

## CHARACTERIZATION OF MUNICIPAL SOLID WASTE IN CALIFORNIA

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### ABSTRACT

Signed into law in 1989, the California Integrated Waste Management Act requires each California city and county to divert 25% of solid waste generated by 1995 and then 50% by the year 2000 through activities such as source reduction, recycling, composting, and transformation. One of the first mandated actions to be taken by local governments was to conduct a representative solid waste characterization study to determine the types and amounts of materials disposed. By doing this, solid waste management planners could target key waste types for diversion, set waste management goals, and track progress towards those goals. But because many jurisdictions were unfamiliar with waste characterization studies, a wide range of characterization techniques and methods were used which made it difficult for county and state officials to compile and compare results at regional or statewide levels. Many of the initial studies that were conducted used vague material type definitions, inconsistent segregation techniques, and unreliable health and safety plans. Also, as new businesses became more involved in waste management, basic questions were asked about the waste stream that could not be answered by some early studies. So in response to new legislation, the California Integrated Waste Management Board (CIWMB), in conjunction with the University of California at Los Angeles, and an advisory group of 38 public and private sector professionals is developing a new comprehensive waste characterization method for local governments to use that introduces statewide consistency in the process of conducting waste characterization studies. This, in turn, is

expected to yield useful information at the local level that can also be easily compiled with other local government results to produce regional or statewide information on the makeup of the solid waste stream.

### INTRODUCTION

Solid waste can include putrescible and nonputrescible solid, semisolid, and liquid wastes including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, appliances, dewatered sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid waste and semisolid waste (California Integrated Waste Management Statutes, 1994). Operations, liability, and regulations, however, may limit the types of solid waste a facility will accept. To date, the State of California has 255 landfills and 3 waste-to-energy facilities. In 1994 these facilities disposed of or combusted approximately 34 million tons of solid waste. Waste diversion efforts recovered approximately 11 million tons of material in that same year resulting in an estimated 25% diversion rate (BioCycle, 1995). The State of California has 527 jurisdictions, each responsible for achieving the mandated diversion goals. In order to meet the 50% diversion goal by the year 2000, state and local officials will need to work together to understand the makeup of 34 million tons of solid waste so that appropriate solutions can be implemented.