

Proposal

on

Solid Waste Studies - Criteria Evaluation and Methodology

Recommended by: Environmental Management Committee

	<u>Amount Requested</u>	<u>Commitment desired by</u>
Fiscal Year 1978-79	\$50,000	November 20, 1978

Under Section 3001 of the Resource Conservation and Recovery Act, EPA must establish regulations setting forth criteria and testing methods for determining whether a solid waste would be designated hazardous. The EPA proposed test protocols would require separate determinations regarding ignitability, flammability, radioactivity, chemical reactivity, infectiousness, toxicity, including mutagenic activity. The relevance of those tests is unsupported by meaningful research or technical studies.

Preliminary results from isolated member company tests indicate that many materials considered innocuous (examples are fly-ash, asphalt paving, or containerboard) would fail one or another of the tests and be classified hazardous. The consequences of misclassification are far-reaching. For the chemical industry, classification of waste as hazardous would induce disposal costs in the range of \$80 to \$100 per ton, whereas nonhazardous materials can be put into landfills at a cost of \$15 per ton. Moreover, the number of class I landfills available to accept an enlarged volume of hazardous waste is strictly limited. An overtaking of the capacities of these landfills would lead to the opening of new sites at locations remote from urban and industrial centers, if they could be established.

Simple classification methods are needed to establish reliable, rapid, low-cost methods for determining if a solid waste should be treated as hazardous. Critical analysis of the EPA protocols also is necessary to this process.

*See Minutes of August 8, 1978 Executive Committee Meeting

(a) MCA has contributed \$6,000 to the American Society for Testing and Materials (ASTM) Committee D-19.12 which is developing test methods for appraising the leaching of waste materials. Round-robin collaborative tests of their simplified procedure are underway on replicated analyses of six waste materials using three extraction procedures. These procedures aim for simplicity and reproducibility without compromising health effects determinations.

(b) It is proposed to engage Hydrosience, Inc. to conduct toxicity tests and Hazleton Laboratories to conduct genetic activity assays, using the proposed EPA protocols. This phase of the program is estimated to cost \$50,000. The program has been discussed with EPA; the Agency encourages us to proceed. Results would be made available to EPA and others to demonstrate needed modifications in the EPA test protocols.

The program is expected to be completed ten to twelve weeks after authorization.

MCA

EC - 11/20/78