



WIN case study October 2010:

Keeping MRF Contamination in check - Find out how Project Integra audit the contamination at the Materials Recovery Facility in Alton



Summary

Project Integra has a strong emphasis on quality of recycling, and to that end a permanent materials analysis facility (MAF) has been developed at Alton MRF to analyse both recycling inputs and outputs, and residual streams.

The MAF enables the partnership to better understand current performance, highlight specific areas for improvement and target funding at projects to address high contamination, improve quality, and increase capture of recyclables.

Data is also used to accurately apportion income generated from the sales of recyclables, and provides a more comprehensive assessment of the performance of each authority for WasteDataFlow.

What were the drivers for change?

- Maximising income from recycling
- Maximising carbon benefit of recycling
- Improving recycling performance and diverting waste from landfill

Background

The Alton Materials Recovery Facility (MRF) was opened in 2005 and is one of two MRFs in Hampshire, which together handle up to 157,000 tonnes of dry mixed recyclables every year. Under contract to the Waste Disposal Authorities within Project Integra*, Veolia Environmental Services is responsible for the operation and maintenance of the facility and the income from the sale of the recyclables is shared 50/50 between Veolia and the Waste Collection Authorities.



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What did they do?

In 1999, Project Integra embarked on Hampshire's first county-wide waste composition analysis to gain a greater understanding of household waste arisings for the purpose of developing future waste strategies. Furthermore, in 2003 a study was carried out to identify the composition of dry mixed recyclables going into Hampshire's two Material Recovery Facilities.

Both studies highlighted the versatility of waste composition data in terms of performance monitoring and providing an evidence base. As a result, it was agreed by the Project Integra partnership to build a facility which could provide continuous waste composition data.

As a member of the Project Integra Partnership it was agreed the Veolia Environmental Service would design and seek quotes for developing the facility. Hampshire County Council secured funding for the MAF from the National Waste Minimisation and Recycling Fund.

The construction of the facility took approximately 2 months. A testing period, to ensure processes and equipment worked effectively was an additional month.

The facility consists of a hopper with two automated conveyor belts, a cabin with nine sorting chutes and a set of electronic scales. The facility also has two collection vehicles (a 7.5 tonne lorry and a pick-up and trailer), a forklift to move samples around the facility, and over 60 crates to collect samples within. To ensure it operates effectively and efficiently, five staff members are employed at the facility; a manager, a supervisor, a collection driver and two sorters. All samples are hand sorted.



Cost

The Materials Analysis Facility cost approximately £100,000 to develop. This included the purchasing of a forklift truck, weighing scales and sampling crates for use by the facility.

Benefits

The MAF provides regular, accurate data to all partners, which enables the partnership to better understand current performance, highlight specific areas for improvement and target funding at projects to address high contamination, improve quality, and increase capture of recyclables.

Data is also used to inform a number of areas including accurate apportionment of income generated from the sales of recyclables, and providing a more comprehensive assessment of the performance of each authority for WasteDataFlow.

In 2007, the Environment Agency highlighted this approach as setting a standard for best practice in this area in their 'Data Quality Report



for the Landfill Allowances Trading Scheme'. In 2008, the MAF won in the Best Local Authority Recycling Initiative category at the Letsrecycle.com Awards for Excellence.

Using the MAF to monitor performance helps to maintain the quality at every stage of the collection and sorting process and strong and lasting relationships have been established with reprocessors because they know that they can rely on high quality material from Hampshire.

Financial savings attributed solely to the MAF are difficult to quantify as recycling rates may also be effected by other factors, for instance communication campaigns. The MAF has ensured however that whilst recycling rates increase, the collection of good quality material is maintained. Ensuring good quality material is processed and secured markets achieved has been particularly important recently during the challenging market climate.

Lessons Learned

The location of an analysis facility is key. The most difficult aspect of analysis is sample collection and transportation. To ensure the facility always has material; to analyse authorities would need to identify how many samples they think they would be able to transport and how long it takes. Alton MRF is

ideally located in Hampshire with good transport links to all collection authorities delivery points.

Flexibility of developing the facility further. The MAF is able to sort material into more than nine of categories by processing material through the facility a number of times. For future facilities it would be useful to plan for the potential for further development e.g extending sorting cabin. Extending the sorting cabin would create space for additional staff and enable an increased number of sorting chutes to be used.

Notes

*Project Integra is the partnership of all district authorities in Hampshire, Hampshire County Council, the unitary authorities of Portsmouth and Southampton, and a private waste contractor, Veolia Environmental Services (VES), working together to provide an integrated solution to Hampshire's waste.

Links and Contacts

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