



Standard Guide for General Planning of Waste Sampling¹

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INTRODUCTION

The analysis and testing of solid waste requires collection of adequately sized, representative samples. Wastes are found in various locations and physical states. Therefore, each sampling routine must be tailored to fit the waste and situation. Wastes often occur as nonhomogeneous mixtures in stratified layers or as poorly mixed conglomerations. For example, wastes are commonly stored or disposed of in surface impoundments with stratified or layered sludges covered by ponded wastewater. In these situations, the collector may be faced with sampling the wastewater, the sludge, and some depth of soil beneath the sludges. Collecting representative samples in these situations requires a carefully assessed, well-planned, and well-executed sampling routine.

Currently, Subcommittee D34.01 is working on practices for sampling wastes from a variety of different sampling locations and situations. Also in progress is a practice for containerization, preservation, and holding times for waste samples. As these documents are approved by ASTM, reference to these standards will be made in this general guide on waste sampling. Further, Subcommittee D34.01 recommends this guide be used in conjunction with the new waste sampling practices when available in print by ASTM.

1. Scope

1.1 This guide provides information for formulating and planning the many aspects of waste sampling (see 1.2) which are common to most waste sampling situations.

1.2 The aspects of sampling which this guide addresses are as follows:

	Section
Safety plans	4
Sampling plans	5
Quality assurance considerations	6
General sampling considerations	7
Preservation and containerization	8
Cleaning equipment	9
Labeling and shipping procedures	10
Chain-of-custody procedure	11

1.3 This guide does not provide comprehensive sampling procedures for these aspects, nor does it serve as a guide to any specific application. It is the responsibility of the user to assure that the procedures used are proper and adequate.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applica-*

bility of regulatory limitations prior to use. For more specific precautionary statements see 3.2, 3.3, and Section 4.

2. Referenced Documents

2.1 *ASTM Standards:*

E 122 Practice for Choice of Sample Size to Estimate a Measure of Quality for a Lot or Process²

2.2 *Other Document:*

EPA-SW-846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods³

3. Significance and Use

3.1 The procedures covered in this guide are general and provide the user with information helpful for writing sampling plans, safety plans, labeling and shipping procedures, chain-of-custody procedures, general sampling procedures, general cleaning procedures, and general preservation procedures.

3.2 For purposes of this guide, it is assumed that the user has knowledge of the waste being sampled and the possible safety hazards.

3.3 This guide is not to be used when sampling sites or wastes where safety hazards are unknown. In such cases, the user must use other more appropriate procedures.

¹ This guide is under the jurisdiction of ASTM Committee D34 on Waste Management and is the direct responsibility of Subcommittee D34.01.01 on Planning for Sampling.

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² *Annual Book of ASTM Standards*, Vol 14.02.

³ Available from Superintendent of Documents, U.S. Printing Office, Washington, DC 20402.