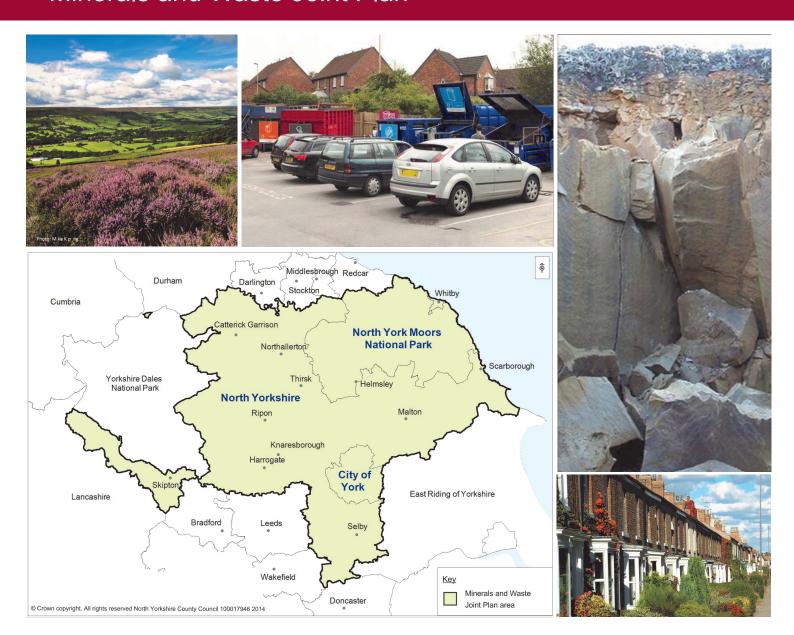






# Minerals and Waste Joint Plan



# **Waste Topic Papers**

February 2014

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### Topic Paper – Local Authority Collected Waste

# What is Local Authority Collected Waste?

Local Authority Collected Waste (LACW) has been defined by the Department for Food and Rural Affairs (Defra) to include all waste collected by the local authority, including household waste, business waste which is similar in nature and composition and non-municipal fractions such as construction and demolition waste<sup>1</sup>.

LACW is collected by local authorities and in the case of the Joint Plan area this is the 7 District/Borough Councils, City of York Council and Redcar and Cleveland Borough Council. LACW can be collected through regular waste collection services, through the provision of bottle, paper and can banks i.e. bring sites, and Household Waste Recycling Centres (HWRCs). LACW also includes other elements such as litter and street sweepings, bulky household wastes and flytipped materials. Although LACW is collected by the District/Borough Councils and the City of York Council, it is the latter authority, together with North Yorkshire County Council, that have responsibility to ensure that provision is made for the management of LACW arising in the Plan area<sup>2</sup>.

### Where does it arise?

LACW arises widely across the Plan area but as waste from households is an important component there is a strong association with the distribution of population, with the more urbanised parts of the Plan area being key sources of arisings of LACW.

Although the Joint Plan area does not include the Yorkshire Dales National Park, North Yorkshire County Council is the Waste Disposal Authority responsible for management of the LACW collected by the District/Borough Councils within the majority of the Park<sup>3</sup> and this situation is expected to continue as there is no significant waste management infrastructure within the Yorkshire Dales National Park area.

### Where and how is it managed?

LACW is managed through a network of Household facilities including Waste Recycling Centres (HWRCs), transfer facilities, recycling and treatment facilities and landfill sites that are located both within and outside the Joint Plan area. HWRCs form an important part of the network, with 22 sites currently distributed across the area (see map below). Other significant sites that currently manage LACW arising within the Joint Plan area include: Seamer Carr Integrated Waste Management Facility, near Scarborough; Harewood Whin Integrated Waste Management Facility, near York and Allerton Park Landfill. A number of smaller transfer, composting and recycling the facilities also play а role in management of LACW.

LACW is also managed at waste facilities outside of the Joint Plan area. Approximately 58% of LACW recyclate managed by North Yorkshire County Council is exported outside the County or is managed through facilities that are

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<sup>&</sup>lt;sup>1</sup> Defra, www.gov.uk/local-authority-collected-waste-definition-of-terms (23 Sept 2011)

<sup>&</sup>lt;sup>2</sup> A small part of the North York Moors National Park area lies within Redcar and Cleveland Borough Council area, with that authority having statutory responsibility for the collection and management of waste

<sup>&</sup>lt;sup>3</sup> With the exception of that part of the National Park which falls within Cumbria

exempt from Environment Agency permitting.<sup>4</sup>

The map below illustrates the distribution of HWRCs throughout the Joint Plan area.

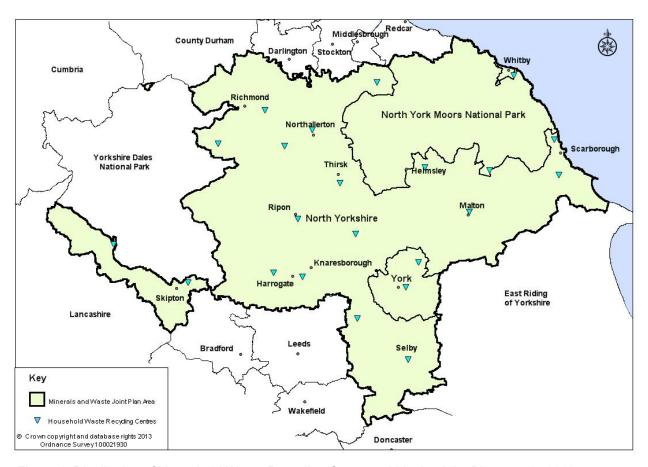


Figure 1: Distribution of Household Waste Recycling Centres within the Joint Plan area in 2013

### **Key Policy Influences**

National waste planning policy is informed by European waste policy such as the Waste Framework Directive (2008) which introduced the concept of the Waste Hierarchy. This places five categories of waste management in their order of priority: Prevention, Preparing for Re-Use, Recycling, Other recovery, and Disposal. The Landfill Directive (1999) is a key driving factor behind the diversion of

management, including ensuring the Local

waste from landfill and aims to reduce the negative effects of landfilling on the environment and human health. This Directive sets a 2020 target to reduce the total amount of biodegradable municipal waste sent to landfill by 35%, using 1995 as a baseline year.

The national planning policy context for the management of LACW is set out in Planning Policy Statement 10: Planning for Sustainable Waste Management (2011). This document sets out a number of key planning objectives for waste

<sup>&</sup>lt;sup>4</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

Plan reflects the concerns and interests of communities, the needs of waste collection authorities, waste disposal and business. The Government intends to update PPS10 with a National Waste Planning Policy.

More recent national planning policy is provided by the National Planning Policy Framework, published in March 2012, provides which а broader policy framework for planning. Although this document contains no specific waste planning policies it does introduce a 'presumption in favour of sustainable development' which requires local planning authorities to positively seek opportunities to meet the development needs of their area, which should be objectively assessed, unless the adverse impacts of doing so would significantly and demonstrably outweigh the benefits.

There are also two waste specific policy documents which are of importance; the 2011 Government Review of Waste Policy in England, which includes a target to recycle 50% of waste from households by 2020 and Waste Strategy 2007, both of which recognise LACW as one of the key waste streams.

At a local level the York and North Yorkshire *Municipal Waste Management Strategy (2006)* (MWMS), which covers the majority of the Joint Plan area and the adjacent Yorkshire Dales National Park, contains a number of targets which are important to planning for the management of LACW, including:

- Recycle or compost 45% of household waste by 2013
- Recycle or compost 50% of household waste by 2020
- Divert 75% of municipal waste from landfill by 2013.

It is noted in PPS10 that waste policies in a Local Plan should inform and be informed by the MWMS.

### **Key Data and discussion**

The table below presents the total LACW arisings in the Joint Plan area over recent years and the main methods by which it has been managed.

	Amount of LACW Arisings (tonnes)		
Year	Landfill	Recycled / composted	Total waste arisings
2008/09	279,202	196,757	476,491
2009/10	265,633	190,840	458,405
2010/11	255,713	189,214	445,824
2011/12	245,154	190,724	436,593
2012/13	247,527	177,423	424,949

Table 1: LACW arising and management type in the Joint Plan area, 2008/09 – 2012/13<sup>5</sup>

The table above demonstrates that there was a reduction in total arisings of LACW over the period 2008/09 to 2012/13, with a fall also in the amount landfilled. Against the fall in arisings, there has been an increase in the proportion of LACW recycled and composted. Household waste accounted for approximately 90% of LACW arisings in 2012/13 and is subject to specific national and local targets for its management. The table below sets out the main management methods for household waste arising within North Yorkshire and City of York.

Waste Management Method	2012/13
Recycled	24.4%
Composted	20.8%
Recycled, Composted &	45.7%
Re-used	10.7 70
Landfill	54.3%

Table 2: Management Method of Household Waste arising in the Joint Plan area 2012/13<sup>6</sup>

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<sup>&</sup>lt;sup>5</sup> York and North Yorkshire Waste Partnership, 2013

York and North Yorkshire Waste Partnership have utilised available data to provide a forecast projection of Local Authority Municipal Solid Waste projections for the Joint Plan area up to and beyond the Joint Plan period. These projections, which utilise a 2008/09 base line, were generated to inform procurement of a new contract for the management of residual LACW arising within the York and North Yorkshire area. The projections predict an increase of over 125,000 tonnes in arisings over the period from 2012/13 to 2039/40. This is an increase of 22%. Over the period to 2029/30 (i.e. around the end date for the Joint Plan) the projected increase is about 92,000 tonnes. LACW projections are based on the assumption that increases will be driven by the growth in the number of households within York and North Yorkshire.

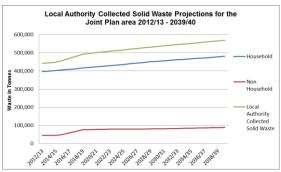


Figure 2: Local Authority Collected Solid Waste projections for the Joint Plan area 2012/13 – 2039/40<sup>7</sup>

These projections suggest that, over the Joint Plan period, it is likely that LACW arisings will rise considerably.

The need to ensure further increases in rates of recycling and composting, and further diversion of residual waste from landfill, in order to meet current targets, is a key issue facing the area. A particular

issue is the provision of capacity for the management of residual LACW (i.e. waste which remains after re-use, recycling and composting). Currently landfill remains the principle means of dealing with residual waste, but delivery of landfill diversion targets and policy requirements to move management of waste up the waste hierarchy mean that alternative means of dealing with residual LACW need to be delivered.

In early 2013 North Yorkshire County Council granted planning permission for Recovery Allerton Waste (AWRP) which, if it becomes operational, would provide sufficient capacity manage residual LACW arising within the North Yorkshire and York area and would be the main means of delivering current increased recycling targets for diversion of LACW away from landfill. The facility would be located at Allerton Park Quarry, adjacent to the existing Allerton Park landfill site, in Harrogate Borough. If the AWRP was not developed alternative arrangements would be required for the residual waste generated within York and North Yorkshire.

Current contracts for the disposal of LACW arising within the North Yorkshire County Council area (via landfill) end in 2015, whilst contracts for the disposal of LACW arising in City of York Council area do not end until 2022. It is likely that there will be a need for further interim contracts for management of residual LACW arising within the North Yorkshire County Council area but the nature and extent of these will be influenced by progress with the proposed AWRP facility.

There would also be a need for the development of further waste transfer station capacity for LACW, in order to provide more local facilities for the bulking and onward transport of locally collected

<sup>&</sup>lt;sup>6</sup> York and North Yorkshire Waste Partnership, 2013

<sup>&</sup>lt;sup>7</sup> York and North Yorkshire Waste Partnership, Waste Flow Model (July 2012)

LACW. Provision of new transfer station capacity at Kirkby Misperton near Malton, Burn Airfield near Selby and Harewood Whin near York are currently under consideration by the Waste Management Authority. If the AWRP facility is ultimately not developed, then additional transfer station capacity to serve LACW arising in Harrogate Borough is also likely to be required. New transfer capacity in these locations would operate alongside existing transfer capacity in the Plan area in order to provide a network of accessible facilities for the efficient management of LACW. New transfer capacity is intended to be in place by 2015 in order to coincide with the ending of current contracts for the disposal of residual LACW.

The NYCC Waste Management Authority is also considering development of a new HWRC site for the Catterick area, as a replacement for the existing site. The new facility would provide additional capacity and would be able to accept a wider range of wastes and recyclables, to help improve recycling and composting rates. proposed location of the new facility is the Gatherley Road Industrial Estate at planning **Brompton** on Swale. application was submitted in September 2013.

The research undertaken by Urban Vision and 4Resources projects waste arisings up to 2030 based upon a number of scenarios and growth assumptions, and compares these against existing waste management capacity in order to identify any potential capacity gap. For the first three years of the Joint Plan continued reliance on landfill for LACW would be required, pending development of the AWRP facility. Reliance on landfill may need to continue if AWRP, or a similar facility or several smaller capacity facilities, were not developed. In addition, if AWRP was not developed a capacity

gap for anaerobic digestion and other recovery processes of LACW would exist. However, if AWRP is developed, no specific capacity gap in LACW management facilities would exist for the Plan period, on the assumption that exports of recyclate continue as is currently the case<sup>8</sup>.

### **Consultation Responses**

Representations received in relation to the Minerals and Waste Joint Plan First consultation identified a number of issues that the Joint Plan will need to consider in LACW. relation to These include considering the export of LACW to facilities outside of the Joint Plan area, especially when facilities across authority borders may be closer to some sources of arisings than those within the area, and the continued separation of green waste from other waste in the LACW waste stream. In addition to these responses, there were also representations which both objected to and supported the incineration of household waste, and indicated the likely need for small scale facilities for the compositing of LACW green waste and recycling infrastructure.

A previous consultation exercise, carried out by North Yorkshire County Council in Summer 2011, highlighted issues such as: ensuring the Plan reflects identified current and future requirements managing LACW; encouraging waste producers to manage waste at the nearest appropriate facility; the need to place a greater emphasis upon the reinterpretation of LACW which now includes waste from commercial sources, which are similar in nature and composition; include available waste projections evidence base; consider the co-location of waste management facilities with new

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<sup>&</sup>lt;sup>8</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

developments. The consultation highlighted issues such as: consider the development of locally focussed waste management facilities which accept multiple waste streams: define opportunities where sustainable waste management facilities can contribute to environmental objectives; adhere to the 'zero waste economy' concept promoted upon waste Government; focus reduction; energy from waste to be restricted to residual waste; cooperate with adjoining authorities to avoid the risk of creating excess waste management capacity: reduce the transportation of waste; acknowledge the impact of waste facilities upon local communities; and the importance of the York and North Yorkshire MWMS.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with any new and additional information that may become available, to help the identification of suitable policy responses.

A summary of the key issues relevant to LACW that may need to be addressed in the Joint Plan are as follows:

- Plan Ensuring the provides appropriate support for the delivery of new infrastructure needed for the management of LACW, supporting further movement of **LACW** management up the waste hierarchy delivery of targets management of LACW
- Considering the need for the Plan to adopt a flexible approach to provision of infrastructure for LACW, depending on the future position with regard to delivery of the AWRP facility
- Consideration will need to be given to the locational approach to any new waste infrastructure expected to be needed, including the minimisation of impacts and maximisation of any benefits
- Consideration may need to be given to implications of any import and/or export of LACW waste across local authority boundaries

### Topic Paper – Commercial and Industrial Waste

# What is Commercial and Industrial Waste?

Commercial and Industrial (C&I) Waste can be broken down into two constituent parts. Commercial waste is classified as waste arising from the commercial sector including wholesalers, catering establishments, shops and offices (in both the public and private sectors). Industrial waste is waste arising from the industrial sector including factories and industrial Recent re-definitions of waste previously mean that more wastes, classed as C&I wastes, are being collected by local authorities along with other waste such as household waste, under the term Local Authority Collected Waste (LACW) (see separate topic paper dealing with LACW).

### Where does it arise?

C&I Waste is produced by a range of sectors which can be separated into two specific groups.

Commercial Waste Producers	Industrial Waste Producers		
	Food, Drink &     Tobacco		
Retail &     Wholesale	<ul> <li>Chemical/Non- Metallic Minerals</li> <li>Power &amp; Utilities</li> </ul>		
Public Sector	Metal     Manufacturing		
Other Services	Machinery &     Equipment		
	Textiles/Wood/     Paper Publishing		

Table 1: Commercial and Industrial Waste Producers

By definition, C&I waste arises in association with business and industrial

activity. The distribution of arisings of C&I waste is likely to be relatively wide within the Joint Plan area, although with the exception of some forms of industrial waste such as from the Power and Utilities sector, it is more likely to arise in association with more developed parts of the Joint Plan area.

Although the Joint Plan area does not include the Yorkshire Dales National Park, it is likely that only a relatively small amount of C&I waste arises in the Park and that a significant proportion is managed at waste facilities within the Joint Plan area. This situation is expected to continue as a result of the absence of waste management infrastructure in the Yorkshire Dales National Park.

### Where and how is it managed?

These sectors produce a wide range of types of waste and therefore a wide range of waste management methods are utilised by producers and managers of C&I The main methods used to manage C&I waste arising within the Joint Plan area include: landfill, e.g. Gale Common Ash Disposal site which receives ash from Eggborough power station; transfer stations such as Whitemoor Business Park Transfer Station; and recycling facilities such as metal recycling facilities. There are currently significant treatment facilities in the area for residual C&I waste (i.e. waste remaining after other forms of waste management such as recycling and composting have taken place). In 2013 a planning application was submitted to NYCC for development of an energy recovery facility on land at Kellingley Colliery, near Knottingley. The facility would have a capacity of 280,000 tonnes per annum and is aimed at processing C&I waste, although the applicant has also indicated the facility could process municipal waste. The proposed Allerton Waste Recovery Park facility (see LACW topic paper) would, if developed, also have potential capacity to manage some residual C&I waste, particularly during the first part of the Plan period.

The majority of C&I waste is collected and managed privately and there is currently limited data on total C&I waste arisings at a sub-regional level. However, the figures below provide a summary of available information on the waste management methods for C&I waste (in addition to household waste, which is included along with C&I waste in data collated by the Environment Agency) deposited in North Yorkshire.

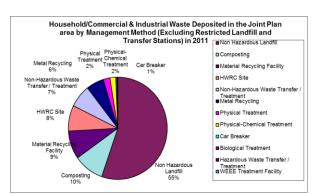


Figure 1: Household and C&I waste deposits in the Joint Plan area by management method (excluding waste deposited at Restricted User Landfill sites (Power station waste) and waste passing through Transfer Stations), in 2011<sup>1</sup>

### **Key Policy Influences**

National waste planning policy is informed by European waste policy such as the Waste Framework Directive (2008), which introduced the concept of the Waste Hierarchy where waste is first prevented then prepared for re-use, recycled, recovered in other ways and then only as a last resort, disposed of. Also relevant is the Landfill Directive (1999) which aims to

reduce the negative effects of landfilling on the environment and human health.

The national planning policy context for the management of C&I waste is set out in *Planning Policy Statement 10: Planning for Sustainable Waste Management (2011).* This document identifies C&I waste as a waste stream which should be given specific regard when considering the need for waste management in a Plan area. The Government intends to update PPS10 with a National Waste Planning Policy.

This key policy document is supported by the *National Planning Policy Framework*, published in March 2012, which provides a broader policy framework for planning. Although this document contains no specific waste planning policies it does introduce a *'presumption in favour of sustainable development'* which compels local planning authorities to positively seek opportunities to meet the development needs of their area, which should be objectively assessed.

There are also two waste specific policy documents which are of particular importance: the 2011 Government Review of Waste Policy in England and Waste Strategy 2007. The former places a high importance improving upon the management of waste from the C&I It states 'the focus to date in England has been on improving recycling As well as services to householders. focussing more on waste prevention, we also need to have a similar focus on recycling services to businesses. We are taking steps to improve the waste and recycling services that business. particularly SMEs, can expect from either their local authority or a private waste management Further company. improvements in the management of

Minerals and Waste Joint Plan

<sup>&</sup>lt;sup>1</sup> Environment Agency, 2011 Waste Data Interrogator, 2013

business waste will be a critical part of the move towards a zero waste economy.<sup>2</sup>.

### **Key Data and discussion**

The research undertaken by Urban Vision and 4Resources has produced estimates of C&I waste arisings within the Joint Plan area based upon two sources of baseline information, the results of which are shown below.

Waste Stream	Defra National C&I Survey 2009/10	North West Region C&I Survey 2009
Commercial Waste	344,717	455,622
Industrial Waste	571,491	289,559
Commercial & Industrial Waste	916,208	745,179

Table 1: C&I Waste Arisings in the Joint Plan area. Excludes Power & Utilities Waste<sup>3</sup>

The research also projects C&I arisings up to 2030 based upon a number of scenarios and growth assumptions, and compares these against existing waste management facilities in order to calculate a potential capacity gap. This has resulted in the identification of substantial gap in recycling capacity for C&I waste arising within the Joint Plan area which is currently met by export from the area. The research also suggests that there could be an increasing, albeit small, capacity gap for the recovery of energy from suitable C&I waste under a number of the scenarios tested. In addition to this, the research identifies a small potential capacity gap for the landfilling hazardous C&I waste. although amount would not justify specific provision

### **Consultation Responses**

Representations received in relation to the Minerals and Waste Joint Plan First consultation identified a number of issues that the Joint Plan will need to consider in relation to C&I waste. These include planning for the management commercial waste, including food waste, at localised anaerobic digestion and mechanical/biological treatment facilities, together with an increased focus upon waste reduction, re-use, recycling and commercial composting of Responses also identified that potential waste facilities should be sited in close proximity to industrial and population centres where a large proportion of C&I waste is produced.

A previous consultation exercise, carried out by North Yorkshire County Council in Summer 2011, highlighted issues such as: the impact of the recession upon C&I activity and therefore waste arisings; the need to ensure the C&I sector is attempting to increase recycling and waste minimisation; the facilitation of commercial recycling schemes; the need to ensure that industrial and household waste is managed separately; ensuring the disposal of C&I waste does not detrimentally impact upon visual amenity and landscape; include any available waste projections in the evidence base; consider the co-location of waste management facilities with new developments. The consultation also highlighted issues such as: consider the

in the Plan area. A potential gap in the provision of anaerobic digestion capacity for C&I waste has also been identified. However, this gap may be filled by a proposed facility which is currently due for consideration by City of York Council<sup>4</sup>.

<sup>&</sup>lt;sup>2</sup> Defra, Government Review of Waste Policy in England

<sup>2011,</sup> June 2011
<sup>3</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

<sup>&</sup>lt;sup>4</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

development of locally focussed waste management facilities which accept multiple waste streams; define opportunities where sustainable waste management facilities can contribute to environmental objectives; adhere to the 'zero waste economy' concept promoted Government; focus upon reduction; energy from waste to be restricted to residual waste; cooperate with adjoining authorities to avoid the risk of creating excess waste management capacity; reduce the transportation of waste; acknowledge the impact of waste facilities upon local communities; and the need to place a greater emphasis upon the reinterpretation of LACW which now includes waste from commercial sources. similar which are in nature composition. In addition, NYCC undertook a workshop where waste planning issues were discussed, these included; focussing upon recycling C&I waste; and, utilising C&I waste as a resource.

### **Summary of Key Points**

The management of C&I waste, and how this is approached in the context of the Joint Plan area, gives rise to a range of issues:

- Power Station waste ash is a key element of C&I waste and the management of this will need to be planned for in cooperation with industry. However it tends to be managed at private facilities and does not compete for waste management capacity with other forms of waste. For the power stations, it is expected that current management arrangements are likely to continue.
- There is a range of infrastructure in the Plan area which currently deals with C&I waste, however, a capacity gap has been identified in a number or areas, including recycling facilities, energy recovery, hazardous landfill and potentially Anaerobic Digestion.

- The recession is likely to have had an impact upon the recent level of C&I activity, and C&I waste arisings, but this may not be fully representative of future trends of C&I waste arisings.
- Consideration will also need to be given to the scale and location of any new infrastructure for C&I waste and account will need to be taken of the extent to which C&I waste is imported or exported across the Plan area boundary.
- Where possible, new infrastructure for management of C&I waste will need to help move management of C&I waste up the waste hierarchy away from landfill.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with any new and additional information that may become available, to help the identification of suitable policy responses.

A summary of the key issues relevant to C&I waste that may need to be addressed in the Joint Plan are as follows.

- Ensuring the Plan provides the waste management capacity to meet expected future arisings of C&I waste over the plan period
- Encouraging the management of C&I waste further up the waste hierarchy and diverting away from landfill
- Establishing a locational approach for the distribution of any new waste management capacity
- Considering what imports/exports of C&I waste to/from other Waste Planning Authorities are to be expected and how should this be planned for

 The need to ensure that any adverse impacts on environment, local communities and businesses arising from the management of C&I waste are addressed and minimised and any positive opportunities maximised

### Topic Paper – Construction, Demolition and Excavation Waste

# What is Construction, Demolition and Excavation waste?

Construction, Demolition and Excavation (CD&E) waste arises from activities such as construction, refurbishment, demolition or excavation. It includes items like plasterboard, bricks, soils, minerals, glass, metals and tiles. It is the largest waste sector in England. Mining and quarrying waste is very similar in nature to some elements of CD&E waste.

### Where does it arise?

There is no information identifying where in the Plan area CD&E waste arises but it is logical that greater amounts will arise in and around urban areas and/or at the site of large regeneration or construction projects.

### **Key Policy Influences**

The 2008 Waste Directive sets a target to recover 70% of construction and demolition waste by 2020. In England in 2008 approximately 85% of CD&E waste was recovered or re-used without the need for further processing and therefore no further measures are proposed by Government to meet the target.

The Government set a target in 2008 to reduce the amount of CD&E waste sent to landfill by 50% by 2012 (compared to 2008 levels). The 2011 Government Review of Waste Policy suggests that the target will have been met.

The national 2011 Review of Waste Policy aims to focus on reducing waste at the design stages of construction projects. The Government seeks to expand capacity for treating CD&E waste including through improved information on waste supply and composition and developing

further supply chains for re-using such wastes.

Although the National Planning Policy Framework does not contain specific policies on waste, it does encourage the use of secondary and recycled materials and minerals. The Government intends to update Planning Policy Statement 10: Planning for Sustainable Waste Management with a National Waste Planning Policy.

### **Key Data and discussion**

The research undertaken by Urban Vision and 4Resources has produced estimates of 2011 CD&E waste arisings within the North Yorkshire Sub-region, the results of which are shown below.

Waste Stream	Tonnes
Construction & Demolition Waste	215,559
Excavation Waste	553,205
Total CD&E	768,765

Table 1: CD&E Waste Arisings in the North Yorkshire Sub-region (Joint Plan area plus Yorkshire Dales National Park)<sup>1</sup>

The data above excludes waste deposited at 'registered exemptions', which includes utilising the waste for reclamation purposes, due to the lack of data from these sites. Therefore, the CD&E arisings provided must be assumed to be a minimum figure. It has been estimated that over 2.7 million tonnes of CD&E waste was generated in North Yorkshire in 2005 representing 26% of the estimated CD&E waste arisings in the Yorkshire and Humber region, which suggests a large

<sup>&</sup>lt;sup>1</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

amount of waste is deposited at 'registered exemption' sites.

However, it is likely that the amount of CD&E waste generated in the Plan area has reduced since 2005 due to the economic down turn. In England the total amount of CD&E waste generated declined from around 110mt in 2005 to around 87mt in 2008, a fall of almost 21%.

The Urban Vision and 4Resources research also projects CD&E arisings up to 2030 based upon a number of scenarios and growth assumptions, and compares these against existing waste management facilities in order to calculate This has a potential capacity gap. resulted in the identification of a predicted significant shortfall in capacity for facilities to recycle CD&E waste, primarily the construction and demolition element, by 2030. In addition to this, a potentially significant capacity gap has identified for landfill of CD&E waste, particularly over the latter part of the Plan period.2

In 2011, over 480,000 tonnes of CD&E waste, primarily the excavation element, was sent to landfill in the Joint Plan area, around 62% of total CD&E waste deposits<sup>3</sup>.

In 2011, 1,012,761 tonnes of minerals and quarry waste was deposited in North Yorkshire, the large majority of which was from Kellingley Colliery and disposed of at the Womersley Quarry spoil disposal site. This facility has relatively limited capacity remaining, although an application for provision of some further capacity at the site is currently under consideration.

A specific issue is the impact of prolonging landfilling activities on specific sites by virtue of maximising recycling of CD&E waste. This can occur where there is a need to restore a former mineral site, which is most commonly undertaken by the importation or re-use of CD&E waste material, but due to the policy requirement of diverting waste away from landfill and pushing the management of CD&E waste up the waste hierarchy, this encourages high rates of recycling of CD&E waste prior to landfilling. This can have a potential impact upon local communities where mineral sites have an extended restoration phase.

### **Consultation Responses**

There were no responses relating specifically to CD&E waste in the previous NYCC consultations with the exception of ensuring that it is considered.

At Regulation 18 stage there were only a few responses received in relation to CD&E waste. Responses generally suggest there should be a reduction in the amount of CD&E waste produced. A previous workshop consultation event, undertaken by NYCC in 2011, highlighted the issue of ensuring the co-location of CD&E waste management facilities with the producers of this waste stream.

### **Summary of Key Points**

The information in this topic paper is designed to provide an introduction to the key information relating to CD&E waste within the Joint Plan area. Further detailed information is available in the current evidence base for the Joint Plan available on our website

www.northyorks.gov.uk/mwevidence

<sup>&</sup>lt;sup>2</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

<sup>&</sup>lt;sup>3</sup> Environment Agency Waste Data Interrogator 2011 – EWC category

The key information can be summarised as follows:

- Available data on arisings and management of CD&E waste suggests that significant arisings occur
- Around two thirds of registered CD&E waste deposits within the Plan area are sent to landfill. This suggests that there may be some potential to support the movement of some CD&E waste further up the waste hierarchy
- However, other data sources suggests that a significant proportion of CD&E waste is deposited at 'registered exemptions' such as being reused on site and does not require provision of offsite capacity for its management
- Capacity gaps for the Joint Plan period have been identified for the recycling and landfill of CD&E waste.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to help begin to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with any new and additional information that may become available, to help in the identification of suitable policy responses.

A summary of the key issues which have been identified from the information above is as follows.

- Promoting increased re-use of CD&E waste on site
- Making provision to meet the identified capacity gap for the management of CD&E waste
- Identifying alternatives to landfill for managing CD&E waste
- Considering future requirements for disposal of spoil from Kellingley Colliery
- Considering the locational approach to CD&E waste management facilities
- Considering the impact of prolonging landfilling activities on specific sites by virtue of maximising recycling of CD&E waste

# Topic Paper – Agricultural Waste

### What is agricultural waste?

The definition of agriculture includes a range of activities including horticulture, fruit growing, dairy farming, livestock breeding, seed growing, grazing land and nurseries. Agricultural waste includes a variety of substances such as pesticide containers, oil and silage wrap, as well as slurry.

### Where does it arise?

Agricultural waste arises through farming activities. As much of the Plan area is rural it is likely to generate relatively large amounts of agricultural waste.

### **Key Policy Influences**

The Government has introduced a number of regulations which control how agricultural wastes are stored and disposed of.

National planning policy for waste is contained in *Planning Policy Statement* 10, pending the publication of new national waste policy. PPS10 states that waste planning authorities should give priority to the re-use of previously developed land and redundant agricultural and forestry buildings and their curtilages. The use of redundant agricultural and forestry buildings may be particularly relevant when the proposal is linked to the management of agricultural waste. The Government intends to update PPS10 with a new National Waste Planning Policy.

The 2011 Review of Waste Policy in England promotes waste controls in the agricultural sector through the Whole Farm Approach. The Government is also promoting increased use of anaerobic digestion – a process usually involving the use of agricultural waste to create energy.

### **Key Data and Discussion**

There is limited definitive data on the actual amount of agricultural waste arising in the Plan area. Whilst on a national scale agricultural waste accounts for less than 1% of all wastes, it is likely that this percentage will be greater in the Plan area, which is largely rural. A total of 8,018 tonnes of agricultural and food waste was recorded as managed in North Yorkshire and York in 2011<sup>1</sup>. This is likely to be a small fraction of the total amount of agricultural waste produced as most is disposed of or re-used on the farm.

There are a total of 4,308<sup>2</sup> agricultural exemption licenses in North Yorkshire and York<sup>3</sup>. These are issued bν Environment Agency allowing waste to be disposed of on the farm. As well as suggesting that most agricultural waste is handled on site it also confirms that not insignificant quantities of agricultural waste is being generated. The number of licenses varies across the Plan area with Hambleton. Harrogate and Rvedale having the highest number of licenses and lower numbers in Selby, Scarborough and York.

Most agricultural waste is re-used or disposed of on the farm in a number of ways such as spreading on the land, composting or processing for production of biodiesel. Many of these activities are not under the control of the planning system. Some agricultural waste generated in the Plan area is composted, either on-site or at more commercially-based composting facilities (see Waste Recovery topic paper) which may combine agricultural waste with other waste streams.

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<sup>&</sup>lt;sup>1</sup> Environment Agency Waste Data Interrogator 2011

<sup>&</sup>lt;sup>2</sup> Environment Agency public register, June 2013

<sup>&</sup>lt;sup>3</sup> North Yorkshire county including both National Parks, plus York

Anaerobic digestion facilities can be fairly sizeable and generate levels of activity, particularly those associated with lorry movements. To date, three anaerobic digestion facilities have been granted planning permission in the Joint Plan area, two of which have yet to be built (see Waste Recovery topic paper).

The research undertaken by Urban Vision and 4Resources has produced estimates of the number of farm holdings within the Joint Plan area, these are presented below.

Waste Planning Authority	Number of Farm Holdings
North Yorkshire	3,458
North York Moors National Park	1,673
City of York	248
Total Joint Plan area	5,379

Table 1: Number of Farm Holdings within the Joint Plan area<sup>4</sup>

The Urban Vision and 4Resources research has also estimated that around 4.58 million tonnes of agricultural waste is generated in North Yorkshire and York every year although the vast majority of this is organic by-products most of which will be disposed of at the farm. remaining amount, thought to be around 32,000 tonnes, will require off farm site management which will need to be factored into consideration of provision of waste management facilities. It is likely that over the Plan period this waste will be diverted from landfill to recycling, fulfilling the aspirations of waste management moving up the waste hierarchy. However, provision for specialised waste, including animal by-products incineration

hazardous landfill, will need to be maintained.<sup>5</sup>

### Consultation Responses

There were not many responses relating to agricultural waste through the previous NYCC consultations however there was support for managing farm waste through anaerobic digestion and managing waste on farms.

At the Regulation 18 consultation stage a limited number of responses received that related to agricultural waste. However, support was given for anaerobic digestion and composting including on-One farm schemes. respondent considered that consideration should be given to farm animal wastes. A previous workshop consultation event, undertaken by NYCC in 2011, highlighted issues such as; ensuring the Joint Plan protects environmental assets from agricultural waste; and, ensuring farms dispose of agricultural waste responsibly.

### **Summary of Key Points**

The information in this topic paper is designed to provide an introduction to the key information relating to agricultural waste within the Joint Plan area. Further detailed information is available in the current evidence base for the Joint Plan available on our website

www.northyorks.gov.uk/mwevidence

The key information can be summarised as follows:

- There is likely to be a relatively large amount of agricultural waste produced in the Plan area;
- A lot of the agricultural waste generated is likely to be disposed of or re-used on the farm itself;

<sup>&</sup>lt;sup>4</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

- A small amount of specialised waste arising on farms will need to be managed off site;
- The Government is aiming to increase the role of anaerobic digestion in waste management (and energy generation) and this could be relevant to management of agricultural waste.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to help begin to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with any new and additional information that may become available, to help in the identification of suitable policy responses.

A summary of the key issues which have been identified from the information above is as follows.

- Agricultural waste is often disposed of on-site by methods which are beyond the control of the planning authority
- Aims to manage waste further up the hierarchy could lead to further demand for farm based composting schemes
- Provision of specialised waste facilities will need to be maintained to manage specific types of agricultural waste
- The Government's aims for increased use of anaerobic digestion may result in increased demand for such facilities in the Joint Plan area

# Topic Paper – Hazardous Waste and Low Level (Non-nuclear) Radioactive Waste

### What is Hazardous Waste?

Hazardous Waste is defined by Defra as waste that may cause particular harm to human health or the environment. The European Commission defines hazardous waste within the European Waste List, which includes materials such as:

- Any waste containing a dangerous substance
- Agrochemical wastes
- Waste containing arsenic, mercury and other heavy metals
- Wastes from the photographic industry
- Waste from asbestos processing
- Inorganic pesticides, biocides and wood preserving agents
- Waste explosives.

Everyday items such as computer monitors, TVs, refrigeration equipment and some batteries are defined as hazardous waste, as well as more obvious materials such as asbestos and oil.

# What is Low Level (Non-nuclear) Radioactive Waste?

Low Level (Non-Nuclear) Radioactive (LLR) Waste is defined by Defra as waste having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma activity.

### Where does it arise?

Hazardous Waste is produced by a wide range of industries including the agricultural sector, chemical industries and metal manufacturers with the biggest producer being the construction sector. However, all industries have the potential to produce some hazardous waste.

**LLR Waste** is produced by a relatively small number of industries. A proportion LLR Waste generated is conventional (that is, non-nuclear) industries, a major producer being the healthcare sector. Within the Joint Plan area other producers of LLR Waste also include organisations such pharmaceutical companies and research and educational establishments.

Most (98%) of LLR waste in the UK arises from the operation of nuclear power stations. nuclear fuel reprocessing facilities and also from the decommissioning and clean-up of nuclear sites. The remaining 2% is produced by non-nuclear industry users radioactivity<sup>1</sup>. As no nuclear sites are located in the Joint Plan area, and there is no likelihood of a nuclear facility being located in the Joint Plan area in the next 20 years, it is highly unlikely that LLR waste will increase significantly above current very low levels.

### How is it managed?

Hazardous Waste, when mismanaged, has the potential to cause greater harm to the environment and human health than non-hazardous waste, and, as a result, additional controls apply to its movement and management. The charts below provide a summary of the methods by which waste arisings and deposits within the Joint Plan area are managed.

Minerals and Waste Joint Plan

<sup>&</sup>lt;sup>1</sup> Defra, Policy for the Long Term Management of Solid Low Level Radioactive Waste in the United Kingdom, March 2007

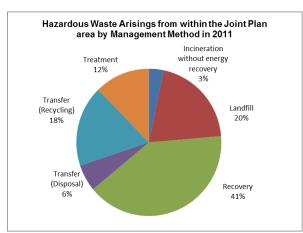


Figure 1: Hazardous Waste **Arisings** from within the Joint Plan area by management method in 2011<sup>2</sup>

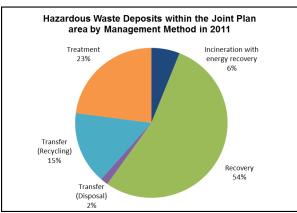


Figure 2: Hazardous Waste **Deposits** within the Joint Plan area by management method in 2011<sup>3</sup>

The charts above demonstrate that 'recovery' is the primary method by which hazardous waste is managed for both arisings and deposits within the Joint Plan area. However, 20% of hazardous waste arisings in the Joint Plan area are sent to 'landfill'.

There is very limited data available on the methods by which **LLR Waste** arising within the Joint Plan area is managed and where these facilities are located. However, the Environment Agency has confirmed that a proportion of LLR Waste arising in the Joint Plan area is managed

at an incineration facility in Knostrop, within the Leeds City Council area.<sup>4</sup>

### **Key Policy Influences**

National waste planning policy is informed by European waste policy such as the Waste Framework Directive (2008), which introduced the concept of the Waste Hierarchy where waste is first prevented then prepared for re-use, recycled, recovered in other ways and then only as a last resort disposed of. Also relevant is the Landfill Directive (1999) which aims to reduce the negative effects of landfilling on the environment and human health.

The national planning policy context for the management of Hazardous Waste and LLR Waste is set out in Planning Policy Statement 10: Planning for Sustainable Waste Management (2011).document sets out a number of key waste planning objectives for management which are relevant to the safe management of these specialised waste streams. The Government intends to update PPS10 with a National Waste Planning Policy.

This key policy document is supported by the *National Planning Policy Framework*, published in March 2012, which provides a broader policy framework for planning. Although this document contains no specific waste planning policies it does introduce a *'presumption in favour of sustainable development'* which compels local planning authorities to positively seek opportunities to meet the development needs of their area, which should be objectively assessed.

There are also four waste specific policy documents which are of importance; the 2011 Government Review of Waste Policy

<sup>&</sup>lt;sup>2</sup> EA, 2011 Hazardous Waste Data Interrogator, 2013

<sup>&</sup>lt;sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

in England, the Waste Strategy 2007, A Strategy for Hazardous Waste Management in England (March 2010) and A Strategy for the management of Solid Low Level Radioactive Waste from the Non-Nuclear Industry in the United Kingdom (2012). The latter of these documents states that waste planning authorities should take account of nonnuclear industry radioactive waste disposal requirements, both in their role as consultees to the environmental regulators, and when they prepare and review local waste plans. In addition waste planning authorities should also be aware of the current disposal needs and waste management practices of nonnuclear industries that operate within their areas of responsibility as they prepare their plans.

### **Key Data and discussion**

The Joint Plan area produces very limited amounts of Hazardous waste and LLR Waste. However, the waste facilities within the Joint Plan area manage an even lower amount of these specialised waste streams.

Area	Hazardous Waste Arisings in 2011	Hazardous Waste Deposits in 2011
North Yorkshire	20,748	3,890
City of York	6,266	8,685
Joint Plan area	27,014	12,575

Table 1: Hazardous Waste Arisings and Deposits with the Joint Plan area in 2011<sup>5</sup>

The table above illustrates that **hazardous** waste facilities within the Joint Plan area manage an amount equivalent to less than half of the total amount arising.

Furthermore, of the hazardous waste arising within the Joint plan area only 12% of this is ultimately managed at facilities within the Joint Plan area. Approximately 11% of Hazardous waste arising within the Joint Plan area is exported to the Leeds City Council area to be managed, with Wakefield Council area also taking a significant proportion. In the same year relatively small amounts of hazardous waste were imported into the county from a range of other WPAs, namely Leeds. and Wakefield. In 2011 the Joint Plan area exported 22,357 tonnes and imported tonnes of hazardous demonstrating that the Joint Plan area is a net exporter of hazardous waste. The primary management method for hazardous waste exported from the Plan area is recovery at 38% and secondary is landfill at 19%6.

Specialised waste streams such as hazardous waste and LLR Waste tend to be transported further distances to be managed when compared to more conventional waste streams. This is because they often require management at more specialised facilities, which often cannot be provided locally due to economies of scale.

As stated above there is very limited data on the amount of **LLR Waste** arising within the Joint Plan area and where and how it is managed. However, through discussions with the Environment Agency it is understood that the amount of LLR Waste arising annually within North Yorkshire is not likely to exceed 50m<sup>3</sup>.

The research undertaken by Urban Vision and 4Resources has found that arisings of **LLR Waste** are not expected to change significantly over the plan period and the current pattern of management, which is

<sup>&</sup>lt;sup>5</sup> EA, 2011 Hazardous Waste Data Interrogator, 2013

<sup>&</sup>lt;sup>6</sup> EA, 2011 Hazardous Waste Data Interrogator, 2013

export out of the Plan area, is expected to continue as at present. However, this will need to be kept under review as there is currently a level of uncertainty about future landfill capacity for LLR waste outside of the Plan area post 2015. The research considers future management of hazardous waste as a subset of other waste streams and any potential capacity gap has been identified in the separate topic papers<sup>7</sup>.

### **Consultation Responses**

Representations received in relation to the Minerals and Waste Joint Plan First consultation identified a number of issues that the Joint Plan will need to consider in relation to hazardous and LLR waste. These include ensuring that safety considerations are the priority when managing hazardous waste: acknowledgement of cross-boundary movement of these waste streams prior to disposal; and the need to plan for hazardous waste facilities which can manage LACW, including Waste Electrical and Electronic Equipment and asbestos.

A previous consultation exercise, carried out by NYCC in Summer 2011, highlighted the issue that more emphasis should be given to LLR Waste in the Plan than was provided in the consultation document.

### **Summary of Key Points**

The evidence base and responses to previous consultations both raised a number of issues relevant to hazardous waste and LLR waste management in the Joint Plan area, these include:

 Specialised waste such as hazardous and LLR waste may sometimes need to be transported longer distances to be managed at specialised facilities,

- potentially over local authority boundaries.
- The Joint Plan area is a net exporter of hazardous waste, although overall volumes of hazardous waste arising in, and exported from, the area, are relatively low.
- Very low levels of LLR Waste are produced within the Joint Plan area by a relatively small number of industries. LLR arisings are currently exported out of the Plan area and the potential for such arrangements to continue needs to be addressed.
- Due to its specialised nature, facilities managing these types of waste may create a greater concern among communities within which they are located.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with any new and additional information that may become available, to help the identification of suitable policy responses.

A summary of the key issues relevant to Hazardous and LLR waste that may need to be addressed in the Joint Plan are as follows.

- Considering the extent to which the Joint Plan area can be self-sufficient in the management of hazardous and LLR waste and whether existing patterns of export are likely to be able to continue over the plan period
- Provision of additional capacity, if any, in the Joint Plan area for the management of hazardous and LLR

<sup>&</sup>lt;sup>7</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

### waste

- Encouraging the management of hazardous and LLR waste further up the waste hierarchy
- Ensuring the Plan applies the appropriate control of any impacts, associated with the management of hazardous and LLR waste, on the environment, communities and businesses

### Topic Paper – Waste Water

### What is Waste Water?

Waste water is water which is disposed of at domestic properties or through industrial activities. Domestic waste water includes sewerage and water from other household activities.

### Where does it arise?

As stated above, waste water can originate from either domestic or industrial premises. Greater quantities of waste water will arise in the more urban parts of the Joint Plan area.

### **Key Policy Influences**

The EU Water Framework Directive, which aims to improve water quality, has resulted in the upgrading of a lot of waste water infrastructure and will continue to be relevant in the future in ensuring all groundwater supplies are at safe levels and free from pollution.

The Urban Waste Water Treatment Regulations aim to ensure that the collection, treatment and discharge of urban waste water is conducted in a way which does not harm the environment.

The 2011 Defra Review of Waste Policy supports the reduction of the amount of waste water generated.

Although it contains no specific policy in relation to waste water, Planning Policy Statement 10 supports the protection of water resources. The government intends to update PPS10 with a National Waste Planning Policy.

### **Key Data and Discussion**

Whilst there is no data on the amount of waste water generated in the Joint Plan area, 10 billion litres of waste water are created in England and Wales every day. This would equate very roughly to around 14 million litres of waste water generated in the Plan area every day<sup>1</sup>.

Waste water is treated and managed by private water companies with Yorkshire Water covering most of the Plan area. They operate a number of facilities including Waste Water Treatment Works, sewerage treatment facilities and pumping stations. There are a total of 367 Waste Water Treatment Works located across the Plan area – these use various methods to remove waste matter from the water enabling it to be returned to the environment. These are generally located close to settlements – both large towns and smaller villages – as shown on the map overleaf.

Increases in population and new development will have a bearing on the need for waste water treatment works. The population of North Yorkshire and York is predicted to grow by 37,500 between 2012 and 2021. This represents an increase of around 4.8%.

<sup>&</sup>lt;sup>1</sup> Based upon the population of the Plan area of 782,080 in 2011

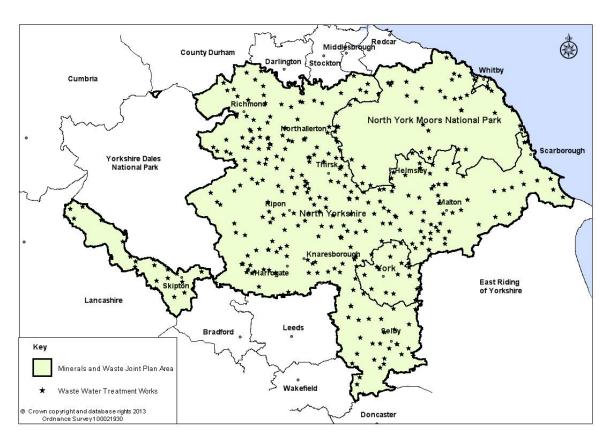


Figure 1: Location of Waste Water Treatment Works in the Joint Plan area

### **Consultation Responses**

There were not many responses received relating to waste water during NYCC's previous consultations, however, there was a suggestion that other facilities should not be located near to waste water treatment works.

Yorkshire Water are unable to provide an estimate of likely requirements to manage waste water during the Plan period as they plan on a 5 year timescale. At initial consultation stage on the Joint Plan there were few responses relating to waste water. The comments that were made suggested that waste water could be used for other useful purposes and it should be separated from surface water.

### Requirements

There are no quantified requirements for waste water management and the water

companies do not plan ahead far enough to estimate likely requirements during the Plan period. A further potential source of waste water could arise in future in association with development of unconventional gas resources in the Plan area, such as coal bed methane and shale gas, although there are no proposals for such development at the time of preparation of this topic paper.

### **Summary of Key Points**

The information in this topic paper is designed to provide an introduction to the key information relating to waste water within the Joint Plan area. Further detailed information is available in the current evidence base for the joint plan available on our website

www.northyorks.gov.uk/mwjointplan.

The key information can be summarised as follows:

- Millions of litres of waste water are generated in the Joint Plan area each day
- Over 360 waste water treatment works are located in the Joint Plan area
- Further infrastructure requirements may arise during the Plan period but these cannot be identified at this stage.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to help begin to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with any new and additional information that may become available, to help in the identification of suitable policy responses.

A summary of the key issues which have been identified from the information above is as follows.

- Investment in new infrastructure may continue to arise from the requirements of the Water Framework Directive
- Requirements for new or altered treatment works may arise to meet requirements related to increased population and other new development

### Topic Paper - Re-use, Recycling and Transfer

# What are Re-use, Recycling and Transfer?

Re-use involves putting an item to another use after its original function has been fulfilled. It differs from recycling in that no processing is required, so it is considered to be more sustainable. Re-use can take various forms. Some products are designed to be used a number of times before becoming obsolete, for example, re-useable milk bottles or re-useable transit packaging. Some items find new uses once they have served their original purpose, for example, plastic carrier bags used as bin liners. Charity shops often deal in re-use items such as clothes and books.

Recycling involves processing waste to produce a usable raw material or product. Facilities for re-use and recycling include materials recycling facilities (MRF), household waste recycling centres (HWRC) (formerly known as civic amenity sites) and transfer stations. In addition there are specialist facilities catering for metal recycling and end of life vehicles.

MRFs actively alter the composition of waste in order to produce an end product that can be utilised. These facilities commonly include some form of waste separation techniques in order to aid in the processing element of the facility.

Waste transfer stations are where waste is delivered, sorted, bundled and then moved on to another location for further processing.

HWRCs are provided by local authorities to accept waste directly from the public and, in part, perform a similar role as waste transfer stations.

Metal recycling facilities are where scrap ferrous and non-ferrous metals are collected, sorted and distributed. In addition there are specialist end-of-life vehicle sites where cars and other vehicles are de-polluted and dismantled.

Other re-use and recycling facilities include 'bring-sites' where free standing containers are provided for the public to deposit a variety of materials from glass bottles to textiles. These vary in size from small facilities in car parks to larger facilities on their own site collecting a wider range of material.

### Where are facilities located?

Facilities for re-use and recycling are widespread throughout the Joint Plan area. There are currently 52 recycling facilities, 22 of which are HWRCs, and 52 transfer stations within the Joint Plan area that are licensed by the Environment Agency and hold planning permission which are, to our knowledge, operating as of June 2013<sup>1</sup>. The Plan below shows the location of these waste management facilities throughout the Joint Plan area.

<sup>&</sup>lt;sup>1</sup> EA, Waste Licence Holders (Dec 2012). NYCC, Planning Records (June 2013)

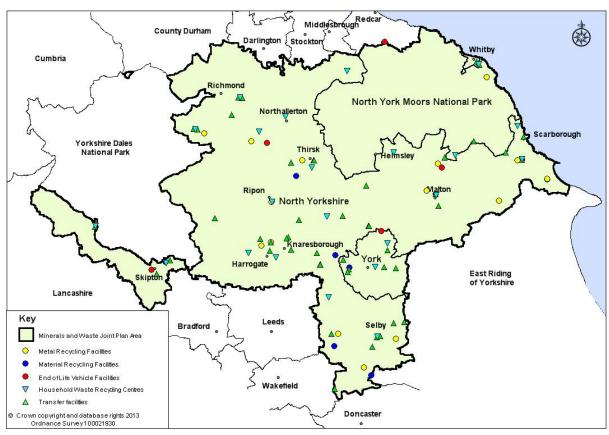


Figure 1: Map showing location of re-use, recycling and transfer facilities in the Joint Plan area

### **Key Policy Influences**

European legislation has a significant bearing on waste management policies in the UK. The Waste Framework Directive (2008) requires all EU Member States to take the necessary measures to ensure that waste is treated and disposed of correctly. It includes one of the key pillars of waste policy, the Waste Hierarchy, which places 5 waste management methods in order of priority. These are reduction. re-use, recycling and composting, energy recovery and disposal.

A new Scrap Metal Dealers Act 2013 received Royal assent in February 2013 creating a revised regulatory regime for the scrap metal recycling and vehicle dismantling industries in England and Wales.

With regard to waste transfer, the

Government has attempted to simplify the regulatory system of waste management by making it more proportionate and risk based through reforming the controls on handling, transfer and transport of waste. This demonstrates the importance of waste transfer and the value placed nationally on waste transfer facilities.

The NPPF does not contain specific waste policies, since national waste planning policy will be published as part of the National Waste Management Plan for England that is expected in 2014. PPS 10 (2011) therefore remains in force and confirms that the recycling of waste is an important element in the waste hierarchy and diverting waste from landfill to recycling facilities is a key aim of national waste planning policy and must be adequately catered for in preparing waste plans. This includes identifying sites and areas suitable for new or enhanced

recycling and transfer facilities for the waste management needs of the area.

The Joint Municipal Waste Management Strategy for York and North Yorkshire provides a basis for future infrastructure needs for the more sustainable management of Local Authority Collected Waste (LACW). Implementation of the Strategy is likely to require the provision of further transfer capacity for LACW, as well as additional small scale composting and recycling facilities may be required in the Plan area.

Consideration is being given by the NYCC Waste Management Authority to the provision of new waste transfer stations at Kirkby Misperton near Malton, Airfield near Selby and Harewood Whin near York for LACW, to provide local delivery points for LACW in Ryedale and Selby Districts and in York respectively. These would need to be in place by 2015 when current NYCC waste disposal contracts end. It is also possible that a transfer station to serve the new Harrogate area could be required if the Allerton Waste Recovery Park facility (see Waste Recovery topic paper) is not built.

Consideration is also being given to the development of a new HWRC site for the Catterick area, to replace the existing facility at Catterick. The new facility would provide additional capacity and be able to accept a wider range of wastes, to help improve recycling and composting rates. It is intended that the new site would be located on the Gatherley Road industrial estate at Brompton on Swale. A planning application was submitted in September 2013.

The Government Review of Waste Policy was published in 2011 and is the most upto-date and comprehensive expression of the current Government's approach to

national waste policy. It sets out a vision of moving towards a 'zero waste economy' and reaffirms the Government's commitment to recycling. The Government intends to update PPS10 with a National Waste Planning Policy.

### **Key Data and discussion**

The York and North Yorkshire Waste Partnership set a target to recycle or compost 50% of household waste produced within the partnership area by 2020. The table below shows that between 2009/10 and 2012/13 the total amount of household waste arising has decreased whilst the percentage of household waste recycled, re-used or composted has generally increased.

Comparable figures for other waste streams are not yet available.

	2009/10	2010/11	2011/12	2012/13
Total amount of Household Waste arising (tonnes)	399,645	396,077	391,433	383,772
Household Waste Recycled, Re-used or Composted (Tonnes)	175,943	178,597	180,883	175,431
Household Waste Recycled, Re-used or Composted (%)	44 %	45.1 %	46.2 %	45.7 %

Table 1: Household Waste Recycled, Re-used or Composted 2009/10 – 2012/13 in the Joint Plan area (including YDNP)

As local authority budgets are squeezed, new initiatives are likely to be required to ensure that household waste recycling centres are affordable and retained as an important part of the network of waste management facilities in the Joint Plan area.

The research undertaken by Urban Vision and 4Resources projects waste arisings up to 2030 based upon a number of scenarios and growth assumptions, and compares these against existing waste management facilities, including re-use, recycling and transfer facilities, in order to calculate a potential capacity gap. This has resulted in the identification of a recycling and transfer capacity gap for:

- Local Authority Collected Waste; provision for LACW recycling capacity would only be required if AWRP, or a similar capacity facility or several smaller facilities, are not developed and on the assumption that current of LACW for exports recycling continue. However, North Yorkshire County Council and City of York Council Waste Disposal Authorities have identified that additional transfer facilities are likely to be needed in order to provide an overall adequate geographical network.
- Commercial & Industrial Waste: a substantial gap in the recycling capacity for C&I waste has been identified which is currently met by export from the area.
- Construction, Demolition & Excavation Waste; a significant shortfall in capacity for facilities to recycle CD&E waste has been identified, primarily the construction and demolition element, throughout the Plan period.
- Agricultural Waste; a small recycling capacity gap of agricultural waste has been identified over the Plan period. However, due the minimal capacity required to meet this, for the purposes of the research the recycling capacity

has been combined with the required C&I recycling capacity.<sup>2</sup>

### **Consultation Responses**

The initial consultation exercise on the Joint Plan carried out earlier this year highlighted issues such as: widespread support for re-use and recycling which should be maximised; the number of recycling facilities should be increased to reduce the amount of waste going to landfill; recycling facilities should accessible to all; recycling can benefit from local authorities working partnership; and the need for small scale facilities for the composting of green waste and recycling infrastructure for a range of recyclables and inert materials.

A previous consultation exercise carried out in 2011 by NYCC highlighted issues such as: sustainable waste management facilities can contribute to environmental support objectives: for re-use recycling as part of a strategy to move the treatment of waste up the hierarchy; and the need for multiple local facilities to reflect the geography of the area. addition, NYCC held a workshop where waste planning issues were discussed, these included; focus upon recycling C&I waste; capitalise on public enthusiasm for recycling: maximise employment recycling facilities; provision of a local network of accessible recycling centres; co-location of recycling facilities and producers of waste; and, educate local communities on recycling methods.

### **Summary of Key Points**

The information in this topic paper is designed to provide an introduction to the key information relating to Re-use and Recycling within the Joint Plan Area that

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has been identified from the current evidence base for the Joint Plan.

- There are a significant number of recycling and transfer facilities throughout the Joint Plan area.
- This includes specialist facilities for metal recycling and dealing with endof-life vehicles.
- Re-use and recycling are preferred options in the Waste Hierarchy and this is reflected in national waste planning policy.
- The percentage of household waste recycled has been steadily increasing in recent years.
- As identified above, new recycling and transfer capacity will be required to meet the identified need and help deliver the requirements for more sustainable waste management as well as provide an adequate overall network of facilities.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to help begin to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with any new and additional information that may become available, to help the identification of suitable policy responses.

A summary of the key issues that have been identified above are as follows.

- New capacity for the recycling and transfer of waste will be needed to meet the identified capacity gap for C&I and CD&E waste streams and potentially LACW, as part of the network of waste management provision in the Joint Plan area
- Reliance on export of some waste for recycling is likely to be necessary

### Topic Paper – Recovery

### What is Recovery?

Technologies or processes for recovery of waste include incineration with energy recovery, advanced thermal treatment (ATT), anaerobic digestion and composting.

Both incineration and ATT technologies, such as pyrolysis and gasification, offer the option of treating residual waste and recovering energy. The technologies are different in how the waste is processed and the energy liberated for recovery. Incineration involves the combustion of waste to directly release energy in the waste, whereas ATT facilities thermally treat the waste to generate secondary products (gas, liquid and/or solid) from which energy can be generated. The energy produced can be used to generate power (electricity), heat or combined heat and power (CHP).

Anaerobic digestion is a natural process where plant and animal materials (biomass) are broken down by microorganisms in the absence of air. The biomass is put inside a sealed tank or digester and the naturally occurring microorganisms digest the biomass to release a methane-rich gas that can be used to generate heat and power. The residue is rich in nutrients and can be used as a fertiliser.

Composting is the aerobic processing of biologically degradable organic wastes to produce an end product (compost) that can be applied to land to improve soil structure and improve the nutrient content of soil. Compost can be a substitute for peat, although its quality is dependent on the nature of the wastes used. Composting is carried out at different levels, from individual households to large-

scale commercial facilities. The latter include open-row and in-vessel facilities.

### Where are facilities located?

There are no operating large scale waste incineration facilities in the Joint Plan area only one operating anaerobic digestion facility, and two with planning permission but not yet built. In 2013 North Yorkshire County Council granted planning permission for a new waste recovery facility, known as the Allerton Waste Recovery Park (AWRP) comprising mechanical treatment, anaerobic digester, energy from waste and incinerator bottom ash plant at the Allerton Park landfill site in Harrogate Borough. The new facility would reduce the amount of household waste going to landfill by over 90% and help deliver the current target for recycling or composting 50% of household waste by 2020.

If the AWRP facility is not developed alternative arrangements will be required for the residual Local Authority Collected Waste (LACW) generated within NYCC and CYC.

There is currently one ATT plant at Seamer Carr, near Scarborough, completed as a pilot project in 2009 and with planning permission until 2020. This is a gas conversion and energy recovery plant that can process approximately 17,000 tonnes of waste materials per annum, generating 1.46 MW of electricity that is supplied to the National Grid.

In 2013 a planning application was submitted to NYCC for a new Energy from Waste facility, with a potential capacity of 280,000 tonnes per annum on land at Kellingley Colliery near Knottingley. The

applicant indicates that the facility would be capable of managing C&I or LACW.

An application has also been submitted for a waste treatment plant at the former North Selby Mine site, in the City of York area, which would involve anaerobic digestion of waste and the provision of heat and power to a horticultural facility.

There are currently 19 Waste Treatment Facilities, 10 of which are composting facilities, within the Joint Plan area that are licensed by the Environment Agency and hold planning permission which are, to our knowledge, operating as of June 2013<sup>1</sup>. The Plan below shows the location of these sites throughout the Joint Plan area. It is likely that further small scale composting facilities will be required to support the recovery of local authority collected green waste.

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<sup>&</sup>lt;sup>1</sup> EA, Waste Licence Holders (Dec 2012). NYCC, Planning Records (June 2013)

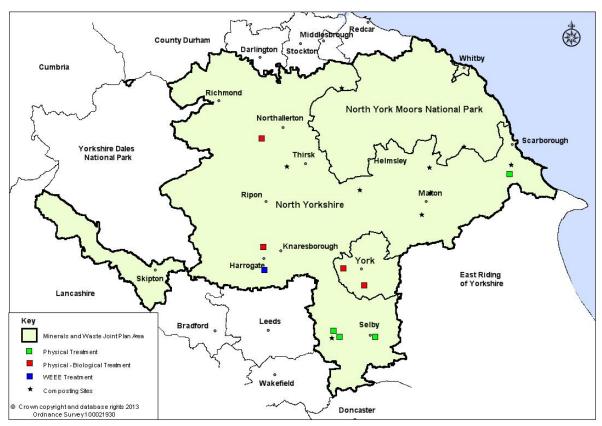


Figure 1: Map showing the location of Treatment and Composting facilities within the Joint Plan area

### **Key Policy Influences**

European legislation has a significant bearing on waste management policies in the UK. The Waste Framework Directive (2008) requires all EU Member States to take the necessary measures to ensure that waste is treated and disposed of correctly. It includes one of the key pillars of waste policy, the Waste Hierarchy, which places 5 waste management methods in order of priority. These are reduction. re-use. recycling and composting, energy recovery disposal. European experience illustrates that recovery of energy from residual waste is compatible with high recycling rates.

In the UK all waste incineration facilities must comply with the Waste Incineration Directive (2000), which sets stringent emissions controls for any thermal processes regulated in the EU. The

objectives of the Directive are to minimise the impact from emissions to air, soil and surface and ground water on the environment and human health resulting from the incineration of waste. The enforcement of the Directive is through the Pollution Prevention and Control (PPC) regime.

The NPPF does not contain specific waste policies, since national waste planning policy will be published as part of the National Waste Management Plan for England that is expected in late 2013. PPS 10 (2011) therefore remains in force and confirms that using waste as a source of energy is a preferable option to disposal and one which must be adequately catered for in preparing waste plans. This includes identifying sites and suitable for new or enhanced waste management facilities for the waste management needs of the area. The Government intends to update PPS10 with a National Waste Planning Policy.

The Government Review of Waste Policy was published in 2011 and is the most upto-date and comprehensive expression of the current Government's approach to national waste policy. It sets out a vision of moving towards a 'zero waste economy' and states that support will be given for energy from waste facilities where appropriate, for waste which cannot be reused, recycled or composted.

### **Key Data and discussion**

The York and North Yorkshire Waste Partnership set a target to recycle or compost 50% of household waste produced within the two local authority areas by 2020. The table below shows that between 2009/10 and 2012/13 the total amount of household waste arising has decreased whilst the proportion of household waste composted has gradually increased...

	2009/10	2010/11	2011/12	2012/13
Total amount of Household Waste arising (tonnes)	399,645	396,077	391,433	383,772
Household Waste Composted (Tonnes)	79,681	79,805	83,734	79,680
Household Waste Composted (%)	19.9 %	20.1 %	21.4 %	20.8 %

Table 1: Household Waste Composted with the Joint Plan area 2009/10 – 2012/13 (Includes YDNP)

The research undertaken by Urban Vision and 4Resources projects waste arisings up to 2030 based upon a number of scenarios and growth assumptions, and compares these against existing waste management facilities, including recovery

facilities, in order to calculate a potential capacity gap. This has resulted in the identification of a recovery capacity gap for:

- Local Authority Collected Waste; provision for anaerobic digestion and other recovery capacity would only be required if AWRP, or a similar capacity facility or several smaller facilities, are not developed.
- Commercial & Industrial Waste; taking into account potential for some recovery capacity for C&I waste to be provided at the AWRP facility if developed, there is an increasing capacity gap for recovery of energy from C&I waste under two of the recycling scenarios modelled. however, this is unlikely to be above the capacity provided by one small facility. A potential gap in the provision of anaerobic digestion capacity for C&I waste has also been identified.
- Low-Level (Non-Nuclear) Radioactive Waste; capacity outside of the Joint Plan area for LLRW is uncertain post-2015 suggesting the need for medium term review of these provisions.<sup>2</sup>

### **Consultation Responses**

The initial consultation exercise on the Joint Plan carried out earlier this year highlighted issues including: general support for composting in appropriate locations provided that environmental impacts are controlled; differing views on whether the AWRP facility should be developed and whether alternatives to the Allerton site should be considered in case it does not go ahead; environmentally friendly clean incineration facilities should be investigated; there are differing views on whether energy from waste facilities should be developed; and a flexible

<sup>&</sup>lt;sup>2</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

approach should be followed to allow for new and emerging technologies.

A previous consultation exercise carried out in 2011 by NYCC highlighted issues such as: energy recovery should be restricted to dealing with residual waste that cannot be re-used or recycled; the waste strategy should be decided before the Allerton waste recovery proposal is decided; flexibility should be built in to allow for new technologies; and the strategy should acknowledge the impact that waste facilities can have on the environment and local communities.

### **Summary of Key Points**

The information in this topic paper is designed to provide an introduction to the key information relating to Recovery within the Joint Plan area, which has been identified from the current evidence base for the Joint Plan.

- North Yorkshire County Council has granted planning permission for an anaerobic digester, energy from waste and incinerator bottom ash plant at the Allerton Park quarry and landfill site although it is not yet known whether the permission will be implemented
- This facility would reduce the amount of household waste going to landfill by over 90%, as well as helping to meet current targets for increased rates of recycling
- If the AWRP facility is not developed alternative arrangements will be required for the residual LACW generated within the Plan area
- The percentage of household waste composted has been steadily increasing in recent years
- There are 10 composting sites, all of which are open-row facilities. Further small scale composting facilities are likely to be required to support the

- management of green waste collected by local authorities or deposited at Household Waste Recycling Centres
- A pilot ATT facility has been established at Seamer Carr, near Scarborough
- Proposals have been submitted for further energy recovery capacity at sites at Kellingley Colliery (NYCC area) and the former North Selby Mine site (City of York)
- European and national policy imposes strict emission controls for any thermal processes

### Key Issues to be addressed

The information in this topic paper provides a basis on which to help begin to identify some of the key issues that the strategy will need to address. As the preparation of the Joint Plan progresses this information will be used, together with new any new and additional information that may become available, to help the identification of suitable policy responses.

A summary of the key issues that have been identified above are as follows.

- Additional recovery capacity for the management of C&I waste, LLRW and potentially LACW may be needed
- The scale of any additional recovery capacity provision which may need to be made in the Plan will be strongly influenced by whether or not the AWRP facility is ultimately developed
- Additional provision for small scale composting of LACW may also be required
- Recovery capacity may also be needed for other waste streams, particularly suitable C&I Waste and potentially some agricultural waste. More information about potential future

requirements is available in the evidence report prepared for the Authorities by Urban Vision and 4Resources (Oct 2013)

### Topic Paper – Disposal

### What is Disposal?

Disposal includes landfill and incineration without energy recovery. Landfill is the process of disposal of refuse by burial under layers of earth. It is commonly undertaken in disused quarries and mineral workings, where the resources have been exhausted and forms part of the restoration of the sites. In areas without disused quarries such disposal can involve 'land-raising', by increasing the natural contours of the ground.

Disposal to landfill has historically been, and continues to be, the most common waste management method in the Joint Plan area and indeed in the UK as a whole. However, in line with the waste hierarchy, due to its environmental impacts and the inherent unsustainability of landfilling, current national and local policy is focussed towards reversing this position.

Incineration without energy recovery involves the thermal treatment of waste without recovery of the combustion heat generated. This waste management method was formerly widespread in the UK but good practice now suggests that incinerators should only process residual waste and the energy produced should be recovered for use in the generation of electricity, heat and power.

### Where are facilities located?

Landfill sites are categorised into three types based upon the streams of waste that they accept:

- Hazardous
- Non-hazardous
- Inert

There are no hazardous landfill sites in the Joint Plan area. Similarly there are no

large scale incinerators without energy recovery (or indeed with energy recovery).

Facilities for non-hazardous and inert waste disposal are widespread across the Joint Plan area. Most of these are located within North Yorkshire and in current or disused quarries, whilst the Harewood Whin<sup>1</sup> site lies within City of York. Landfill can play a role in the reclamation of quarries but there can also be significant issues associated with the need to prevent pollution, including to groundwater in sensitive areas. In addition there are a significant number of closed landfill sites that are closely regulated and monitored by the Environment Agency because of their potential to release greenhouse gases. There are currently 20 landfill sites within the Joint Plan area that are licensed by the Environment Agency and hold planning permission which are, to our knowledge, operating as of June 2013<sup>2</sup> although a number of these are expected to close in the near future. below shows the location of these landfill sites throughout the Joint Plan area. Remaining capacity for landfill biodegadeable waste is becomina increasingly concentrated at two sites, Allerton Park landfill (NYCC area) and Harewood Whin (City of York area) due to the closure of other sites.

<sup>&</sup>lt;sup>1</sup> The Harewood Whin site is technically a landraise site rather than a landfill

<sup>&</sup>lt;sup>2</sup> EA, Waste Licence Holders (Dec 2012). NYCC, Planning Records (June 2013) Some of these sites are in the process of being closed

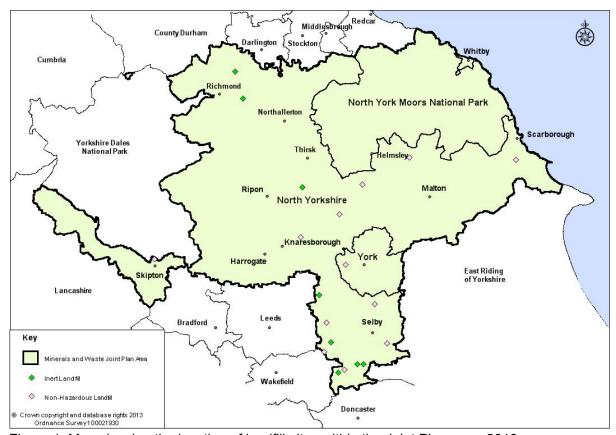


Figure 1: Map showing the location of landfill sites within the Joint Plan area, 2013

### **Key Policy Influences**

European legislation has a significant bearing on waste management policies, especially in relation to disposal, in the UK. Two key European Union Directives are the Landfill Directive (1999) and the Waste Framework Directive (2008).

The overall objective of the Landfill Directive is to prevent or reduce the negative effects of landfilling on the environment and human health. It seeks to achieve this through specifying uniform technical standards and sets out requirements for the location, engineering, management, closure and monitoring of landfill sites.

The Waste Framework Directive requires all EU Member States to take the necessary measures to ensure that waste is treated and disposed of correctly. It

includes one of the key pillars of waste policy, the Waste Hierarchy, which places 5 waste management methods in order of priority with disposal as the least favoured option. Only if none of reduction, re-use, recycling and composting and energy recovery offer an appropriate solution should waste be disposed of.

The NPPF does not contain specific waste policies, since national waste planning policy will be published as part of the National Waste Management Plan for England that is expected in 2014. PPS 10 (2011) therefore remains in force and confirms that whilst disposing of waste is a last resort, it is an option that must be adequately catered for in preparing waste plans. This includes identifying sites and areas suitable for new or enhanced waste management facilities for the waste management needs of the area, including

facilities for the disposal of waste. The Government intends to update PPS10 with a new National Waste Planning Policy.

The Government Review of Waste Policy was published in 2011 and is the most upto-date and comprehensive expression of the current Government's approach to national waste policy. It sets out a vision of moving towards a 'zero waste economy' with disposal being the option of very last It includes a commitment to consult on restricting wood waste from landfill and to review the case for restrictions on sending other materials to landfill. The Government review did not substantially change national towards waste but served to emphasise its commitment to such aspects as waste recycling, prevention, re-use and minimising landfill disposal.

Since 1996 the Landfill Tax has been a tax on the disposal of waste. It aims to encourage waste producers to produce less waste, recover more value from waste, for example through recycling or composting and to use more environmentally friendly methods of waste disposal. There are 2 rates with inert or inactive waste being subject to a lower rate, currently £2.50 per tonne. standard rate increases each year and is currently (2013/14) £72 per tonne and will increase to £80 per tonne in 2014/15. It is a key policy driver in diverting waste from landfill.

### **Key Data and discussion**

The York and North Yorkshire Waste Partnership set a target to divert 75% of municipal waste away from landfill by 2013. As the table below shows, whilst the amount of Local Authority Collected Waste (LACW) being sent to landfill has generally decreased between 2009/10 and 2012/13 the actual proportion of waste landfilled has remained broadly static,

suggesting this target is unlikely to be achieved without significant further change in waste management practice in the Plan area, including a need for the delivery of new waste recovery capacity for LACW. Comparable figures for other waste streams are not yet available

	2009/10	2010/11	2011/12	2012/13
Total amount of LACW (tonnes)	458,405	445,824	436,593	424,949
LACW sent to Landfill (Tonnes)	265,633	255,713	245,154	247,527
LACW sent to Landfill (%)	58 %	57.4 %	56.2 %	58.3 %

Table 1: Local Authority Collected Waste sent to Landfill in the Joint Plan area 2009/10 – 2012/13

Current contracts for the disposal of LACW arising in the North Yorkshire County Council area to landfill expire in 2015. The proposed Allerton Waste Recovery Park, if implemented, is not due to be operational until after this date and therefore interim contracts for the management of LACW will be required. Current contracts in City of York Council area do not expire until 2022.

The research undertaken by Urban Vision and 4Resources projects waste arisings up to 2030 based upon a number of scenarios and growth assumptions, and compares these against existing waste management facilities, including disposal facilities, in order to calculate a potential capacity gap. This has resulted in the identification of a landfill capacity gap for;

 Local Authority Collected Waste; for the first three years of the Joint Plan continued reliance on landfill would be required, pending development of the AWRP facility. This would increase significantly if AWRP, or a similar

- capacity facility or several smaller facilities, are not developed
- Commercial & Industrial Waste; only under the scenario where there is significant waste growth and no increase in recycling or energy recovery over the Plan period. There is a small capacity gap for hazardous C&I waste landfill throughout the Plan period, but the amount projected does not justify a new landfill site in itself
- Construction. Demolition & Excavation Waste: from 2017 onwards there is a significant landfill capacity gap for this waste stream up to the end of the Plan period. The hazardous CD&E waste landfill capacity gap is small in comparison but runs throughout the Plan period
- Low-Level (Non-Nuclear) Radioactive Waste; landfill capacity outside of the Joint Plan area for LLRW is uncertain post-2015 suggesting the need for medium term review of these provisions.<sup>3</sup>

### **Consultation Responses**

The initial consultation exercise on the Joint Plan carried out earlier this year highlighted issues such as: differing views on whether new landfill facilities should be developed; land-raising sites should not give rise to loss of flood storage; high quality agricultural land should not be used for landfill or land raising; and inert wastes can be used as landfill to restore mineral workings.

A previous consultation exercise carried out in 2011 by NYCC highlighted issues such as: the need to focus on moving waste up the hierarchy and to divert waste from landfill; and the strategy should acknowledge the impact that waste facilities can have on the environment and

local communities including the impact of landfill on underground water sources. In addition, NYCC undertook a workshop where waste planning issues were discussed, these included; recognition that overprovision of disposal facilities is a risk; landfill is an important restoration tool for former mineral extraction sites; recognise the current dependence upon landfill as our primary form of waste management; aim for no biodegradable waste being disposed at landfills; utilising methane emissions from landfills; maximise the opportunity of former landfill sites for habitat creation and public enjoyment

### **Summary of Key Points**

The information in this topic paper is designed to provide an introduction to the key information relating to Disposal within the Joint Plan area that has been identified from the current evidence base for the Joint Plan.

- There are no hazardous waste landfill sites or incinerators without energy recovery within the Plan area
- There are a significant number of landfill sites especially in North Yorkshire although some of these are in the process of closure
- European and national policy aims to prevent or reduce the negative effects of landfilling on the environment and human health
- There is a variety of fiscal and environmental policy drivers aimed at diverting waste from landfill, notably the Landfill Tax
- The amount of LACW sent to landfill has been steadily decreasing in recent years
- Notwithstanding the diversion of waste from landfill, provision will continue to be needed over the Plan period especially for the disposal of residual waste which cannot be dealt with by

<sup>&</sup>lt;sup>3</sup> Urban Vision and 4Resources, North Yorkshire Subregion: Waste Arisings and Capacity Requirements Final Report (Oct 2013)

other means, as indicated by the research above.

### Key Issues to be addressed

The information in this topic paper provides a basis on which to identify some of the key issues that the Joint Plan will need to address. As the preparation of the Plan progresses this information will be used, together with any new and additional information that may become available, to help the identification of suitable policy responses.

A summary of the key issues that have been identified above are as follows.

- Increasing amounts of waste need to be diverted from landfill to meet current targets and for environmental and financial reasons
- Notwithstanding this, continued provision will need to be made for management of waste which cannot be dealt with further up the hierarchy and this will require on-going availability of adequate landfill capacity over the plan period, as identified by the Waste Arisings and Capacity Requirements research

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