

Introduction

This is the third ASTM Special Technical Publication (STP) resulting from the annual symposium held by ASTM Committee D-34 on Waste Disposal. The first two symposia have been published as *ASTM STP 760* and *STP 805*. The symposium on which this publication is based was something of a departure from the first two in that it contained many papers by members of the international scientific community interested in wastes and waste disposal practices. The international contributions are the result of an association begun in 1980 with members of the European community who sought the participation of Committee D-34 in an international conference held in Rome in 1981. The results of this conference were so fruitful in the interest generated among the attendees, that a decision was made to make this international meeting a biennial event, alternating between the United States and various international sites. The contributions making up this volume come from the second international conference (the third symposium in this series), which was titled the International Symposium on Industrial and Hazardous Solid Wastes. The third biennial conference (which will be the fifth symposium in this series) will be held in 1985 in Alexandria, Egypt.

As with any ASTM activity, the principal objective of the current symposium was to generate interest in the activities of the ASTM sponsoring committee and to provide a forum for information exchange that could lead to future standards. In addition, this symposium promoted the circulation of information across international boundaries and gave participants a wider view of waste management problems. The papers selected fell into four general subject areas:

- (a) analysis of wastes and waste disposal sites,
- (b) amelioration of wastes in the disposal environment,
- (c) waste as resource, and
- (d) national perspectives in waste management.

These topics present a broader view of waste disposal than has been presented in this symposium series in the past. The first two gatherings focused on the immediate need, generated by the regulatory climate in this country, for standards related to characterization and testing of wastes. While this need still exists and is as critical as ever, this symposium stepped away a little and tried to present a look at other issues relevant to safe, efficient waste disposal.

The changes that occur in a waste after disposal are as important as the

character of the waste at the time of disposal. While the latter issue dictates the classification of the waste as hazardous or nonhazardous for the purpose of disposal, the issue of waste behavior is the heart of risk assessment over the life of the disposed material and, hence, defines its long-term impact on man and the environment. As the understanding of waste characteristics grows and our attitude towards waste management matures beyond the immediate question of hazardous versus nonhazardous designations, the need for standards relating to waste behavior in the disposal environment will become a dominant need. This area of research will expand into the broader activity of risk assessment, which is a very important area of interest to various ASTM committees.

The use of wastes for their resource potential can serve three purposes (1) alteration of the character of the waste, (2) reduction of its volume, and (3) conservation of natural resources. This is definitely a major direction for waste disposal in the future and, as such, is of interest to the members of ASTM Committee D-34 and the general public. The papers on the various national perspectives on waste management show different thinking on the subject: these papers point out new problems and thus, serve to keep our thinking fresh and encourage creative problem solving in the future.

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