



Standard Practice for Obtaining Samples of Geosynthetic Clay Liners¹

This standard is issued under the fixed designation D6072/D6072M; 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 procedures for sampling geosynthetic clay liners (GCLs) for the purpose of laboratory testing. These procedures are designed to ensure that representative samples are obtained and properly packaged for submittal to a testing laboratory.

1.2 The procedures in this practice may be applied to either samples of unhydrated GCLs obtained at the project site prior to installation (or at the production facility, prior to shipment to the project site) or samples exhumed from a project site after installation.

1.3 It is assumed that the *number* of samples to be obtained has already been determined in the project specification, standard test method, or by prior agreement between the purchaser and seller. This practice covers only the methods for obtaining a pre-arranged number of samples and does not describe methods for obtaining individual specimens from the sample.

1.4 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

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

¹ This practice is under the jurisdiction of ASTM Committee D35 on Geosynthetics and is the direct responsibility of Subcommittee D35.04 on Geosynthetic Clay Liners.

Current edition approved Jan. 1, 2015. Published February 2015. Originally approved in 1996. Last previous edition approved in 2009 as D6072/D6072M–09. DOI: 10.1520/D6072_D6072M-09R15.

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.

D4220 Practices for Preserving and Transporting Soil Samples

D4354 Practice for Sampling of Geosynthetics and Rolled Erosion Control Products (RECPs) for Testing

D4439 Terminology for Geosynthetics

D5888 Guide for Storage and Handling of Geosynthetic Clay Liners

3. Terminology

3.1 Definitions:

3.1.1 *geosynthetic clay liner (GCL)*, *n*—a manufactured hydraulic barrier consisting of clay bonded to a layer or layers of geosynthetics.

3.1.2 *sample*, *n*—a portion of a material which is taken for testing or for record purposes (See Practice D4354).

3.1.3 *specimen*, *n*—a specific portion of a material or laboratory sample upon which a test is performed or which is taken for that purpose (See Practice D4354).

3.1.4 For definitions of other geosynthetic terms used in this practice, refer to Terminology D4439.

4. Significance and Use

4.1 This practice provides a procedure by which samples of GCL should be obtained for laboratory testing. The practice applies to materials obtained prior to installation (either at a job site or at a production facility) or exhumed material after installation.

4.2 Only GCL samples obtained in accordance with 5.1 of this practice will be considered representative of the actual manufactured GCL for quality assurance/quality control (QA/QC) purposes.

4.3 The quantity of GCL received by the laboratory should be sufficient for the preparation of several representative test specimens for the standardized physical, hydraulic, and mechanical tests to be performed on the GCLs.

4.4 The procedures in this practice should be used by plant and field personnel for obtaining GCL samples for laboratory testing.

5. Procedure

5.1 Obtaining Samples Prior to Installation: