



Designation: E1527 – 21

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process¹

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1. Scope

1.1 *Purpose*—The purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment*² of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. § 9601) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations on CERCLA liability (hereinafter, the “*landowner liability protections*,” or “*LLPs*”): that is, the practice that constitutes *all appropriate inquiries* into the previous ownership and uses of the *property* consistent with good commercial and customary standards and practices as defined at 42 U.S.C. § 9601(35)(B). (See [Appendix X1](#) for an outline of CERCLA’s liability and defense provisions.) Controlled substances are not included within the scope of this practice. Persons conducting an *environmental site assessment* as part of an EPA Brownfields Assessment and Characterization Grant awarded under CERCLA 42 U.S.C. § 9604(k)(2)(B) must include controlled substances as defined in the Controlled Substances Act (21 U.S.C. § 802) within the scope of the assessment investigations to the extent directed in the terms and conditions of the specific grant or cooperative agreement. Additionally, an evaluation of *business environmental risk (BER)* associated with a parcel of *commercial real estate* may necessitate investigation beyond that identified in this practice (see [1.4](#) and [Section 13](#)).

¹ This practice is under the jurisdiction of ASTM Committee E50 on Environmental Assessment, Risk Management and Corrective Action and is the direct responsibility of Subcommittee E50.02 on Real Estate Assessment and Management.

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² All definitions, descriptions of terms, and acronyms are defined in [Section 3](#). Whenever terms defined in [3.2](#) are used in this practice, they are in *italics*.

1.1.1 *Recognized Environmental Conditions*—The goal of the processes established by this practice is to identify *recognized environmental conditions*. The term *recognized environmental condition* means (1) the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* due to a *release* to the *environment*; (2) the likely presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* due to a *release* or likely *release* to the *environment*; or (3) the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* under conditions that pose a *material threat* of a future *release* to the *environment*. A *de minimis condition* is not a *recognized environmental condition*.

1.1.2 *Petroleum Products*—*Petroleum products* are included within the scope of this practice because they are of concern with respect to *commercial real estate* and current custom and usage is to include an inquiry into the presence of *petroleum products* when doing an *environmental site assessment* of *commercial real estate*. Inclusion of *petroleum products* within the scope of this practice is not based upon the applicability, if any, of CERCLA to *petroleum products*.

1.1.3 *CERCLA Requirements Other Than Appropriate Inquiries*—This practice does not address whether requirements in addition to *all appropriate inquiries* have been met in order to qualify for the *LLPs* (for example, the duties specified in 42 U.S.C. §§ 9607(b)(3)(a) and (b) and cited in [Appendix X1](#), including the continuing obligation not to impede the integrity and effectiveness of *activity and use limitations [AULs]*, or the duty to take reasonable steps to prevent *releases*, or the duty to comply with legally required *release reporting obligations*).

1.1.4 *Other Federal, State, and Local Environmental Laws*—This practice does not address requirements of any state or local laws or of any federal laws other than the *all appropriate inquiries* provisions of the *LLPs*. *Users* are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. *Users* should also be aware that there are likely to be

other legal obligations with regard to *hazardous substances* or *petroleum products* discovered in, on, or at the *subject property* that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for noncompliance.³

1.1.5 Documentation—The scope of this practice includes research and reporting requirements that support the *user's* ability to qualify for the *LLPs*. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report (refer to 8.1.9 and 12.2).

1.2 Objectives—Objectives guiding the development of this practice are (1) to synthesize and put in writing good commercial and customary practice for *environmental site assessments* for *commercial real estate*; (2) to facilitate high quality, standardized *environmental site assessments*; (3) to provide a practical and reasonable *standard practice* for conducting *all appropriate inquiries*; and (4) to clarify an industry standard for *all appropriate inquiries* in an effort to guide legal interpretation of the *LLPs*.

1.3 Units—The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 Considerations beyond Scope—The use of this practice is strictly limited to the scope set forth in this section. Section 13 of this practice identifies, for informational purposes, certain environmental conditions (not an all-inclusive list) that may exist at a *subject property* that are beyond the scope of this practice, but may warrant consideration by parties to a *commercial real estate transaction*. The need to include an investigation of any such conditions in the *environmental professional's* scope of services should be evaluated based upon, among other factors, the nature of the *subject property* and the reasons for performing the assessment (for example, a more comprehensive evaluation of *business environmental risk*) and should be agreed upon between the *user* and *environmental professional* as additional services beyond the scope of this practice before initiation of the *environmental site assessment* process.

1.5 This practice offers a set of instructions for performing one or more specific operations. This document cannot replace education or experience and should be used in conjunction with professional judgment. Not all aspects of this practice may be applicable in all circumstances. This ASTM standard is not intended to represent or replace the standard of care by which

the adequacy of a given professional service must be judged, nor should this document be applied without consideration of a project's many unique aspects. The word "Standard" in the title means only that the document has been approved through the ASTM consensus process.

1.6 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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.7 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

2. Referenced Documents

2.1 ASTM Standards:⁴

E2091 Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls

E2247 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property

E2600 Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions

E2790 Guide for Identifying and Complying With Continuing Obligations

2.2 Federal Statutes:⁵

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "Superfund"), as amended by Superfund Amendments and Reauthorization Act of 1986 ("SARA") and Small Business Liability Relief and Brownfields Revitalization Act of 2002 ("Brownfields Amendments"), 42 U.S.C. § 9601 *et seq.*

Emergency Planning and Community Right-To-Know Act of 1986 ("EPCRA"), 42 U.S.C. § 11001 *et seq.*

Resource Conservation and Recovery Act (also referred to as the Solid Waste Disposal Act), as amended ("RCRA"), 42 U.S.C. § 6901 *et seq.*

2.3 OSHA Standard:

OSHA Hazard Communication Standard (HCS), 29 C.F.R. § 1910.1200⁶

2.4 USEPA Documents:⁷

"Standards and Practices for All Appropriate Inquiries" Final Rule (AAI), 40 C.F.R. Part 312

Superfund, Emergency Planning, and Community Right-To-Know Programs, 40 C.F.R. Parts 300-399

USEPA "Enforcement Discretion Guidance Regarding the

³ Many states and other jurisdictions have differing definitions for terms used throughout this practice, such as "release" and "hazardous substance." If a *Phase I Environmental Site Assessment* is being conducted to satisfy state requirements and to qualify for the state (or other jurisdiction) equivalent of *LLPs*, *users* and *environmental professionals* are cautioned and encouraged to consider any differing jurisdictional requirements and definitions while performing the *Phase I Environmental Site Assessment*. Substances that are outside the scope of this practice (for example, emerging contaminants that are not *hazardous substances* under CERCLA) may be regulated under state law and may be federally regulated in the future. Although the presence or any *release/threatened release* of these substances are "non-scope considerations" under this practice, the *user* may nonetheless decide to include such substances in the defined scope of work for which the *environmental professional* conducting the *Phase I Environmental Site Assessment* is engaged. See 13.1.2.

⁴ 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.

⁵ Available from <https://uscode.house.gov/>.

⁶ Available from www.osha.gov.

⁷ Available from www.epa.gov.