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LIFE-CYCLE MODELS OF SOLID WASTE MANAGEMENT: DEFINING THE STATE-OF-THE-ART FOR COLLECTION, MATERIAL RECOVERY, COMBUSTION, BIOLOGICAL TREATMENT, AND LANDFILLING

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There are many alternatives for the management of solid waste including recycling, biological treatment, thermal treatment and landfill disposal. In many cases, solid waste management systems include the use of several of these processes. Solid waste life-cycle assessment models are often used to evaluate the environmental consequences of various waste management strategies. The foundation of every life-cycle analysis is the development and use of process models to estimate the emissions from solid waste unit processes. The objective of this workshop is to describe the state-of-the-art for the modeling of the solid waste processes and to identify opportunities for improvement and the need for additional research. The first part of each session will be used to explain the state-of-the-art for a given solid waste process model and the remainder of the time will be devoted to input and discussion. The full day Workshop will include discussions on the modeling of collection, material recovery facilities, combustion, offsets from remanufacturing, composting, anaerobic digestion, landfills and management of uncertainty.