



**US Army Corps
of Engineers.**
Construction Engineering
Research Laboratory

Fact Sheet

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SOLID WASTE CHARACTERIZATION

The Problem

Federal, State, local, and Department of Defense (DOD) agencies continue to pass laws and regulations that impact all areas of nonhazardous solid waste (SW) management. Many of these regulations call for increased recycling and reduced disposal, in addition to banning certain materials from sanitary landfills.

Army installations have disposed of SW typically by landfilling on-post or contracting for off-post disposal services on a volume basis. In both cases, no records exist of waste composition, SW generation rates, or SW management program success.

The Technology

The U.S. Army Construction Engineering Research Laboratory (CERL) has conducted research to characterize the total quantity and components of SW. Current capabilities include procedures for detailed on-site analysis to identify recyclable/compostable components of the waste stream and general algorithms for approximate SW characterization. The information collected during the study can be correlated with data from other DOD installations and civilian sector equivalents to establish target areas for aggressive SW management. Information collected after SW management programs have been implemented can be used to "fine-tune" these programs by targeting the SW generation areas with the greatest potential for waste reduction or recycling.

Benefits/Savings

Knowing the characteristics of the SW produced on the installation is the first step toward effective SW management. In addition to being required for legislative compliance, accurate information on current SW and recycling rates can help minimize SW program costs, size optimal facilities for recycling transfer stations and incinerators, and contract cost-effective waste disposal and recycling services.

Status

CERL has been conducting SW characterization research for more than a decade. Current work focuses on characterizing demolition debris for potential salvage. Waste characterization studies have been conducted at several Army installations, including industrial and troop facilities. CERL is also developing a tool to assist installations in writing solid waste management plans, a component of which is local waste stream characterization. The results of an SW characterization study and program evaluation

are available in the CERL Technical Report EP-95/06, April 1995, entitled Army Materiel Command Solid Waste Survey and Analysis.

Point of Contact

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