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Medical Waste Disposal (#22)

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ABSTRACT

Since the washing-up of medical wastes on east coast beaches in the late '80s, jurisdictions around the country have enacted various plans for medical waste management. The stricter regulatory environment over the last decade has lead to transformations in medical waste handling. This presentation summarizes both traditional and innovative techniques for treatment of medical waste, presents guidelines for selecting treatment options, and discusses recent trends towards medical waste reduction.

Generally, medical waste treatment techniques fall into three categories: thermal, chemical, or irradiation. Traditional treatment methods discussed include steam sterilization and incineration. Incineration, a common and widely used method for medical waste disposal, has been impacted by the release, last year, of the EPA's final rules governing national standards for hospital incinerators and other incinerators of hospital, medical, and/or infectious waste. Stringent emission standards have been defined for nine specific pollutants and a mandated training and qualifications program for incinerator operators has been established. Current and innovative treatment methods will be discussed with emphasis on practical, cost-effective solutions.

Considerations for selection of treatment techniques discussed include: waste stream characterization, technical evaluation of equipment, onsite vs. offsite treatment, physical constraints, regulatory concerns, and life cycle costing.

The presentation will conclude with a discussion of future trends in medical waste management and the agreement between the American Hospital Association and the EPA to reduce medical waste, as well as eliminate mercury from waste streams by the year 2005.