

MATERIAL ACTION PLAN FOR CARPET

*STAKEHOLDERS MEETING 2PM-5PM TUESDAY 13TH OCTOBER 2009
DEFRA, NOBEL HOUSE, 17 SMITH SQUARE, LONDON SW1P 3JR*

MINUTES

ATTENDEES

Sean Smith	Defra
Keith Yates	Headlam Group
Paul Herbert	Carpetright Plc
Kevin Harvey	
Paul Gibbs	4Recycling Ltd
Mike Walters	John Lewis Partnership
Beverley McFarlane	Tyndale
Stephen Baker	LARAC
Steve Chamberlain	Interfloor
Jeff Lane (Chairman)	Carpet Foundation
Mark Collinson	WRAP
Kate Chappell	Carpet Recycling UK
Pete Thomas	CFA

APOLOGIES

CHAIRMAN'S REMARKS

Jeff Lane of the Carpet Foundation welcomed the participants and reviewed the purpose of the meeting and introduced the Flooring Resource Efficiency scoping study. He then invited the attendees to introduce themselves.

FINDINGS OF THE SCOPING STUDY

Pete Thomas gave a presentation highlighting the findings of the recently published scoping study. This showed the products investigated and the stakeholders consulted. The report showed a total of 580,000 tonnes of flooring waste discarded every year with less than 1%



being recovered or recycled. The report introduced a series of product data sheet which will form the basis of the Material Action Plans now being produced.

A copy of the presentation is attached.

The activities being taken forward into the next stage of the plan were described. These are:-

- The formation of a Stakeholder Group to ensure the involvement of everyone in the flooring industry, the first meeting of which was on the 21st September.
- A one stop shop web site that will allow any one with flooring waste to find someone who can collect and reprocess it.
- A waste survey using the members of the all of the trade associations involved in the Stakeholders Group.
- Production of Material Action Plans (MAPs) for a range of flooring products

REPORT ON 1ST STAKEHOLDER MEETING

The meeting had defined a project goal and purpose as below.

- Project Goal
 - *To contribute towards reducing the total amount of waste produced by the flooring sector.*
- Project Purpose
 - *To produce a Flooring Resource Efficiency Action Plan with the support and ownership of key industry groups representing the different flooring material types, which will include individual Material Action Plans for each type, which when implemented will contribute towards the goal of reducing the total amount of waste produced by the flooring sector.*

It was decided that there would be 5 MAPs; broadloom carpet, carpet tiles, hard flooring (ceramic, terrazzo and natural stone), resilient and resin. These would be produced by separate groups of stakeholders with the assistance of Pete Thomas as consultant. Kate Chappell and Jeff Lane are the coordinators for the broadloom carpet group

Kate Chappell reported that it was opportune to have the meeting today as Hilary Benn was speaking today at an event and reporting a target of a 50% reduction in municipal waste to landfill by 2020. Previous studies have shown that carpet waste makes up 9% of the residual waste following segregation of municipal waste so removing this from the stream would be a substantial contribution to the 50% reduction target. Also yesterday Manchester had announced that they were setting a carbon reduction target of 41% across the city.

Kate also explained that she hoped that the organisations around the table would be volunteering to help the carpet industry contribute to achieving these targets.



GOVERNMENT POLICY

Sean Smith of the DEFRA road map department is looking at all the impacts for a range of products, from plasterboard to milk. This cannot be done within the scope of current project but one of the potential outputs is to define the gaps that need to be investigated to complete a road map. It is possible that if this is completed early in the project then funding could be found to carry out the road map by the end of this financial year. There is already a sustainable clothing action plan which, while it is not applicable to carpet does indicate the issues that have to be addressed. This is available on the DEFRA website at <http://www.defra.gov.uk/environment/business/products/roadmaps/pdf/sustainable-clothing-action-plan.pdf>

As part of the general policy to reduce waste going to landfill the government is proposing to decrease the number of items that can be sent to landfill. One of the ones that is being targeted is textiles which would include carpet. This proposal is due to be issued for consultation in the near future. Sean was asked to ensure that both Kate Chappell and Pete Thomas were on the circulation list for this consultation.

Mark Collinson of WRAP asked whether the meeting thought whether it would help the project if carpet was banned from landfill. In general it was thought that a complete ban would be counterproductive as people would simply switch to incineration or fly tipping. An increase in the cost of disposal would have a potential benefit of making a higher gate fee feasible.

MATERIAL ACTION PLAN FOR CARPET

Kate explained the current options for reuse which includes:-

For wool based carpet	Use as a fertiliser Felt
Synthetic carpet	Equestrian surfacing Polypropylene granules (study with Axion Recycling) Felt

Greenback recycling is at present receiving carpet waste from local authorities at a gate fee of £70/tonne.

The estimated level of carpet recycling in the UK at present is 6 to 10,000 tonnes

Paul Gibbs reported that at present 4Recycling Ltd are processing 100,000 tonnes per year of organic waste and are able to take in wool based carpet and use it for land reclamation projects. At present it cannot be used for spreading on agricultural land due to restrictions from the Environment Agency. The EA require evidence from trials and risk assessment before allowing application to land. There are problems getting approval to carry out the trials if these could be overcome then the possible usage would increase dramatically.



Mike Walters reported on a trial run by John Lewis Partnership at their Cribbs Causeway store. Their fitters already return the fitting waste to the store to avoid any possibility of the John Lewis name being associated with fly tipping. The trial, which was organised by Green Team World, entailed them putting all their waste into a dedicated skip. This waste was then sent to Cardiff Recycling who run a dry MRF. They removed flooring waste by hand prior to passing the remainder through the MRF which removed cardboard, polythene film and gripper which could be sold on. Of the waste collected only 50% was actual carpet and underlay. (No split on offcuts or used was recorded). Of the remainder 25% was cardboard and the remainder gripperod, screed etc. The gripper was split into metal and wood by the MRF.

It was assumed that as John Lewis sell 95% wool rich carpet that the majority of the material collected would be wool rich. Arrangements had been made for the carpet to be supplied to Edward Clay of Dewsbury who manufacture mattresses which are sold by John Lewis. Edward Clay already uses industrial waste from carpet manufacturers waste but they wanted to receive 2 or 3 bales of material for trials. There were problems with getting the small quantity delivered from Cardiff to Dewsbury. Because of the problems with disposing of the carpet the process proved to be cost negative and was stopped at the end of the 6 months trial.

Keith Yates of Headlam explained that they reuse cardboard cores as many times as possible. They pay their drivers 50p a core for each one brought back. They will cut damaged cores down until they are less than 2 metres. Once the cores are too small to use they are disposed of into their normal cardboard skip. Headlam generate very little flooring waste as they have an automatic optimisation system. Short rolls are sold off.

There is a major problem of bringing material back on the same vehicles used to distribute the flooring as during the early part of the run the vehicle is full. Also in many cases they are delivering to places which also have no space to store waste until the vehicle arrives.

The need for fitters to be licensed waste carriers was confirmed. Pete Thomas said that the Environment Agency had begun to issue single licenses for businesses with multiple sites. He would ensure this was part of the discussions with the EA

Pete Thomas was asked whether there was any money within the scheme for an actual trial and replied that there was not but it was the opportunity to put together a costed request for funding. Mark Collinson of WRAP said that there was no requirement to wait until the publication of the report and if a properly costed proposal was received it could be considered within this financial year.

The subject of using the sheared pile to make insulation was raised. Kate reported that this had been investigated with no success. It could not be incorporated into the normal



production process due to the very short staple length. Also in theory to achieve the required U value the weight would be too heavy for the roof structure.

Mark Collinson had seen a form of insulation consisting of a plastic bag which could be filled with a variety of materials which reportedly could include carpet. Mark will provide contact details to Pete Thomas to follow up.

Steve Baker reported that local authorities has similar problems with the disposal of carpets and mattresses, so further to the trial at John Lewis was it possible that there may be a synergy with the mattress suppliers who not only could potentially use carpet waste but also have similar disposal problems. Mike Walters will follow this up with their mattress suppliers.

Kate Chappell showed a sample of felt made from post-industrial carpet waste. A restriction on reclaiming fibre for this application is the width of the pulling equipment, which means it is only suitable for cut widths. It was pointed out that fitters normally slit carpet to remove them from houses.

Similar felt is used on the back of some carpets and also as an underlayment. Keith Yates will enquire of his suppliers of these products as to whether they are able to use carpet waste.

Steve Chamberlain of Interfloor gave a brief description of the underlayment market. The majority of the products do not use recycled materials. The exception is the PU based material which is produced from offcuts of furniture foam. They could theoretically use waste PU underlayment back into new material. Kate will attempt to source a couple of bales of PU underlayment to allow them to carry out trials. At present all industrial waste goes to landfill

Jeff Lane reported on the results of their recent survey of their members. The main result was that the final customer was happy to pay the fitter to take all the waste away including the old carpet.

Steve Baker said that at present many local authorities would be interested in segregating flooring waste but do so not as they do not have a market. Another problem is that the Local Authority waste sites frequently do not have the space for yet another skip. Currently the cost to dispose of material to landfill is costing £40 for landfill tax and £27 gate fee.

It was considered preferable for any collection point to take all flooring waste in one skip to reduce space and minimise confusion.

Kate noted that there are several processors who are able to take polypropylene carpet and convert into granules that can be processed into various moulded products. The problem is securing a consistent stream that only contains polypropylene. This can be achieved by the use of a near IR gun at a cost of \$20,000. Carpet Recycling UK have one but it is the only one



in the UK. Reflex as a reprocessor are now trying to work out how to sort out PP carpet Polypropylene in carpets is frequently blended with other polymers such as nylon or polyester. This can have a major impact on the reprocessability of the polypropylene. It was proposed that Kate discussed with Reflex what level of other polymers was acceptable. Keith Yates will look at the range of non PP content in the carpets they sell. If Reflex require controlled samples to determine what can be processed Keith can supply them

CRUK have had discussions with manufacturers of automatic selection equipment and they do not have a suitable machine available but for a price could develop one. It was felt that this could potentially be developed as part of one of the government funded technology transfer schemes. Pete Thomas would open discussions with Knowledge Transfer Networks through the IOM3.

Both CRUK and 4Recycling have had contact with the EA but have not been able to resolve the issue of not allowing wool rich carpet waste to be spread on agricultural land. Pete Thomas will ask Jane Thornback at the CPA and Katherine Adams of BRE for assistance in speaking to the Environment Agency at a sufficiently high level to resolve the problem. Paul Gibbs will supply a copy of the technical details they have to confirm that there is no problem with using the material on agricultural land.

ACTIONS

Kate Chappell to Supply 2 or 3 bales of PU underlay to Steve Chamberlain at Interfloor who will run trials to check on recyclability	15/12/09
Pete Thomas to contact Jane Thornback and Katherine Adams and discuss how to contact the EA at a level that will enable a decision to be taken on spreading onto agricultural land and the issuing of multi site waste licensing exceptions	15/12/09
Paul Gibbs to supply Pete Thomas a copy of the technical details likely to be required by the EA	03/11/09
Pete Thomas to speak to the Knowledge Transfer Networks and other potential funders to find solution for automatic sorting of carpets by type.	15/12/09
Mike Walters to discuss possible synergies between carpet and mattress manufacturers both on waste sorting and on use of post use carpet fibre in mattresses	15/12/09
Keith Yates to speak to the suppliers of felt back carpet and felt underlay regarding the potential for the use of post use carpet in the felt	15/12/09



Keith Yates will look at the range of non PP content in the carpets they sell.	03/11/09
Kate Chappel to talk to Reflex regarding carrying out trials to define what level of contamination of the PP is acceptable	15/12/09
Mark Collinson to supply details of the supplier of the insulation bags	03/11/09
Pete Thomas to discuss with Mark Collinson what WRAP may be in the position to fund and what detail they would require to get the funding	03/11/09

DATE OF NEXT MEETING

15th December provisionally at the CFA office in Nottingham

