Negotiated Outcomes for Carpet
Reuse Workgroup Meeting Summary
Baltimore Meeting: 6/11/01

Reuse Workgroup Participants: *Frank Endrenyi, Mohawk; Steve Hoffmann, Milliken; Julie Rhodes, Reuse Development Organization; Todd Smiley, EPA Region 4; Sarosh Sukhia, ERCS; Grace Terpstra, Project Consultants Association (on behalf of Lees and Honeywell); Chris Taylor, Oregon DEQ.*

Introduction

The reuse subcommittee of the Negotiated Outcomes for Carpet Workgroup was charged with trying to measure current carpet reuse and set goals for increasing carpet reuse in the next ten years. Though reuse may only be possible with a small percentage of the total used carpet available, reuse provides an opportunity for the carpet industry to reach higher on the waste management hierarchy and support waste reduction over recycling, waste-to-energy or disposal. Fewer labor, transportation costs, energy and other resources are needed for reuse than other waste management strategies.

Reuse intends to directly transfer material no longer needed by one to someone who can use the material.

Remanufacturing or renewal of carpet is also an option under reuse considerations, however, it provides a value-added component to the product, such as cleaning, repairing, reprinting material before distribution to the end-users.

General Discussion/Observations

Reuse/refurbishing of broadloom is much harder than it is for tiles; most of the carpet market is broadloom.

Residential broadloom carpet (75% of total market) is not a ripe market for reuse. Reuse is mostly viable within the commercial market. Residential carpet is generally too worn to be reused.

Technology for broadloom refurbishing doesn't exist yet, but could some day. Our goals and policies should provide incentives for firms to develop such technology.

Broadloom is usually glued down in commercial applications. Generally, removal destroys the carpet.

The big challenge is developing the resale market for reused carpet.

Market Shares (new carpet) by Type:

Almost all manufacturers sell tiles if they sell commercial carpet. The market for carpet tiles is currently growing faster than the overall carpet market (8-10% a year vs. 2-3% for all carpet).

Tiles are denser (5-6lbs. / yd2) than broadloom (4lbs. / yd2).

Commercial carpet makes up 25% of the total carpet market, 10-15% of this is tile (which has the best reuse potential.) Therefore tile is 2.5% of total carpet market.

Useful life of carpet varies by type: Use life of commercial carpet is about 7 years on average vs. 13 years for residential.

Reuse Markets

The baseline number for current carpet reuse is actually closer to zero than 1% (as stated at the Atlanta meeting in May.

The only reuse numbers available are for refurbishing (Milliken). There are no hard #'s for direct reuse (i.e., cutting up unworn pieces of broadloom and reselling them for floor covering or other secondary uses. We know that such a market exists, with some carpet resold domestically (college students, low income markets) and some of it being sold overseas in developing countries (Mexico, etc.) But the firms selling into these markets are small, hard to locate and reluctant to provide data for fear of losing their market share.

All carpet manufacturers generate substantial amounts of post-industrial, "seconds" (off-spec carpet) that is cut up and resold at bargain prices, sometimes as low as $1/yard. This seconds market has somewhat saturated the potential reuse market (in some regions) because if seconds are available at $1/yard, reused carpet would have to be even less expensive to compete. At this low price (<$1/yd), it may not be economical to collect and process carpet for reuse.

Even if 50% of commercial tile carpet could be captured for reuse, this would represent only 1.25% of all carpet being reused.

Procurement

There is a time lag between when contracts require the recycling of carpet are signed and actual end of life. When carpet reaches end of life it becomes much harder to enforce recycling because the individuals who negotiated the original contract are often no longer present.

Leverage Points

When looking at ways for changing buyer behavior to increase demand for reused carpet there are two major leverage points:

1) **Changing the way used carpet is handled.** Guidelines and needed for how used carpet should be removed in order to maximize opportunities for reuse. In other words, contracts should specify that carpet will be removed manually in large pieces, rather than with a forklift that rips it apart. A small number of firms specialize in hotel interior demolition (which could be a rich source of reusable carpet). Some of them rip up and resell carpet to low income markets (but it is difficult to obtain good data on this.) Flooring contractors (who sell most new carpet) are often responsible

for removing existing carpet when they sell new carpet. They generally pass along disposal costs to customers by including some sort of disposal fee in their bids. Some workgroup members felt this is often a source of additional profit for flooring contractors who can overcharge for disposal costs. We need to find an incentive for these contractors to separate material for reuse, but this practice of marking up disposal costs will make that difficult to achieve. These two groups (demo and flooring contractors) are key audiences for increasing awareness about reuse potential.

2) **Procurement specifications for buying reused carpet.** Procurement guidelines should provide credit for reused/refurbished products. Currently some contract language for environmental preference gives credit only for recycled content, but not for reuse, which is higher on the waste management hierarchy than recycling. To be consistent with the hierarchy and incentivize reuse, preference needs to be given for reuse as well. Group agreed that such language should be amended to treat as carpet as 100% recycled content if it's reused.

Conclusions

Baseline is essentially zero for current reuse.

Initially, the focus for reuse should be on commercial carpet and not residential due to multiple barriers discussed above.

Procurement language should give preference to reuse, not just recycled content.

Changing the behavior or interior demolition contractors and flooring contractors is key to increasing carpet reuse. These groups, in turn, will be heavily influenced by the signals they receive from their customers.

Currently, carpet tiles are a relatively small share of the overall carpet market (2.5%) and they represent the best potential for reuse. However, strong growth in carpet tile sales, and their greater average density suggest this 2.5% figure could rise over time.

Proposals

Draft goals for carpet reuse over the next 10 years:

3 years	**6 years**	**8 years**	**10 years**
0.5 %	**1.0 %**	**1.5 %**	**2.0 %**

*** Baseline --- essentially zero for now (statistically insignificant)**

Prepared by Chris Taylor, Oregon DEQ