

What really happens to our blue and clear recycling bags?

A visit to DS Smith Recycling

Summary report by Peter Reay and John Rawlinson (photos by Peter Reay)

Devon is the top recycling county in the country, recycling 55.3% of its household waste in 2011-12, and aiming to increase its recycling and composting rate to 60% by 2019-20, and 65% by 2025-26. . However, while recycling centres (such as the DS Smith centre visited here) are continuing to increase the proportion they are able to recycle, the overall amount of waste recycled in the county has fallen very slightly in the last year to 54.8%. ¹.

A suggestion to find out more about the fate of recyclable waste collected from South Brent, and whether any improvements could be made at source, was made at the 'Pop-up shop' run by Sustainable South Brent (SSB) during 'Low Carbon Week'.

As a result, a small group visited DS Smith Recycling at Cattedown, Plymouth on 21 June 2013. They included John Rawlinson, Dave Butcher, Mavis Hewitt and Peter Reay from SSB and South Brent Parish Council (JR), together with Sadie Barlow and Charlotte Jones from South Hams District Council Waste Management Department.

The company

"DS Smith Recycling is a sustainable waste management company with no investment in landfill; this means that we are committed to working toward zero landfill"

"Who delivers truly sustainable waste management? We do.

Who diverts over 2 million tonnes of waste from landfill? We do."

(DS Smith 2013).

The company is part of the DS Smith Group, the largest integrated paper and packaging company in UK, and collects and processes 5.4 million tonnes of paper and cardboard each year in the UK and across Europe. Its full service range includes: cardboard recycling; paper recycling; confidential security shredding; plastics recycling; mixed dry recycling; organics and food; construction and demolition; hazardous waste; and disposal of any residuals.

Cattedown is one of 23 Recycling Facilities operated by the company in the UK. Sources of raw material include industrial (such as the printing industry), commercial and domestic.

One of the company's contracts is to handle the blue and clear sacks collected by South Hams District Council. Waste from South Hams, including that from South Brent, is delivered to either the Plymouth or Exeter sites or to Tor Quarry, Kingsbridge. Deliveries to the latter site, which does not process the waste, are eventually sent to either Plymouth or Exeter.

¹ Devon County Council *et al.* 2013

Procedures ²

1. Clear and blue sacks, stacked separately on the South Hams recycling collection vehicles, are unloaded into separate piles. These are then pushed into the sorting sheds by forklift truck.
2. Sacks are torn open by hand, and any inappropriate material (e.g., cardboard from a clear sack) is removed and eventually sent to the appropriate destination on site for further processing. Pieces of wood usually go for chipping.
3. The empty sacks are collected, and they too go for recycling.
4. Piles of target items are then pushed by forklifts towards conveyor belts.
5. Blue sack contents end up as mixed paper and card, but large pieces of cardboard may be pulled out and added to a pure cardboard pile collected from commercial sources.
6. White sack contents move up one conveyor belt which then drops the material onto another, lower down and at right angles, to help spread it. It then passes under an over-band magnet to remove steel items, the remainder being sorted by hand to remove aluminium items from the plastic. Due to the relative value of aluminium and steel, less effort is made to remove plastics from the latter. Most of the plastic items end up as mixed plastic, but any items of rigid plastic or foam are usually separated.
7. Thus the main end-products from the blue and white sacks include:



mixed paper and card



aluminium (free of plastic)



steel (usually contaminated with some plastic)



mixed plastic

and hard plastic; and foam.

² Variation in procedures from district to district and through time may arise because of operational differences between companies, changes in technology and fluctuations in prices of waste materials.

8. Also part of the output of DS Smith are bales of card, paper, metals and plastics, each of several different types, from commercial and industrial sources. This output is independent of the contract with South Hams District Council.
9. All these products are baled, stored outside and eventually collected by lorry. For example, just short of 50 tonnes of domestic plastic go out each month, in about 100 bales.
10. Any material that cannot be recycled goes to landfill. This is kept to a minimum, and now only amounts to 4-5 tonnes every 2-3 months.

Problems – and how you can help improve the effectiveness of recycling

- **Glass and needles.** Glass items and needles are a potential safety hazard and add to sorting time, so should never be put in the sacks³. Glass bottles and jars can be recycled at bottle banks in the district see <http://www.southhams.gov.uk/article/2085/Local-Recycling-Banks>
- **Food and drink remains.** These add to sorting time, and make sorting unpleasant, so any food containers for recycling should be rinsed reasonably clean. Waste food products should be disposed of elsewhere (compost heap, brown bin).
- **Fruit juice cartons.** Although these can be recycled by a specialised recycler they are not sought. . There are five ‘tetrapak’ recycling banks located across the South Hams, for information please see <http://www.southhams.gov.uk/article/2085/Local-Recycling-Banks>
- **Wrong sacks.** Blue waste in clear sacks and vice versa adds to sorting time, so the correct sack should always be used.
- **Lids.** Plastic and metal lids can be included in the clear sacks, but ideally any paper or card linings should be separated and if paper be put into the blue sacks.
- **Squashing metal containers.** This helps to reduce the volume of material, and also minimizes the likelihood of contamination, e.g., by plastic items getting caught within a metal can.
- **Tying the sacks.** As the sacks are torn open rather than being untied, a tight knot will not affect sack opening, but will help to stop contents of the sack escaping prematurely. However, the sacks should not be tied together, as this increases the sorting time and also creates problems for the collection crew.

Any discrepancies between SHDC recommendations (in the Recycling and Waste Collection Services leaflet) and advice given at DS Smith Recycling usually result from differences between the contractor’s current procedure and those operating when the original contract was set up. See also Recycle Devon on line A-Z – see below.

³ If people have syringes or other clinical waste to dispose of, they can contact South Hams District Council on 01803 861234 for advice about how to dispose of this waste.

Thanks to:

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- Sadie Barlow at South Hams District Council Waste Management Department for arranging the visit.

References and resources

Devon County Council, South Hams District Council, East Devon District Council, Torridge District Council, North Devon District Council, Mid Devon District Council, West Devon Borough Council, Exeter Town Council and Teignbridge District Council (2013) *Waste and resource management strategy for Devon review* Exeter: Devon County Council

http://www.devon.gov.uk/dcc_waste_strategy_review.pdf

DS Smith Recycling (2013) *We do* (brochure) West Malling Kent: DS Smith

South Hams District Council (2011) *Your recycling and waste guide* Torquay: South Hams District Council

<http://www.southhams.gov.uk/CHttpHandler.ashx?id=3023&p=0>

Websites

Recycle Devon <http://www.recycledevon.org/>

Videos: <http://www.recycledevon.org/content/what-happens-to-your-recycling-0>

A-Z: <http://www.recycledevon.org/a-to-z/domestic-materials-a-to-z-letter-a>

Devon County Council <http://www.devon.gov.uk/recycling>

South Hams District Council Recycling and waste:

<http://www.southhams.gov.uk/article/632/Recycling--Waste>