

**Manchester City Council
Report for Information**

Report to: Communities and Neighbourhoods Overview and Scrutiny
Committee – 11 January 2011

Subject: Visit to the Longley Lane Facility, Greater Manchester Waste
Disposal Authority

Report of: Governance and Scrutiny Support Unit

Summary

This report provides a summary of the findings of the Committee's visit to Longley Lane Household Waste Recycling Centre on 14 December 2010. The aim of the visit was to see the new facilities at the centre and learn more about the processes first hand.

Recommendations

The Committee is invited to comment on the report.

Wards Affected:

All

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Background documents (available for public inspection):

None

1.0 Introduction

1.1 The Communities and Neighbourhoods Overview and Scrutiny Committee has taken a keen interest in the facilities for recycling in the city and how they have improved over the years. The site at Longley Lane in Sharston has undergone extensive redevelopment and houses a number of facilities which are new to the city. The Committee decided to visit the site in order to see the facilities and learn more about the recycling process.

1.2 Councillors John Flanagan, Norman Lewis and Bernie Ryan attended the visit. They were joined by Councillor Neil Swannick, Chair of Greater Manchester Waste Disposal Authority (GMWDA) and Eleanor Fort from the Governance and Scrutiny Support Unit. The tour of the site was conducted by Jon Griffiths and Justin Lomax of Viridor Laing, the company who were contracted by GMWDA to redevelop the site.

2.0 Visit

2.1 The visit began in the new Education Centre for a health and safety briefing. This was built in order to provide a site in which to promote awareness of waste management, especially for young people. Members were shown a map of the new site and told about the redevelopment and the benefits it would bring. The biggest challenge the redevelopment posed was keeping all the facilities at the site operational throughout the period. Members were glad to hear about the benefits of the redevelopment, including the creation of 100 new jobs and raising the skill level of existing jobs. The site would also produce twice as much energy as it would need to run, meaning the surplus could be sold to the national grid.

2.2 Members were then given a tour of the site, starting with the Materials Recovery Facility (MRF). Unfortunately this was temporarily not in operation at the time of the visit. This facility prepares and sorts cans, glass and plastic bottles. These materials are generally left in a single container for kerbside collection. The MRF sorts them into the different types of material and takes out any contaminant materials. Members were surprised that there was still a significant amount of contaminant material disposed of with recycling. They had, however, seen the new campaign in the local media, the intention of which was to inform the public of what can and cannot be recycled in the kerbside collection.

2.3 Magnets are used to remove steel cans from the rest of the recyclable material. Aluminium cans and foil are removed by a metal separator, which are put into bales. Water is used to float off any lids that have been left in the waste. Glass is broken up and then separated according to colour.

2.4 Members were then shown the Mechanical Biological Treatment (MBT) and Anaerobic Digestion (AD) Facility and the Green Waste Shredding Facility (GWS).

2.5 Finally members were taken to the Household Waste Recycling Centre (HWRC). This is where members of the public can bring their waste directly to the site to dispose of waste materials. All household waste can be disposed of at the HWRC, including materials and items that cannot be left in the kerbside collection, such as refrigerators and televisions.

2.5 Further details of the facilities at Longley Lane can be found in the appendix to this report, which has been provided for members by GMWDA to supplement the findings of the site visit.

3.0 Conclusion

3.1 Members were impressed with the new facilities at Longley Lane and found it extremely interesting to see the process first hand. They thanked Councillor Swannick and the team at Longley Lane for the opportunity to see the facilities and for providing such an informative tour.

Appendix



Greater Manchester Waste Disposal Authority Longley Lane Facility

The site has a number of facilities, including:

Mechanical Biological Treatment (MBT)

A new MBT facility is currently being fitted out, consisting of a Mechanical Sorting Plant and Anaerobic Digestion (AD) facility. This is located on the north of the site, on the land currently occupied by the existing processing facility. The existing waste handling facilities have been relocated and improved. Works are ongoing and are due to be finished by Spring 2011. After this testing and commissioning will take place for a further 6 months before the facility will be completely finished.

MBT is the name given to several processes that are used to treat the waste that arrives at the plant. As the name suggests, MBT involves both mechanical and biological methods.

The 'mechanical' part refers to the processes that are used for preparing and separating the waste when it arrives at the plant. There are a number of waste preparation techniques, such as shredding and sieving, which are used mainly to reduce the size of the waste. Further methods, such as screens, separators, and secondary crushing, are then used to separate the waste into 'fractions'. Lightweight fractions are separated to produce a high calorific value 'solid recovered fuel' which is then transported by rail to a combined heat and power plant which produces steam and electricity (green energy) rather than using fossil fuels. The biodegradable fraction is mixed with water in anaerobic digestion tanks to produce methane. The methane is used to run engines on site to produce electricity to use at both Longley Lane and to export to the National Grid. The anaerobic digestion material is subsequently dewatered and used as a low calorific value solid recovered fuel material.

Materials Recovery Facility (MRF)

A new MRF has been built on the site to process and sort all of Greater Manchester's co-mingled recycling (glass containers, cans and plastic bottles). The facility is now complete and accepting Greater Manchester's co-mingled recycling.

Using this system, less than 5% of the material that enters the MRF leaves it as waste, significantly reducing the amount that ends up going to landfill. The MRF has to recover 95% of the 'input tonnage' that goes into it.

This MRF will prepare and sort the materials that most of us recycle in a single container (co-mingled) at the kerbside: cans, glass and plastic bottles. It uses a range of state-of-the-art preparation and separation technologies to make sure each bale of steel, aluminium and plastic bottles, as well as glass, which is stored loose, is in the best possible condition ready for recycling – hence the term ‘clean’ Materials Recycling Facility.

Transfer Loading Paper/Card

Waste Collection Authorities collect paper and cupboard from households and deposit this at Longley Lane in a dry area adjacent to the MRF. There is a check for quality before being relocated into bulk vehicles who take it direct to processors.

Green Waste Shredding Facility (GWS)

The new GWS receive and shred green garden waste. Green garden waste from kerbside recycling collections and Household Waste Recycling Centres (HWRC) is transported to a purpose-built, partially covered structure. Once at the facility the material is unloaded, passed through shredding machinery and then ‘bulked’ – collected and stored until there is a large enough volume for transfer.

This shredded material is sent to composting facilities, creating a versatile material that has practical uses in agriculture, horticulture and landscaping.

Household Waste Recycling Centre (HWRC)

A new and enlarged HWRC has replaced the previous, dated facility. Ground preparations began in January 2010 and the facility was completed and opened up to the public in May 2010.

Waste Education Centre

A new Waste Education Centre has been built, to promote awareness of waste management to young people and other interested visitors. The building has been completed and the Education part is being fitted out.