

PART A: Leeds Recycling and Energy Recovery Facility (RERF) – Summary of the operational contractual arrangements with Veolia

The RERF contract is a 25-year PFI contract based on the Standardisation of PFI Contracts V4 (SOPC4) with derivations where required. It is a contract only for the treatment of residual waste. Currently it is in the 6th year of operations with the contract not due to expire until 2041.

It is a Design Build and Operate contract, scaled specifically to deal with the Council's projected waste tonnages over the life of the contract, with a small amount of excess capacity to give flexibility to cope with waste flow variations and providing some third-party waste capacity.

The technical solution provided by Veolia is a Mechanical Pre-Treatment Facility for the extraction of recyclates at the front end of the process, followed by Energy from Waste for treatment of the waste that cannot be recycled.

There are three Key Targets in contract these are:

- Diversion from landfill – not less than 96.5% of contract waste
- BMW diversion – limits set for each year of the contract; and
- Recycling – 10% front end recycling (reduced by variation to 2% in 2020) – 2.3% achieved in 2020/21.

In addition to the key targets there is an extensive reporting regime and a performance mechanism that covers all aspects of the service and which the contract management team continuously monitor against, to ensure day to day performance standards and service expectations are achieved. If not achieved, the relevant associated penalties are applied, and resolutions sought and monitored to a successful conclusion.

As noted above, the recycling target was reduced in 2020 to 2%. The only solution for persistent breach of this key target under the contract was termination. All parties considered this to be an otherwise successful contract, delivering many other benefits. The contractor had worked hard to resolve the issues with recycling by increasing shifts from 2 to 3 daily, introducing an extensive MPT cleaning regime, installing additional access to all areas of the plant for better cleaning, replacing key and significant pieces of equipment, and building an additional facility to try to clean the paper and card to improve the quality to make the materials more marketable. The outcome of all these initiatives provided a small improvement in the recycling rates, but not enough to meet the key target and therefore an alternative resolution was sought. With DEFRA's approval, a proportion of the MPT has been mothballed for a period of 7 years and the recycling key target has been temporarily reduced. Metals of all types are currently the only materials being targeted for extraction in return for a significant annual compensation payment from Veolia.

It should be noted that whilst front end recycling has reduced, this is not the whole story in 2020/21. Only 0.14% of waste sent to the facility was landfilled, and the BMW sent to landfill was also therefore minimal. In addition, backend recycling is also undertaken. Whilst this can't be counted towards our recycling targets in England, it involves a further extraction of post-incineration metals. The bottom ash, which is approximately 23% of the input weight, is also recycled and used in the construction industry. The fly ash is also beneficially used for the neutralisation of industrial acids. So, in 2020 / 2021 of the 190,374 tonnes of contract waste that was delivered to the facility, only 0.14% or 286 tonnes went to landfill, the rest had a 'beneficial' use, whether that be from recycling, or creating energy, which is impressive.

The facility offers a range of other benefits. It supplies up to 11MW of electricity to the national grid. The newest and most significant introduction, from an environmental perspective, is that it provides the heat for the Council's District Heating Network. For each MW of electricity, if converted to heat, the efficiency is multiplied by a factor of 5, so this really does improve the environmental performance of the plant. It provides cost effective, environmentally friendly heat and hot water to an ever-increasing number of homes and businesses across the city, helping to tackle fuel poverty for some of the most deprived communities.

There is an impressive visitor centre on site, which shows key aspects of the waste process. We host visits for schools, universities, community groups and individuals highlighting the importance of the environmental benefits delivered by the facility. This also helps to promote the Council's key recycling messages.

The contract management team are supported by DEFRA in all aspects of contract monitoring and change. There are dedicated monthly meetings with an appointed transactor, who also attends regular meetings with senior members of both the Council and Veolia teams. They also host quarterly networking meetings for all Council PFI contract management staff and periodically offer waste specific contract management training.

This facility and contract have fundamentally changed the way Leeds City Council deals with residual waste, it provides a modern, safe, efficient facility for the collection service, it has improved our environmental performance as a whole saving approximately 40,000 tonnes of carbon per year (when compared to landfill) which is the equivalent of taking 19.5k cars off the road. It generates up to 11 MW electricity which is enough to power 22,000 homes and now provides heat to the district heating network, which adds further carbon benefits. The forecast saving for the Council at the start of the contract was expected to be approximately £7m per annum over the life of the contract when compared to the previous solutions.

PART B: Summary of the contractual arrangements to sort Leeds' green bin waste at the Materials Recovery Facility (MRF) owned and operated by HW Martin

The contract encompasses the delivery, processing, treatment and onward recycling and sale of kerbside collected recyclable waste from the residents of Leeds.

The original framework was let in 2013 and was subsequently extended and modified to its current position to date. Due to the uncertainty regarding the future "consistency of collections" requirements within the forthcoming Environment Bill and the continued uncertainties and risk cause by Covid-19, the service has modified the current contract in accordance with Regulation 72 (1) (b) (i) and (ii) of the Public Contracts Regulations and extended the expiry by a period of 2 years with the expiry of November 2023. It is anticipated that we will go to the market/tender during this period for a new contract.

Around 26 RCV vehicles are tipped per day (Mon – Sat) roughly equating to around 41,000 tons yearly.

We currently accept the following materials in the green bins:

- ✓ Newspapers and Pamphlets
- ✓ Mixed Paper
- ✓ Cardboard

- ✓ Steel cans
- ✓ Aluminium cans
- ✓ HDPE Plastic (Such as milk bottles)
- ✓ PET Plastic (such as clear drinks bottles)
- ✓ LDPE Plastic film (such as carrier bags)
- ✓ PP Plastic (such as plastic food trays)

Using a weekly sampling system, a monthly sample is generated to split the materials for use in the mechanism below.

Other materials not targeted/advertised at kerbside are recovered and recycled by HW Martins:

- ✓ Scrap metal
- ✓ Mixed rigid plastics
- ✓ Textiles

The current contract includes an innovative open book risk share pricing mechanism whereby a processing cost is charged per tonne for all the mixed material delivered to be processed and separated by HW Martin. Then, according to the tonnage of materials separated the council is guaranteed to receive at least market rate for these materials then any sales above market value are split 50/50 between the Council and HW Martin. This cost and income offset against each other either generates a cost or income to the council depending on the strength of the markets.

The percentage of tonnage delivered deemed waste after processing then incurs a disposal cost to the council.

Due to the volatile and international nature of the recyclable material market which is reliant on external factors such as; demand, Packaging Recovery Notes (PRNS), capacity, oil/virgin material prices, transport costs and international tariffs all affect material prices. This mechanism is currently providing a net income to the council and is currently around £300k under the YTD budget for the service.

Performance and outcomes are measured using the information gathered from the monthly reporting whereby material tonnes and prices are tracked. Things like wastage rate (the amount of material delivered deemed waste), operational issues, rejections at gate (waste too contaminated to sort), income received, market and sales information. Operational issues, H&S issues, legislative adherence are also monitored through our contract management process. As with all contracts managed by the team, we undertake 6 monthly due diligence audits on all waste contractors; whereby they are audited on things such as, H&S compliance, permit/planning compliance, operational compliance, legislative compliance and industry good practice. Any adverse findings are communicated, and a plan is put in place for rectification/remediation.

PART C: Leeds' glass recycling contract with URM

The current Glass collection and recycling contract is awarded to URM through an interim arrangement agreed in July 2015 and further extended through waiver of CPRs in 2020 until 2022 to allow time for a more comprehensive procurement to be undertaken.

An options appraisal and market sounding was conducted to assist in the scoping of this procurement and it identified some tangible and viable opportunities for improvements in having a longer term contract put out to tender. However, due to the current delay in the national Resource and Waste Strategy (RWS) implementation, it is considered that a full procurement should only be

undertaken once the strategy both locally and nationally is clearer, so that any future contract can fully reflect the scope of service required in respect of glass collection and recycling in Leeds. For example, the RWS sets out both the ambition to make the kerbside collection of glass a legal requirement for Councils as part of the consistency of collections aim, and yet also to introduce a national Deposit Return Scheme (DRS) that would include glass.

Leeds City Council own the 700+ bottle banks at bring sites throughout Leeds – there is a small kerbside round that collected glass from high rise properties. URM are contracted to empty the banks and using the councils bulking facility at Kirkstall haul the glass to their recycling facility in Knottingley. The glass material is then sorted and separated into the different colours and other factions such as jar/bottle lids. Adjacent to the recycling facility is a glass manufacturing plant where the sorted glass is made into new bottles.

In 2020/2021 we collected 13,977 tonnes of glass which is the equivalent to roughly 25 million standard wine bottle equivalents (assuming 550g for a standard wine bottle).

Collecting the glass this way ensures that a higher % of glass can be remade back into bottles/jars opposed to other methods of collecting it whereby a significantly smaller proportion of the glass can be remade into bottles/jars and the rest of the material used for aggregate/other applications.

Again, like the contract for recyclables at the kerbside, the arrangement is based on a service cost (price per bank) against an income market price for glass with a guaranteed floor price of £12 p/t to mitigate against adverse market conditions (current market price is £3.75 p/t).