FUTURE SOLID WASTE MANAGEMENT ISSUES: RESULTS OF A DELPHI POLL

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Discussion by

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This paper is the third—and most complete and comprehensive—report on this poll that this reviewer has read. Those who have read the two previous summary reports will want to review this version carefully for the additional detail and information it contains.

The method by which this poll was conducted is one that should effectively preclude introduction of bias on the part of the authors in reporting the results. Further, inclusion of the partial list of panelists in the appendix to the paper lends credence to the findings of the poll. All are eminently qualified to speak on the subject and comprise at least a partial "Who's Who" in the field. However, the authors identify the panelists as "representing all segments of the solid waste fieldmunicipal, state and federal agencies, legislators, vendors, consultants, industry associations and academics." A glaring omission is that of operators. It would seem that a more comprehensive cross-section of informed opinion would have been obtained if the panel had included a number of people involved in the dayto-day operation of various types of waste management facilities. There are many well qualified, experienced superintendents and operators whose insights into present problems and future needs, based on actual handson experience, are not always evident to those in the higher echelons. Perhaps the authors will explain why they were not included.

Considering the diversity of backgrounds of those who were polled, and the perspectives from which they view the field, unanimity of opinion on the various issues is not to be expected. Personal opinions of the panelists are based on their own experience and cannot be challenged in a poll such as this. It is interesting to note, however, that a large majority shared the same opinions on many of the key issues. This reviewer generally agrees with the majority positions throughout, and believes they point the way of the future, particularly to additional research and study. To repeat, however, it is this reviewer's opinion that, while overall results of the poll might not have been different, a more rounded consensus would have been obtained if representatives of the day-to-day operating sector had been included as panelists.

Discussion by

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The results of the poll as presented in this paper are interesting, especially since the poll participants, in my

opinion, do not constitute a representative cross-section of the technologies. Instead, they are said to represent all segments of the solid waste management field. Again, I am not sure I agree with this. A number of recognized experts are absent from the list, but perhaps they declined to participate.

Several issues not included in the poll, which should have been, are ash residue disposal and heavy metal emissions in both ash and air. I believe these areas have overtaken the dioxin issue which has greatly faded. The Long Island garbage barge of 1987 was mentioned, but not the Philadelphia ash ship of 1986–1988.

I believe the public perception of resource recovery and opposition to projects is more becoming opposition to "mass burn incineration" rather than to resource recovery. This difference needs to be explored.

The public's desire in many locations to minimize

the amount of waste burning is driving more source separation recycling programs, as well as more mechanical materials recovery prior to burning. In essence, I believe mass burn systems are slowly evolving into RDF or prepared-fuel systems. In order to remain in the marketplace, mass burn will ultimately have to preprocess the waste in order to reduce quantities burned, recycle more materials, reduce ash generation and reduce total emissions. Indeed, there are continuing improvements in resource recovery technologies; many have been and will continue to be made as a result of public opinion and demands of the marketplace.

I believe this type of poll is useful to the industry. However, I would recommend expanding the participation in it to include more solid waste management experts including all aspects of technology, from source separation recycling through land disposal.

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