Designation: D 6759 – 02

Standard Practice for Sampling Liquids Using Grab and Discrete Depth Samplers[1]

This standard is issued under the fixed designation D 6759; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice describes sampling devices and procedures for collecting samples of liquids or sludges, or both, whose upper surface can be accessed by the suitable device. These devices may be used to sample tanks that have an appropriately sized and located sampling port.

1.2 This practice describes and discusses the advantages and limitations of the following commonly used equipment, some of which can be used for both grab and discrete depth sampling: dipper, liquid grab sampler, swing jar sampler, Bacon Bomb, Kemmerer sampler, Discrete Level sampler, liquid profiler, lidded sludge/water sampler, peristaltic pump, and the Syringe sampler.

1.3 This practice provides instructions on the use of these samplers.

1.4 This practice does not address sampling devices for collecting ground water.

1.5 *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 applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:* [2]

D 4687 Guide for General Planning of Waste Sampling

D 4840 Guide for Sample Chain of Custody Procedures

D 5088 Practice for Decontamination of Field Equipment Used at Non-Radioactive Waste Sites

D 5283 Practice for Generation of Environmental Data Related to Waste Management Activities: Quality Assurance and Quality Control Planning and Implementation

D 5358 Practice for Sampling with a Dipper or Pond Sampler

D 5743 Practice for Sampling Single or Multilayered Liquids with or without Solids in Drums or Similar Containers

D 5753 Guide for Planning and Conducting Borehole Geophysical Logging

D 5792 Practice for Generation of Environmental Data Related to Waste Management Activities: Development of Data Quality Objectives

D 5956 Guide for Sampling Strategies for Heterogeneous Wastes

D 6044 Guide for Representative Sampling for Management of Waste and Contaminated Media

D 6051 Guide for Composite Sampling and Field Subsampling for Environmental Waste Management Activities

D 6232 Guide for Selection of Sampling Equipment for Waste and Contaminated Media Data Collection Activities

D 6323 Guide for Laboratory Subsampling of Media Related to Waste Management Activities

D 6538 Guide for Sampling Wastewater With Automatic Samplers

D 6699 Practice for Sampling Liquids Using Bailers

E 856 Definitions of Terms and Abbreviations Relating to Physical and Chemical Characteristics of Refuse Derived Fuel

3. Terminology

3.1 *discrete depth sample*, *n*—sample obtained from a defined level within the liquid being sampled.

3.2 *grab sample*, *n*—individual sample collected over a period of time usually not exceeding 15 min and in such a manner as to be representative of conditions at the time of sampling. Grab samples are sometimes called individual or discrete samples.

3.3 *representative sample*, *n*—sample collected such that it reflects one or more characteristics of interest (as defined by the project objectives) of a population from which it was collected. **D 5956**

3.4 *sample*, *n*—portion of material taken from a larger quantity for the purpose of estimating properties or composition of the larger quantity. **E 856**

3.5 *sludge*, *n*—any mixture of solids that settles out of solution. Sludges contain liquids that are not apparent as free liquids (see Practice D 5743). **D 6323**

[1] This practice is under the jurisdiction of ASTM Committee D34 on Waste Management and is the direct responsibility of Subcommittee D34.01.03 on Sampling Equipment.

Current edition approved Feb.10, 2002. Published May 2002.

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

Copyright © ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States.