

## Materials Recovery Facility – Waterbeach, Cambridge

### MRF – Background

In 2014, Amey was awarded a five-year contract with the Cambridgeshire and Peterborough Waste Partnership (RECAP) to process recyclable materials collected from households across Cambridgeshire. This contract maximizes the usage of the facility, helping the local authorities to achieve their recycling and cost saving targets. The location of the MRF at the Waterbeach Waste Management Park, means it complements Amey's other waste treatment facilities (Mechanical Biological Treatment, In-Vessel Composting and Landfill) which are also on site. This allows Amey to offer a comprehensive waste management service to our clients.

### Production Statistics

- MRF Capacity: 100,000 tonnes per year.
- Shift Pattern: 2 X 12 hour shifts, 7 days per week.
- Processing Capability: 280 tonnes per day, 1,960 tonnes per week.
- Plant Availability: Working at 80% operational time.
- Producing 500 bales of recyclable material per day. 70 vehicles loaded for onward recycling destinations per week.
- Recovering 12 grades of recyclable material;

Grade Produced	Tonnes Per Week	% of output
Mixed Paper	500	25.51%
OCC	100	5.10%
Aluminium	20	1.02%
Steel	50	2.55%
PET Clear	50	2.55%
HDPE Clear	30	1.53%
PET Coloured	10	0.51%
HDPE Coloured	10	0.51%
Mixed Plastics	40	2.04%
LDPE	5	0.26%
Beverage Carton	5	0.26%
Glass	600	30.61%
MRF Residue	540	27.55%
<b>Total</b>	<b>1960</b>	<b>100.00%</b>

### Sorting Technology

- Hi-speed elevated news sorter and cardboard separator: Disk's rotating on shafts push the applicable fraction upwards whilst other material falls through the shafts.
- Ballistic separator: separates 2D from 3D materials.
- Near infra-red polymer sorters (NIR's): separates different types of plastic as well as paper.
- Overband magnet: separates ferrous metals.
- Eddy current separator: separates non-ferrous metals.
- Glass breaker: crushes glass between rotating shafts which is then further cleaned by an air separation unit.
- 8 sorting cabins: 15 staff per shift ensure quality on conveyor belts is high quality. Any reject material is removed.

