

### Report on the Environmental Issues Group's visit to Chester's Recycling Plant

Six members of the Environmental Issues Group visited Chester's Materials Reclamation Facility (MRF) at Bumpers Lane on 26 April 2007. Dorothy Clift had set up the visit with the expectation that we would be able to see the plant in operation, but, unusually, the plant had been shut down due to non-delivery of a fresh supply of the banding that is used to bale the various wastes before sending them on for further processing. This meant that the plant was relatively quiet and free of smells, and the supervisor, Russ Kendrick, had more time to describe the plant to us and answer all our questions.








Most of Chester District's residents already separate their household waste into pink bags for plastics and tins, green bags for paper and clothes, and black bags for other waste. Black bags are taken to WRG's Gowy Landfill Site, and pink and green bags to the MRF at Bumpers Lane where the contents of the bags are separated into various categories of plastic, paper and other wastes before being sent on for further processing. It should be stressed that the MRF doesn't process the various waste streams it produces – these are processed by companies in other parts of the UK and Europe. In the case of plastics, for example, bales of different plastics are presently sent to a commercial depot in Yorkshire before being sent on to a commercial company in Holland for further processing. The MRF was built in the mid-nineties and was a 'state of the art' facility at the time and the first in Cheshire. At that time technology wasn't available to allow automatic separation of plastics into different types, so the plant was designed for the waste streams to be separated manually. It was a surprise to learn that only 14 operators are needed to separate the contents of the vast number of pink and green bags that are delivered to the site.

The weights of black, pink and green bags are recorded, and these weights are used to draw up a 'recycling league' for Chester District. The Chester City Council website reports that Westminster Park presently heads the 'recycling league' by recycling 30.49% of its waste. These recycling statistics are questionable as they don't include household waste that is dumped in Cheshire County Council's Household Waste Recycling Centres, of which two, namely those at Tattenhall and Bumpers Lane, lie within Chester District. The Tattenhall site is limited as it won't accept plastics, oil, timber, rubble and card for recycling. The Bumpers Lane site is better, albeit far too small and congested for a city the size of Chester, but it can't accept plastics for recycling either, notwithstanding Chester's MRF being on an adjacent site! Who knows, the two sites on Bumpers Lane may start talking to each other if the plans for a unitary authority proceed!

**Green Bags** can contain paper, cardboard (up to 3-ply), clothes and shoes, and plastic carrier bags. The bags are emptied onto a conveyor belt from which the various waste streams are separated and baled. We were given a few recycling hints, as follows:

- Paper shouldn't be contaminated with food
- Waxed paper can't be recycled
- Tetrapaks can't be recycled, primarily because of their complicated composite structure
- Envelopes can be recycled if the plastic 'windows' are removed first
- Shredded paper and clothes/shoes should ideally be contained in their own carrier bags or green bags
- Clothes are recycled to the third world and should be free of oil, grease and paint
- Single shoes can't be recycled - there aren't many one-legged people in the third world!

**Pink bags** are emptied onto a conveyor belt from which the cans, tins and various types of plastic are separated and baled. The plastics industry has developed standard marking codes to help consumers identify the main types of plastic. These codes can usually be found on the bottom of plastic bottles or containers, and are as follows:

Code	Plastic type	Use
	polyethylene terephthalate PET	Bottles for soft drinks and water. Microwavable food trays.
	high density polyethylene HDPE	Bottles for milk, water, juice, cosmetics, shampoos, detergents, household cleaners and washing up liquid.
	polyvinyl chloride PVC	Bottles for squash (eg Robinsons), mineral water and shampoos.
	low density polyethylene LDPE	Container lids. Squeezable bottles. Carrier bags and bin liners.
	polypropylene PP	Containers for yoghurt, margarine, take-away meals. Microwave meal trays.
	polystyrene PS	Plastic cups, plates, bowls, cutlery. Hinged take-away containers. Meat and poultry trays. Some rigid food containers. Products can be foamed or non-foamed – see below.
	other plastics OTHER	Specialised applications, eg custom packaging.

The 'Recycling Calendar 2007', which every household in Chester District should have received, states that only plastic codes 1, 2 and 4 can be recycled, but, in practice, we were told that the MRF at Bumpers Lane is able to recycle codes 1 to 6, provided they aren't contaminated with food or drink, with the exception of:

- Foamed polystyrene (code 5)
- Highly-coloured rigid polypropylene or polystyrene (codes 5 and 6). Rigid PP and PS containers can be recycled if they are clear or white.

We are very grateful to Russ Kendrick for his patience and for the time he spent with us. Tony White, a member of the Environmental Issues Group, took several photos during our visit, some of which have been posted on the Chester U3A website. We found the visit so interesting that we are fired with enthusiasm to visit other recycling facilities. Next port of call is likely to be the composting and landfill facilities at WRG's Gowry Landfill Site.

John Hammond 16 May 2007