

Witco

Report: Meeting on Source Reduction of Heavy Metals in
Municipal Solid Waste [Including Cadmium], Dec. 2-3, 1992

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A national technical forum was held on the source reduction of cadmium, lead, and mercury in municipal solid waste (MSW) in Providence, RI, on December 2-3, 1992. This meeting was sponsored by and initiated by the US Environmental Protection Agency (EPA), Region I and Headquarters (Washington, D.C.).

The forum was organized and run by SWANA (The Solid Waste Association of North America) as a contracted, consulting function paid by EPA. The background material included a 138-page booklet titled "Getting at the Source - Strategies for Reducing Municipal Solid Waste." This publication was used to plan and to steer the meeting. It was developed by the World Wildlife Fund & The Conservation Foundation, Washington, D.C., which is the largest private U.S. organization working worldwide to conserve nature.

About 100 participants attended the forum from regulatory organizations (both federal and state), academia, consulting firms, and industry. The attendees then formed six work sessions, each covering one of the six pre-selected target products.

Sixteen people attended and contributed to the discussions and conclusions in the work group on the target product: cadmium-based stabilizers used in PVC. This work session was moderated by a facilitator, Mr. Bob Pease, from a consulting firm in Massachusetts, paid by EPA. He appeared to be greatly influenced by Miss Francis Irwin from the World Wildlife Fund & Conservation Foundation.

Also present were invited representatives from industry, The BFGoodrich Co., Akzo Chemicals, Ferro (Bedford Chemical Div.), Synthetic Products Co., and Witco Corp. After several hours of brainstorming for all types of source reduction of cadmium in stabilizers, followed by elimination of impracticable possibilities, 10 "viable" options were listed.

These options were vigorously discussed, and the best ones were presented by the facilitator to the combined forum at the end of the two-day meeting. First, the following general conclusions were given:

- The USA-made toy and food industries have been cadmium-free since the 1950's.
- Since the 1980's there has been a 25 - 33 % reduction in the use of cadmium stabilizers in PVC.
- Majority of the industry expects to be off cadmium within the next 5 (7 ?) years.

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- Every customer is being pushed to switch to non-cadmium stabilizers
- All R&D work is being done in non-cadmium stabilizers; none in cadmium stabilizers.
- Non-cadmium stabilizer products will become superior to the cadmium ones because no R&D is being done on cadmium.

The top three methods to implement source reduction of cadmium stabilizers in PVC are listed first; the others are in approximate order of acceptability.

1. Substitution of cadmium and reformulate with other metals like calcium and zinc (and barium).
2. Voluntary decrease of the use of cadmium stabilizers.
3. Promote the use of alternate PVC materials that do not contain cadmium.
4. Reduce the amount of cadmium in stabilizers.
5. User fee on cadmium products.
6. Extend product life of PVC products.
7. Reduce use of PVC products containing cadmium stabilizers.
8. Ban the PVC products that use cadmium stabilizers.
9. Government bonus (subsidy) to replace cadmium.
10. Ban all PVC.

Note that item 10. was suggested only by the facilitator and supported, in part, by only one person, the Wildlife Fund member. It appeared to me that we decided to delete this item, but the facilitator included it when he gave the summary report for the group.

We will be receiving a draft report of the meeting conclusions for comments and corrections before SWANA (or the EPA) issues a finished, formal report.