

Report of the Economy and Place Programme Manager

Allerton Waste Recovery Park

Summary

1. The purpose of this paper is to update the Economy and Place Scrutiny Committee on the progress of the Allerton Waste Recovery Park (AWRP) project. This is a 25 year project in Partnership with North Yorkshire County Council (NYCC) with the objective of delivering a sustainable alternative to landfill for the treatment of residual waste. A key element is updating Members on progress towards the strengthening of the partnership between City of York Council (CYC) and NYCC.

Background

2. As a Unitary Authority, CYC has duties around the collection (Waste Collection Authority) and disposal (Waste Disposal Authority) of municipal waste as set out in the Environmental Protection Act 1990. In terms of North Yorkshire, the Districts and Boroughs act as the Waste collection authorities and NYCC acts as the Waste Disposal authority.
3. It is in the interests of the local area, both financially (landfill cost, landfill tax and haulage) and in terms of the environment, to ensure that as much waste as possible is diverted from landfill and in York there is a history of successful campaigns and projects when it comes to waste prevention and reuse. CYC, as a collection authority, also provide a kerbside recycling (including commissioning a City centre service to an environmentally focused community charity, St. Nicks), garden waste collection services and recycling facilities at the Hazel Court and Towthorpe Household Waste Recycling Centres (HWRC). There are also a number of bring banks provided by the Council, through charities and other entities located in supermarkets, on street and other locations.
4. It is vital that this good work is continued and is placed at the heart of both regional waste strategies (York and North Yorkshire Waste

Partnership “Let’s talk less rubbish” strategy) and local strategies (including One Planet York). In this very positive environment there still exists a significant tonnage of residual waste produced by households and business every year.

5. Historically, the approach to this, across the UK, has been to landfill residual waste. As well as this presenting environmental issues it also presents a high cost to Local authorities and residents as there is a landfill tax that UK national government levies on Local Authorities. In the financial year 2016/17 the cost of sending waste to landfill for the authority was in the region of £5.7m

Allerton Waste Recovery Park project

6. In December 2010, CYC entered into a Joint Waste Management Agreement (JWMA) with NYCC. This supported NYCC entering into a contract with AmeyCespa (identified as preferred bidder in 2009) for the provision of a long term (25 year) Waste management service. The objective of this is to deliver a long term, sustainable alternative to landfill for the treatment of residual waste.
7. AmeyCespa were required to secure planning (February 2013) for a Waste recovery facility at Allerton quarry before confirming the final cost (June 2014). The final cost was presented and NYCC agreed to financial close in September 2014. CYC agreed to progress a JWMA with NYCC at the same time.
8. Amongst the key outputs of the project for CYC is that the contract should enable CYC to achieve an additional 5% recycling and a minimum of 90% waste diverted from landfill.
9. It is estimated that the Waste management contract will cost CYC, £153m, over the 25 year contract length between NYCC with AmeyCespa. It is therefore the largest contractual collaboration that the council has ever entered into.
10. The largest element of the cost is the Unitary Charge which is primarily fixed for the period of the contract other than a small proportion which is index linked. There are however a number of risks that the council has accepted which may impact the overall cost to the council. These risks were highlighted as part of the report to Executive “Financial Close for the Long Term Waste Management Service Contract” (9th September 2014). Many of the financial risks were fixed at financial close including

the level of interest rates, exchange rates and capital spend (see summary in **Risks** section).

11. There are also potential opportunities across the life of the contract. There is an opportunity for the councils to request the refinancing of the project should the funding terms in the market being more favourable than those within the Financing Agreements. This would usually be following a successful period of operation and electricity generation. The benefit of refinancing would be shared between the Operator and the Councils.

Operations

12. AWRP is designed to treat waste through a series of processes including mechanical separation of recyclable materials (known as mechanical treatment or MT), anaerobic digestion (AD) and thermal treatment through incineration and generation of electricity (known as Energy from Waste or EfW).
13. In order to make the haulage of the Waste more efficient, a network of transfer stations across has been constructed across York and North Yorkshire. All residual waste in the City of York administrative area will go to the Harewood Whin transfer station that opened in the summer 2017.
14. The waste is then delivered from Harewood Whin to AWRP into the tipping hall where it is tipped into large bunkers. These are for Mechanical treatment or direct to Energy from Waste (EfW). Cranes then lift the waste from the bunkers to start the Mechanical Treatment process.
15. The Mechanical Treatment plant (MT) separates metals, plastics and paper and is capable of sorting up to 320,000 tpa. The MT plant also separates approximately 40,000 tpa of organic waste for treatment through the Anaerobic Digestion (AD) plant.
16. The Anaerobic Digestion (AD) plant uses microbes to break down the organic waste in the absence of air to produce a gas and compost like output known as digestate. This process will produce around 1mw per hour of energy.
17. The remaining waste is burnt in the Energy from Waste (EfW) incinerator. The heat from the EfW is used to produce steam and drive a

turbine which produces electricity for export to the national grid. The capacity of the EfW is approximately 320,000 tpa and it will produce around 24mw per hour of energy, which is enough to power around 40,000 homes.

Construction and commissioning

18. The construction is now nearing completion and the final stage before full service commencement is the commissioning period.
19. The commissioning period started in July 2017 and it tests the full operation of the facility over a 6 month period. A requirement of this is that during this period the volume of waste is built up to the volumes that will be delivered at service commencement. This gives the opportunities to test all elements of the facility individually and together.
20. The commissioning phase is nearing completion and the Mechanical Treatment and Energy from Waste facilities have been operating for the required continuous days, with the required volumes of Waste in order to fulfil the requirements for the sign off for each of the components. During commissioning there has been the expected process issues and equipment failure, but these have been managed within the parameters of the project and the contract.
21. The commissioning process for the Anaerobic Digester involves the build up of material in the tank and the addition of micro organisms that break up the material as part of the Anaerobic Digestion process. During commissioning the levels of ammonia in the tank have risen to levels where the micro organisms have not been at optimum health (this has been due to a higher nitrogen to carbon ration in the input material than envisaged). If the micro organisms in the tank are killed the whole process must start again including the emptying and cleaning of the tank.
22. Proactive mitigating measures have been put in place to counteract the balance of input materials and it will take time for the effect to be determined. The consequence is that the take over test (a 28 day process to test that the required volumes of waste can be processed by the AD), had caused a delay in full service commencement by around a month. The take over test is now complete and the aim is still for full service commencement to be in the expected February window and work is ongoing to ensure that the balance of the AD is right.

23. The risk of a delay in full service commencement is with the contractor as the cost per tonne of waste during the commissioning period is lower than the Unitary Charge (the fixed cost to the council over the 25 year period) after full service commencement. It is therefore in the interests of the contractor to resolve any issues as quickly and effectively as possible and move into full service commencement.
24. The transfer station at Harewood Whin has functioned well during the commissioning period and work is ongoing between the NYCC, CYC, Yorwaste and Amey to ensure that the waste delivered to AWRP can be processed as efficiently as possible. The commissioning period has required CYC refuse collection vehicles to tip at the transfer station and at the landfill site and an exercise is ongoing to ensure related performance data can be reconciled. Once full service commences all waste will be tipped at the transfer station for onward transport to Allerton Park.

Partnership with North Yorkshire County Council

25. The 2010 JWMA provides for sharing of costs between NYCC and CYC relating to the procurement of the long term service provided by AmeyCespa, but has not been renewed since NYCC let the Contract with AmeyCespa so does not reflect the final commercial position achieved nor does it extend to arrangements for formal management of that contract which if not included will entail a duplication of work by the Councils. In order that CYC and NYCC can fully exploit the AmeyCespa contract and optimise the management and auditing of both Councils waste disposal functions both Councils officers are recommending to formally collaborate in the management of contracted waste disposal services including AWRP but also for other waste disposal authority functions provided through Yorwaste and other third party contractors.
26. The objectives of further collaboration and joint management of contracted services are to:
 - Minimise bureaucracy
 - Reduce duplication of effort
 - Improve decision making
 - Improve resilience
 - Share resources and assets
 - Improve capability to recognise and take advantage of opportunities

- Strengthen team skills
- Achieve optimum balance of waste movements to disposal facilities to ensure maximum joint financial benefit/ least cost to both parties

27. Work is currently ongoing between the teams at CYC and NYCC to agree the detail of the collaboration and it is expected that the final agreements will be ready for consideration by Executive in the spring 2018.

Risk management

28.

Risk area	Potential Impact
Waste composition	The contract states that through it an additional 5% recycling will be achieved. This is dependent on the composition of the materials being sent to AWRP reflect the compositions that were assumed when the requirements for AWRP for specified.
Waste Tonnages	The council has access to a range of tonnages from a minimum (Guaranteed Minimum Tonnage) to Maximum Threshold. Should the actual tonnages be outside this range there will potentially be costs to the council(s)
Change in Law	Should there be a legislative change that the Operator is able to claim a Qualifying Change in Law could increase costs to the council(s)
Inflation / Landfill Costs	Whilst inflation is only applied to a small proportion of the costs, the level will impact overall costs. There are also pass through costs such as landfill costs that are payable by the council(s) which will be at the prevailing rate.
Teckal Waste	The Council(s) have sought to optimise revenues by using Waste sourced by Yorwaste to be used in the facility. These revenues will be dependent on tonnages available and the prevailing market price for waste in the geographical area

Implications

29. This report is for information only and there are no implications arising from the report recommendation.

Recommendation

30. Members are asked to note and comment on the content of this report.

Reason: To inform Members on the progress of the Allerton Waste Recovery Park project.

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Wards Affected:

All

For further information please contact the author of the report

Annexes

None

List of Abbreviations Used in this Report

AWRP – Allerton Waste Recovery Park

NYCC – North Yorkshire County Council

CYC – City of York Council

HWRC – Household Waste Recycling Centres

Bring bank – A bring bank is a recycling disposal point that can be situated in a number of locations commonly supermarket car parks

24mw – energy output, mw stands for mega watts

TPA – Tonnes per annum