



Standard Practice for Assessment of Attaining Clean Up Level for Site Closure¹

This standard is issued under the fixed designation D 6597; 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 covers the steps necessary to determine if a site is ready for closure with emphasis on general sampling techniques and how to determine if the agreed upon level of remediation has been achieved.

1.2 A minimum of statistical procedures is used in this practice.

1.3 The standard practice does not address radioactive waste sites nor does it cover every situation that can occur in the field. It does cover the following general sampling techniques: soil sampling, swipe sampling of buildings and equipment, surface impoundments, waste piles, and layered tanks. It does not cover drum sampling, general water sampling and monitoring wells and their construction.

1.4 *This standard does not purport to address all 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 to determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

- D 1452 Practice for Soil Investigation and Sampling by Auger Borings²
- D 1586 Test Method for Penetration Test and Split-Barrel Sampling of Soils²
- D 1587 Practice for Thin-Walled Tube Geotechnical Sampling of Soils²
- D 3550 Practice for Ring-Lined Barrel Sampling of Soils²
- D 4547 Guide for Sampling Waste and Soils for Volatile Organic Compounds³
- D 4687 Guide for General Planning of Waste Sampling³
- D 5088 Practice for Decontamination of Field Equipment Used at Nonradioactive Waste Sites²
- D 5283 Practice for Generation of Environmental Data Related to Waste Management Activities: Quality Assurance and Quality Control Planning and Implementation³
- D 5434 Guide for Field Logging of Subsurface Explorations of Soil and Rock²

- D 5451 Practice for Sampling Using a Trier Sampler³
 - D 5730 Guide for Site Characterization for Environmental Purposes With Emphasis on Soil, Rock, the Vadose Zone and Ground Water²
 - D 5792 Practice for Generation of Environmental Data Related to Waste Management Activities: Development of Data Quality Objectives³
 - D 5956 Guide for Sampling Strategies for Heterogeneous Wastes³
 - D 6009 Guide for Sampling Waste Piles³
 - D 6051 Guide for Composite Sampling and Field Subsampling for Environmental Waste Management Activities³
 - D 6232 Guide for Selection of Sampling Equipment for Waste and Contaminated Media Data Collection Activities³
 - D 6250 Practice for Derivation of Decision Point and Confidence Limit for Statistical Testing of Mean Concentration in Waste Management Decisions³
 - D 6311 Guide for Generation of Environmental Data Related to Waste Management Activities: Selection and Optimization of Sampling Design³
 - E 1728 Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques⁴
- #### 2.2 API Standard:
- API Standard 2015 Cleaning Petroleum Storage Tanks⁵
- #### 2.3 Federal Standards:
- Title 40, Code of Federal Regulation (CFR), Part 245, ⁶
 - Title 40, Code of Federal Regulation (CFR), Part 265, Guidance on Demonstrating Equivalence ⁶

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *clean up level, n*—a concentration of a compound or element, in a defined volume of material, that is allowed to remain on a site.

3.1.1.1 *Discussion*—The numerical level usually is determined during the DQO process using a mean, median, or percentage value based upon health risk, fate and transport consideration, site location and intended use.

¹ This practice 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.

Current edition approved Oct. 10, 2000. Published December 2000.

² *Annual Book of ASTM Standards*, Vol 04.08.

³ *Annual Book of ASTM Standards*, Vol 11.04.

⁴ *Annual Book of ASTM Standards*, Vol 04.11.

⁵ Available from American Petroleum Institute, 1801 K Street NW, Washington, DC 20226.

⁶ Available from Superintendent of Documents, US Government Printing Office, Washington, DC 20402.