approach adopted in Cheshire. While it may not be necessary to identify areas if sufficient specific sites are allocated, the allocation of suitable areas such as industrial sites can offer flexibility in terms of the different types of waste facilities that can be accommodated and the opportunities for co-location that can be provided.

The co-location of a number of complimentary waste management facilities on one site can offer benefits such as minimising the distance waste has to travel, assuming that sites are located as close to the main source of waste as possible. This approach is supported by national guidance. However, potential environmental and amenity impacts may also be concentrated and will require appropriate mitigation.

Another consideration is that waste has been identified by the Government as a source of renewable energy, which in turn relates to the meeting of national renewable energy targets and issues associated with climate change. Therefore, any policies concerning the provision of future waste management facilities in Cheshire East will require close integration with the Local Plan Strategy policies on renewable energy i.e. Policies SE8 and SE9. The Council's Climate Change and Sustainable Energy Planning Research Study published in 2011 identified the potential for a range of renewable energy projects in Cheshire East including: Energy from Waste; Combined Heat and Power; and Anaerobic Digestion.

The scale of facilities section above identifies some possible approaches to determining locations for waste management facilities based on the size of the facility that is provided i.e. a limited number of strategic sized sites (located within or outside the Borough) or a larger number of smaller sites. This distribution could be supplemented by an approach which supports the expansion or enhancement of

existing sites and facilities to meet identified need. A preferred approach could be a combination of these approaches.

Question 12 – Do you have any comments on the factors or approach the Council should consider when determining the suitability of sites or locations intended for accommodating waste management facilities? Are any factors of particular importance within the context of Cheshire East?

Key Issue 6 – Safeguarding Sites from Non-Waste Development

National waste planning policy indicates that when planning authorities determine planning applications for non-waste development they should take account of their likely impact on both existing waste management facilities and on the sites and areas allocated for waste management. These impacts should be acceptable and not prejudice the implementation of the waste hierarchy, as expressed through the policies of the Local Plan, and/or the efficient operation of such facilities. Therefore, it may be necessary to seek to amend non-waste development proposals to make them acceptable or, where this is not practicable, refuse planning permission.

Losing identified waste sites or areas to non-waste related development, such as housing, could result in the loss of potential waste management capacity in Cheshire East. This in turn could impact on levels of waste recycling, the diversion of waste from landfill and the ability to meet waste recovery targets. It may also be possible that non-waste development within close proximity of an identified waste site could affect its potential for future waste management use and long term deliverability. The development of non-waste related land uses on sites allocated for waste management uses has been a particular issue in recent years for the existing Waste Local Plan. This has resulted in the loss of key strategic sites and the development of waste facilities being steered towards unallocated sites in a non Plan led approach.

Question 13 – Do you have any comments on the approach the Council should adopt to safeguard waste sites and areas from development? Should this approach focus on both existing and allocated sites and areas or just those proposed to be allocated in the Plan?

Other Matters

This issues paper identifies a number of the main matters which the MWDPD is likely to address. Please let us know if there are any other issues which you feel that the Plan should address.

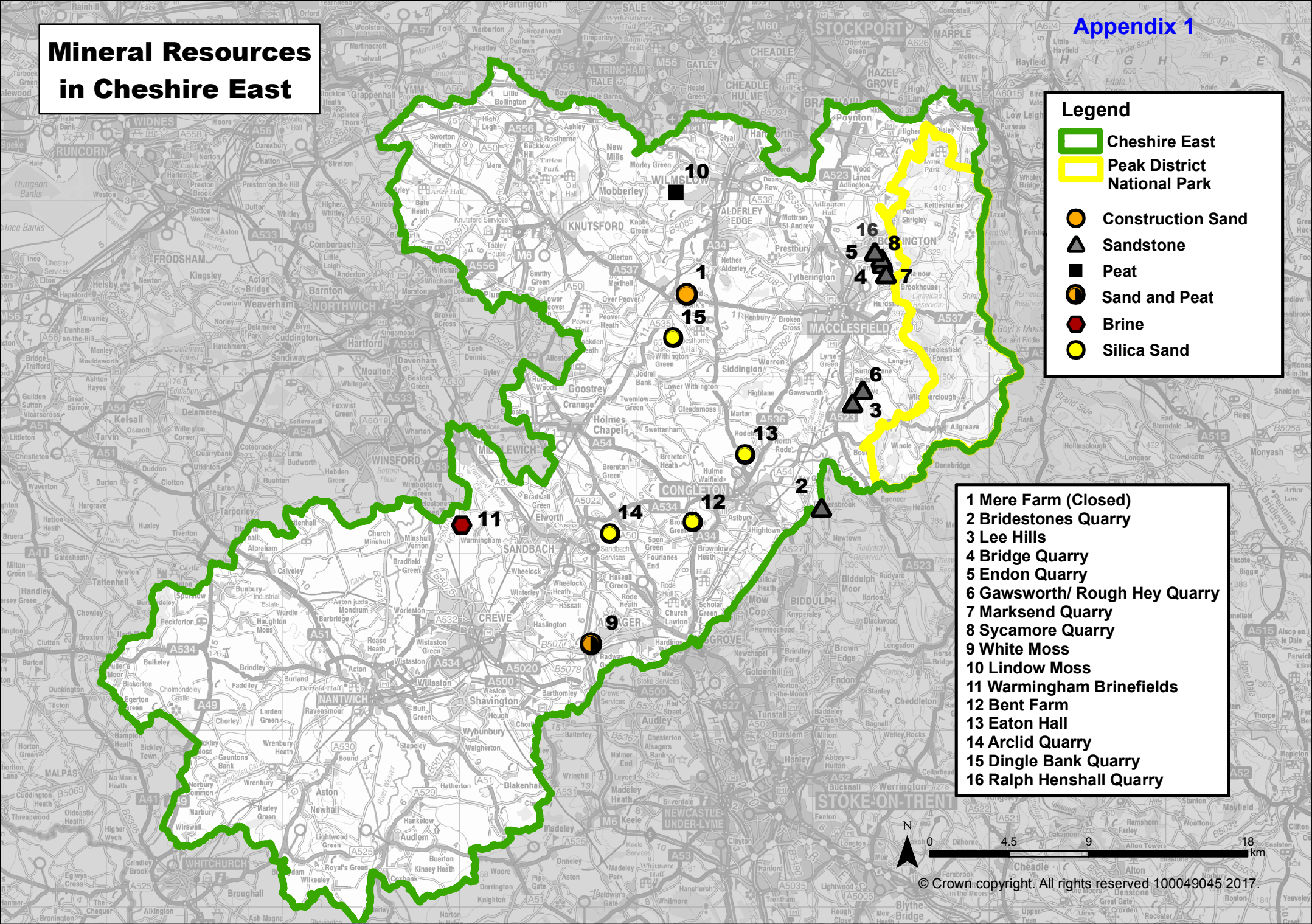
Question 14 – Are there any other issues that the MWDPD should address?

Mineral Resources in Cheshire East

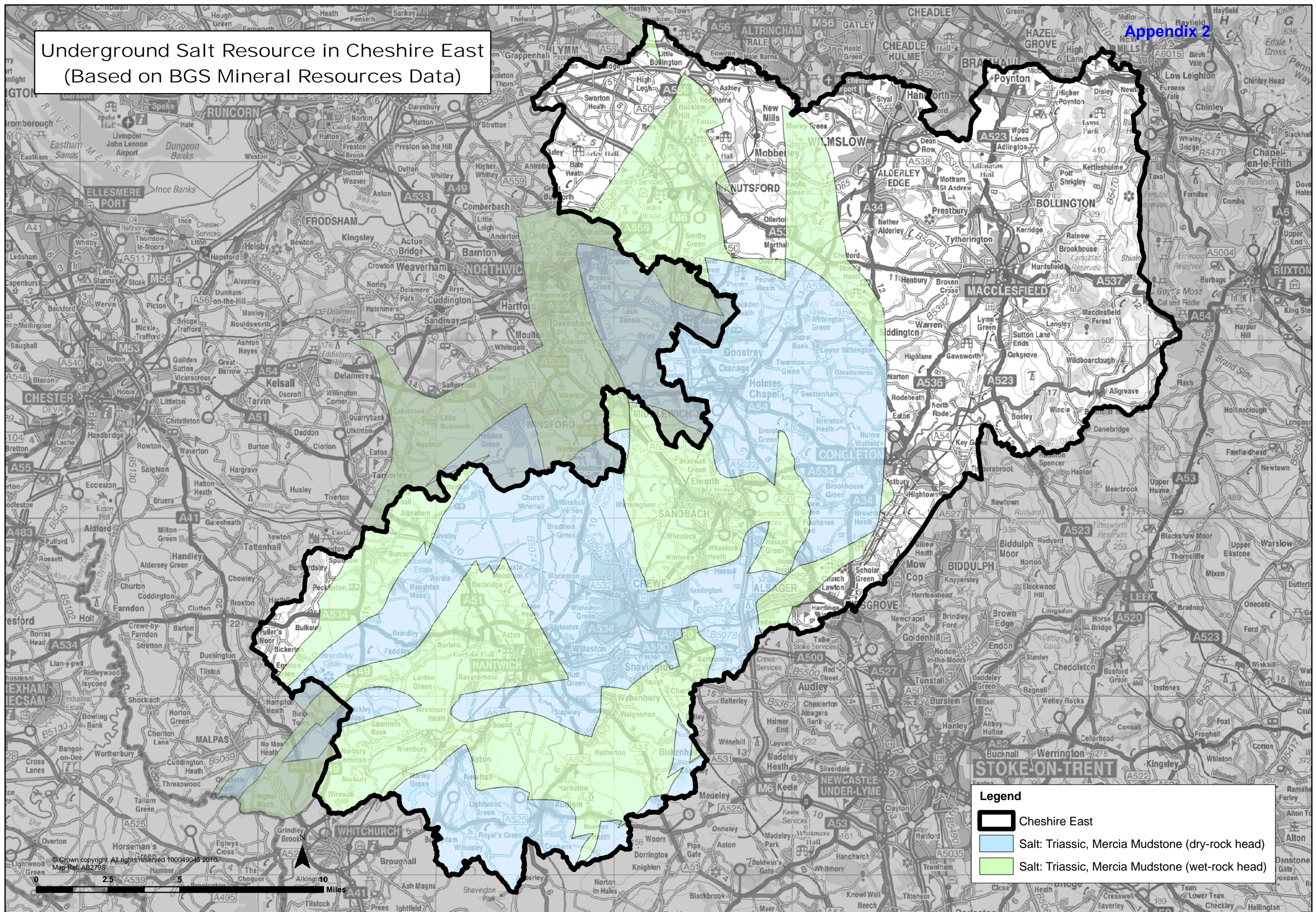
Legend

- Cheshire East
- Peak District National Park
- Construction Sand
- ▲ Sandstone
- Peat
- Sand and Peat
- Brine
- Silica Sand




- 1 Mere Farm (Closed)
- 2 Bridestones Quarry
- 3 Lee Hills
- 4 Bridge Quarry
- 5 Endon Quarry
- 6 Gawsworth/ Rough Hey Quarry
- 7 Marksend Quarry
- 8 Sycamore Quarry
- 9 White Moss
- 10 Lindow Moss
- 11 Warringham Brinefields
- 12 Bent Farm
- 13 Eaton Hall
- 14 Arclid Quarry
- 15 Dingle Bank Quarry
- 16 Ralph Henshall Quarry



Underground Salt Resource in Cheshire East
(Based on BGS Mineral Resources Data)



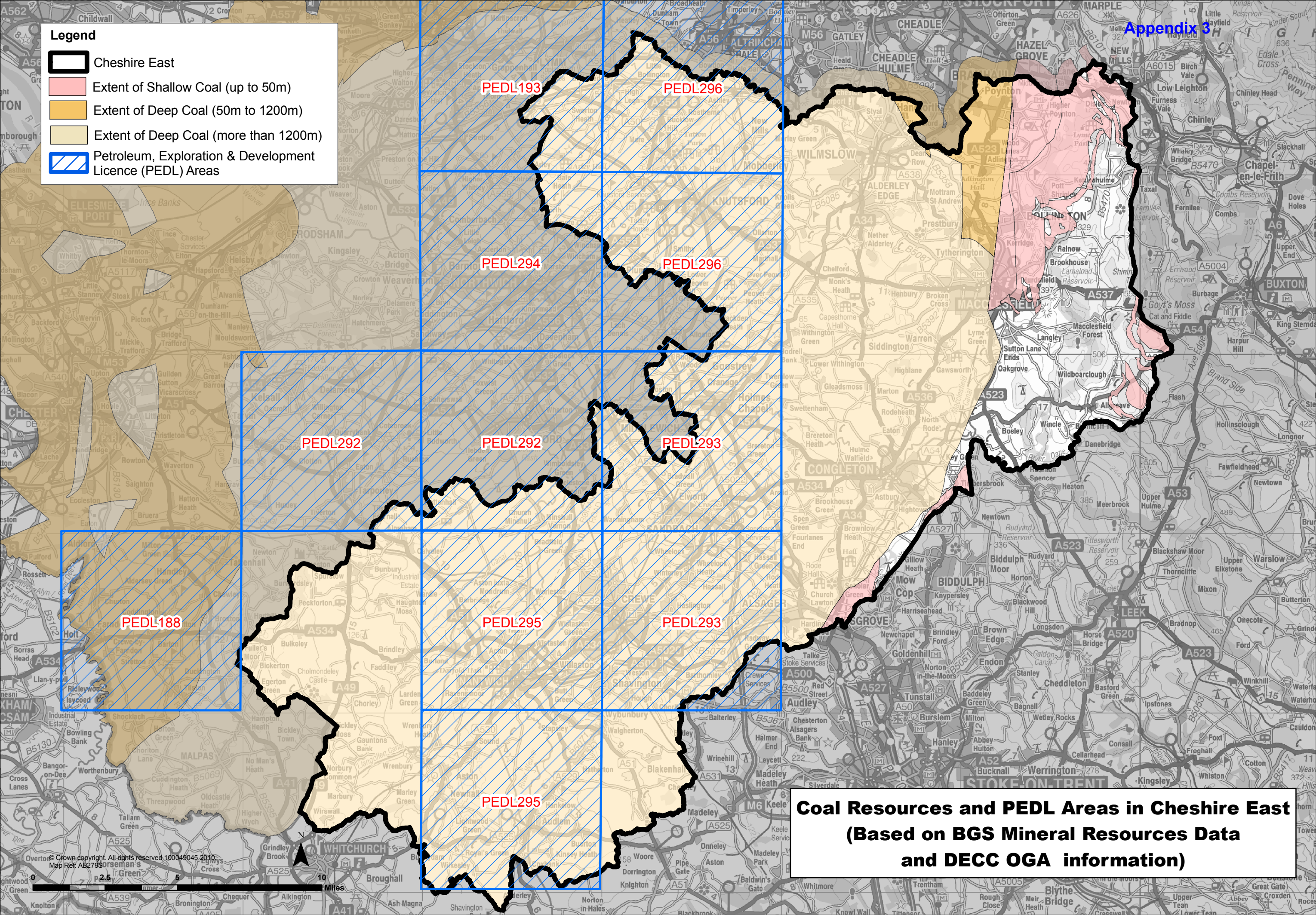
Legend

-  Cheshire East
-  Salt: Triassic, Mercia Mudstone (dry-rock head)
-  Salt: Triassic, Mercia Mudstone (wet-rock head)

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Map Ref: AB279S

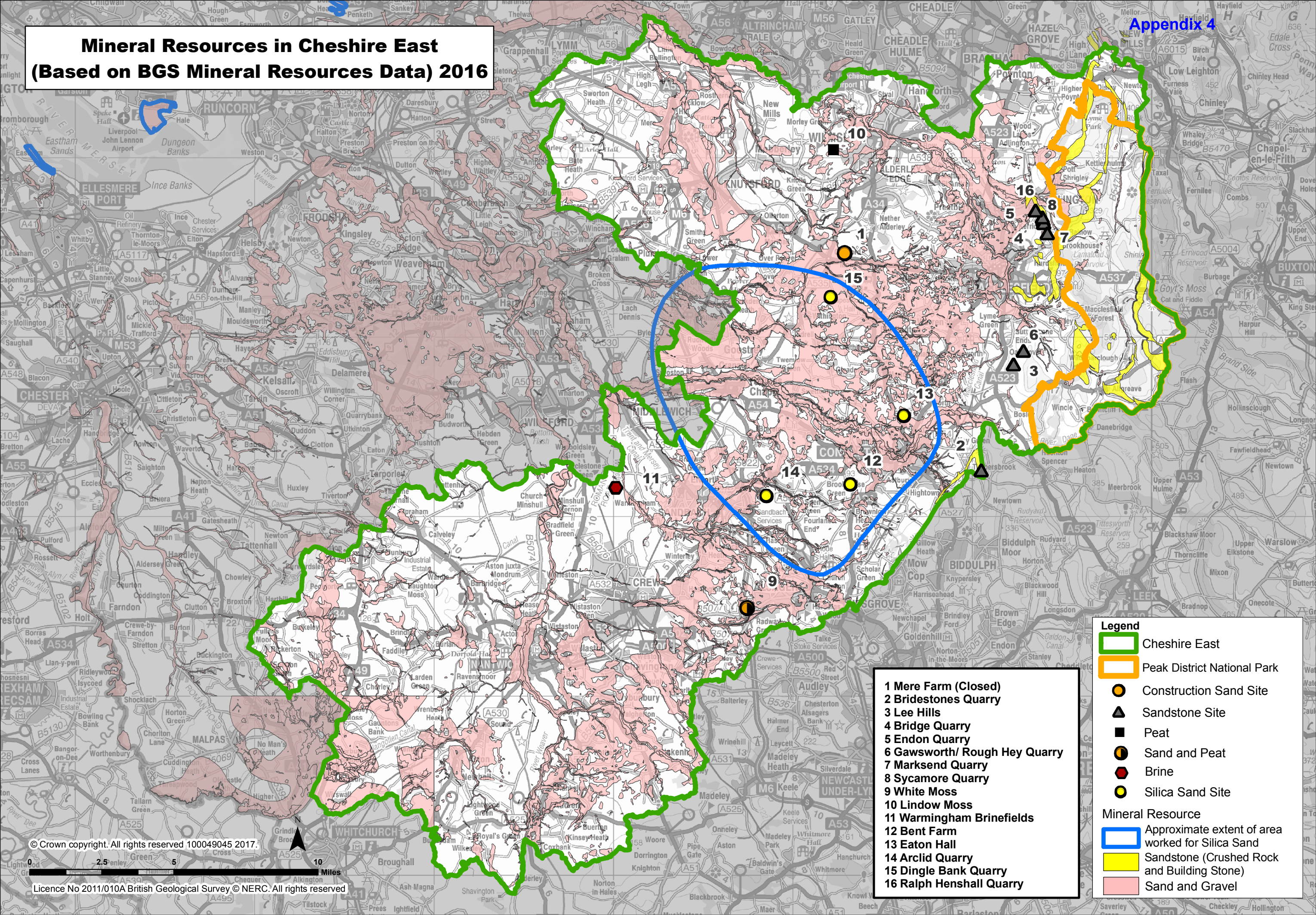
Legend

- Cheshire East
- Extent of Shallow Coal (up to 50m)
- Extent of Deep Coal (50m to 1200m)
- Extent of Deep Coal (more than 1200m)
- Petroleum, Exploration & Development Licence (PEDL) Areas



**Coal Resources and PEDL Areas in Cheshire East
(Based on BGS Mineral Resources Data
and DECC OGA information)**

Mineral Resources in Cheshire East (Based on BGS Mineral Resources Data) 2016



Legend

- Cheshire East
- Peak District National Park
- Construction Sand Site
- ▲ Sandstone Site
- Peat
- Sand and Peat
- Brine
- Silica Sand Site

Mineral Resource

- Approximate extent of area worked for Silica Sand
- Sandstone (Crushed Rock and Building Stone)
- Sand and Gravel

- 1 Mere Farm (Closed)
- 2 Bridstones Quarry
- 3 Lee Hills
- 4 Bridge Quarry
- 5 Endon Quarry
- 6 Gawsworth/ Rough Hey Quarry
- 7 Marksend Quarry
- 8 Sycamore Quarry
- 9 White Moss
- 10 Lindow Moss
- 11 Warmingham Brinefields
- 12 Bent Farm
- 13 Eaton Hall
- 14 Arclid Quarry
- 15 Dingle Bank Quarry
- 16 Ralph Henshall Quarry

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2.5 5 10 Miles

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Appendix 5 – Types of Waste Management Facilities

Facility Type	Process Details	Potential Impacts	Typical Site Area	Typical Throughput (approximate)
Composting (open windrow)	Open air facility where green waste is shredded and formed into open air windrows (elongated piles). These are then actively aerated (active composting stage) by mechanical turning or by forcing air into the piles using fans, until the oxygen demand of the process can be met through the natural diffusion of fresh air into the pile known as the curing or maturation stage. When adequate decomposition (stabilisation) has been achieved the material can be refined into final composted products.	Odour, Water resources, Noise, Traffic	2-3 ha	25,000 tonnes per year
Composting (in-vessel)	Built facility involving the enclosed composting of green waste such as in containers, silos, agitated bays, tunnels, and enclosed halls. In-vessel systems typically involve the forced aeration of the waste and offer sufficient control that the air can be captured and managed to reduce potential nuisance such as odour. The process allows a higher degree of process control than is possible with windrow composting.	Visual, traffic	1-2 ha	25,000 tonnes per year
Anaerobic Digestion	Built facility that enables the anaerobic digestion of waste resulting in the generation of biogas, which is rich in methane and can be used to generate heat and/or electricity; fibre, (or digestate), which is nutrient rich and can potentially	Odour, Visual (centralised), Noise, Traffic	0.15 ha (small scale) 0.6 ha (centralised)	5,000 tonnes per year (small scale) 40,000 tonnes per year (centralised)

	be used as a soil conditioner; and liquor; which can potentially be used as a liquid fertiliser. Plants can vary in scale from smaller local/on farm facilities to larger centralised facilities which may co-digest sources separated municipal wastes with other wastes, such as agricultural residues, sewage sludge and industrial organic wastes.			
Materials Recycling Facility (MRF)	Built facility where dry recyclates are sent to be sorted, separated, compacted and then stored before being sent on to specialist re-processors. Processing operations can take place in a range of buildings and at different locations depending on local circumstances and process configuration.	Noise, Traffic, Litter, Visual	1-2 ha	50,000 tonnes per year (large scale)
Mechanical Biological Treatment (MBT)	Built facility accommodating a hybrid/integrated process that uses both mechanical and biological techniques to treat residual waste. Process often involves production of a refuse derived fuel (RDF). Operations can take place in a range of buildings and at different locations depending on local circumstances and process configuration.	Litter, Odour, Noise, Traffic, Visual	<1-2 ha	50,000 tonnes per year
Advanced Thermal Treatment	Built facility accommodating technology for treatment of waste at high temperatures to induce a chemical reaction – typically using pyrolysis and gasification techniques. Process produces a solid residue and syngas which can be burned to produce heat and power. Processing operations can	Air quality, Noise, Traffic, Visual	1-2 ha	50,000 tonnes per year

	take place in a range of buildings and locations.			
Thermal Treatment (Energy from Waste)	Built facility accommodating technology designed to burn waste as efficiently as possible, usually involving energy recovery. Waste is burnt under controlled conditions and at high temperatures. Heat released from the combustion of this waste is recovered and used to generate electricity and/or to provide steam or hot water. Thermal treatment facilities can vary in scale from small to large depending on their throughput.	Air Quality, Off-site ecology, Noise, Traffic, Visual	<1-2ha (small Scale) 2-5 ha (large scale)	50,000 tonnes per year (small scale) 250,000 tonnes per year (large scale)
Landfill	Open air facility involving the disposal of waste mainly below ground level although can also involve 'land-raise' which refers to disposal mainly above pre-existing ground levels. Landfill sites can vary greatly in size and are often sited where an existing void is available, such as in existing mineral workings, or in areas where suitable material may be excavated either for commercial sales or to provide engineering material for the landfill itself. The location of land-raise sites is less limited and may include derelict land, extensions to existing landfills and even greenfield sites.	Traffic, Water Resources, Noise, Ecology, Visual	5-50 ha	250,000 tonnes per year (capacity)
Waste Transfer Station (WTS)	Built facility where waste is taken to be transferred from smaller vehicles to be bulked up or compacted and loaded onto large vehicles for onward transit. Usually consist of a large building where vehicles deliver waste either onto the floor, into	Noise, Traffic, Visual, Odour, Litter	0.7 ha	120,000 tonnes per year.

	bays, or into compaction units. Can also be located in association with other waste management such as MRFs.			
Aggregate Recycling and Reprocessing	Facility where construction and demolition waste is recycled typically involving the crushing and screening processes to produce a recycled aggregate product. Facilities can be based on construction sites, in which case they are temporary in nature and location will depend on where the development is taking place, or a fixed location.	Noise, Traffic, Visual	1-2 ha	50,000 -150,000 tonnes per year.