

Notes from WTE/Incineration Committee Report
National Negotiated Outcomes for Carpet Stewardship
June 12, 2001
Baltimore, MD

Present: Dobbin Callahan, C&A Floorcoverings; Hallie Clemm, MDE; Hugh Gardner, BP Fabrics & Fibers; Bob Peoples, Solutia; Richard Scott, BASF; Dave Cretors, Iowa DED; Mark Terry, Krupp Polysius Corp.; Chris Mitchell, Krupp Polysius Corp.; Lynn Rubinstein, Northeast Recycling Council, Inc.; Garth Hickle, MN OEA; Cat Wilt, Center for Clean Technologies.

Goal of meeting: To develop a proposed schedule of “rates and dates” for the use of incineration/WTE and cement kilns as management tools for carpet, over a ten year planning horizon.

Assumptions

1. Incineration/WTE, while different technologies, will be considered as one strategy.
2. Incineration/WTE is not considered recycling.
3. The National Negotiated Outcomes Committee and CRI (through its MOU) have agreed that incineration/WTE will be targeted for elimination as a strategy by the end of ten years.
NOTE: The following question/comment is offered. Cat/Garth can you resolve please?
“I believe you [Lynn] mentioned that CRI had agreed to the zero goal in ten years for WTE in the March meeting. If that is so, I suggest that the phrase "through its MOU" be deleted from assumption 3.
4. That kilns (cement and lime), will likely be an important and necessary component of the system for managing carpets, is a less preferable management strategy than recycling.
5. That the “rates” proposed for cement kiln tonnages are *maximum* rates, unlike the rates to be proposed by other workgroups, which will be goals.
6. That cement kilns can provide a significant destination for calcium carbonate and latex, which have limited commercial value outlets at this time.
7. For large volumes of carpet to be handled by cement kilns, it will be necessary for some plants to add gasification systems. This is an expensive proposition, but it enables kilns to accept a variety of materials; not just carpet. Otherwise, carpet will need to be size-reduced before it can be added to the burn mix.
8. That cement kilns in the United States have, in principle, the capacity to handle all of the carpet generated for disposal each year. (The figures that the workgroup were using were different than those reported later to the whole group. In the workgroup we understood that if all the waste carpet were to be managed in cement kilns it would displace most of the other fuel sources – which would not be practical. This would inherently limit the amount of carpet accepted. However, in the full meeting, it was reported that if all the carpet were burned in cement kilns, it would displace only about 7% of the other fuel sources; making it much more likely that there could be cement kiln industry momentum to increase the amount of carpet accepted.)

9. Carpet will never replace tires in the cement kiln burn mix. NOTE: Hallie Clemm, Dobbin Callahan and Lynn Rubinstein support this statement. Hugh Gardner and Bob Peoples have objected to this phrasing. The alternative statement that they support is: It is desirable that the use of carpets in kilns as a raw material source and for energy recovery not displaces other feedstocks such as tire.
10. Cement kilns are used to the materials available for energy production changing over time. Therefore, it is credible for carpets to become a significant portion of the energy source for a few years and then retreat in volume and still make economic sense for kilns.
11. In the first years of accepting carpets, cement kilns may offer a zero tipping fee as an incentive to brokers to consolidate and process carpets.
12. Cement kilns will not process carpet. It will be delivered to them in a size reduced state ready for burning.
13. The estimates that have been provided for tons of carpet currently being managed through incineration/WTE is believed to be inaccurate and perhaps as much as twice the volume that has been reported to date.

Recommendations

	Year 1 2002	Year 3 2005	Year 6 2008	Year 8 2010	Year 10 2012
Incineration/WTE	100%	90%	60%	40%	0%
Cement kilns	0	100	300	200	200

- Incineration/WTE – percentages based on current consumption
- Cement Kilns – measured in millions pounds/year

Actions necessary to achieve these “rates and dates”

1. Brokers collect and process (size-reduce) carpet and bring to cement kilns.
2. CRI will need to play a role in promoting the use of carpet at cement kilns.
3. Approximately three Blue Circle cement kilns will be needed to accept materials in the first three years (100 million pounds). For 100 million pounds, six Blue Circle kilns will be needed.
4. To achieve the rate of 300 million pounds/year will require several kilns to invest in gasification systems, or approximately nine kilns without such systems.
5. The success of this small-scale program will need publicity and promotion to encourage other cement kilns to accept material, as well as for a broader infrastructure of brokers and processors to develop.
6. No specific action will be necessary to decrease reliance on incineration/WTE because the promotion of the other components of carpet management (reuse, recycling, and state pressures to discourage waste disposal of carpet) will result in the elimination of this strategy. ALTERNATE SUGGESTION: Very strong market forces will be necessary to find a "home" for significant quantities of used carpets. WTE could be the near term (2002-2006) disposal option that allows the collection infrastructure (which is needed for recycling) to be established.

Notes recorded by Lynn Rubinstein.