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## Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property<sup>1</sup>

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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 a *Phase I environmental site assessment*<sup>2</sup> of a *property* 120 acres or greater of *forestland* or *rural property* or with a developed use of only *managed forestland* and/or agriculture with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and *petroleum products*. The property need not be adjoining; contiguous; however, the separate non-contiguous areas should have substantially the same general land use and be part of the same transaction. The property may contain isolated areas of non-*forestland* and non-*rural property*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner defense* to CERCLA liability; that is, the practices that constitute “all appropriate inquiry into the previous ownership and uses of 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 inquiry into the previous ownership and uses of the *property* consistent with good commercial or customary practice” as defined in 42 U.S.C. §9601(35)(B). (See Appendix X1 for an outline of CERCLA’s liability and defense provisions). ~~for an outline of CERCLA’s liability and defense provisions.~~ Controlled substances are not included within the scope of this standard. 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.

1.1.1 *Recognized Environmental Conditions*—In defining a standard of good commercial and customary practice for conducting an *environmental site assessment* of a parcel of *property*, the goal of the processes established by this practice is to identify *recognized environmental conditions*. The term *recognized environmental conditions* means the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into *structures* on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* ~~even under conditions in compliance with laws~~. The scope of the work in Section 12 (Non-Scope Considerations) also applies to conditions that would affect the quality of water and threatened and endangered species on a *property* (as defined in the Clean Water Act and the Endangered Species Act specific to non-point source BMP deviations and the taking of threatened and endangered species). ~~The term is not intended to include even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm threat to public human health or the environment or that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.~~

1.1.2 *Three Related Practices*—This practice is closely related to Practices E1527 and E1528. Both E1527 and E1528 are *environmental site assessments*. ~~Two Related Practices—This practice is closely related to Practice E 1527. Practice E 1527 is an environmental site assessment for commercial real estate (see 4.3). This practice also shares similar protocols with Appendix guidance documents X3 and X4: Phase I Environmental Site Assessment Guides for Clean Water Act Non-Point Source Considerations and Threatened and Endangered Species Considerations on Forestland or Rural Property.~~

1.1.3 *Petroleum Products*—*Petroleum products* are included within the scope of this practice because they are of concern with respect to many parcels of *forestland* or *rural property* and current custom and usage is to include an inquiry into the presence of

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<sup>2</sup> All definitions, descriptions of terms, and acronyms are defined in Section 3. Whenever terms defined in 3.2 or described in 3.3 are used in this practice, they are in *italics*.

*petroleum products* when doing an *environmental site assessment* of *forestland* or *rural property*. Inclusion of *petroleum products* within the scope of this practice is not based upon the applicability, if any, of CERCLA to *petroleum products*. (See Appendix X1 for discussion of *petroleum exclusion* to CERCLA liability.)

1.1.4 *CERCLA Requirements Other Than Appropriate Inquiry*—This practice does not address whether requirements in addition to all appropriate inquiry have been met in order to qualify for ~~CERCLA’s innocent landowner defense~~ 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).~~

1.1.5 *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 ~~appropriate inquiry provisions of CERCLA’s innocent landowner defense~~ all appropriate inquiry 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 on a *property* that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance.

1.1.6 *Documentation*—The scope of this practice includes research and reporting requirements that support the *user’s* ability to qualify for the ~~innocent landowner defense~~ 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 7.1.8 and 11.2). ~~8.1.8 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 *forestland* or *rural property*, (2) to facilitate high quality, standardized *environmental site assessments*, (3) to ensure that the standard of ~~appropriate inquiry~~ all appropriate inquiry is practical and reasonable, and (4) to clarify an industry standard for all appropriate inquiry in an effort to guide legal interpretation of ~~CERCLA’s the innocent landowner defense~~ LLPs.

1.3 *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 (for example, threatened and endangered species and non-point source considerations) that may exist on a *forestland* or *rural property* that are beyond the scope of this practice but may warrant discussion between the *environmental professional* and the *user* about a *forestland* or *rural property* ~~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 *property* and the reasons for performing the assessment and should be agreed upon between the *user* and *environmental professional* as additional services beyond the scope of this practice prior to initiation of the *environmental site assessment* process.

1.4 *Organization of This Practice*— This practice has several parts: 13 Sections and two appendices. Section 1 concerns the Scope. Section 2 relates to Referenced Documents. Section 3, Terminology, contains definitions of terms not unique to this practice, descriptions of terms unique to this practice, and acronyms. Section 4 describes the Significance and Use of this practice. Section 5 ~~describes~~ provides discussion regarding activity and use limitations. Section 6 describes the *User’s* Responsibilities. Sections 6-11 contain the main body of the *Phase I Environmental Site Assessment*. 7-12 are the main body of the *Phase I environmental site assessment*, including evaluation and report preparation. Section 12-13 provides additional information regarding non-scope considerations (see 1.3). The appendices are included for information and are not part of the procedures prescribed in this practice. Appendix X1 explains the liability and defense provisions of CERCLA that will assist the *user* in understanding the *user’s* responsibilities under CERCLA; it also contains other important information regarding CERCLA, the *Brownfields Amendments*, and this practice. Appendix X2 provides the definition of the *environmental professional* responsible for the *Phase I environmental site assessment*, as required in the “All Appropriate Inquiry” Final Rule (40 CFR Part 312). Appendix X3 provides an optional User Questionnaire to assist the *user* and the *environmental professional* in gathering information from the user that may be material to identifying *recognized environmental conditions*. Appendix X4 provides a recommended table of contents and report format for a *Phase I Environmental Site Assessment Report*. Guidance Documents X1 and X2 provide guidance to address the evaluation of non-point source and threatened and endangered species considerations, respectively.

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.~~ Phase I environmental site assessment. Guidance Documents X5 and X6 provide guidance to address the evaluation of threatened and endangered species and Clean Water Act non-point source considerations, respectively.

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

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 and health practices and determine the applicability of regulatory limitations prior to use.~~

1.7 This practice offers a set of instructions for performing one or more specific operations and should be supplemented by education, experience, and professional judgment. Not all aspects of this practice may be applicable in all circumstances. This ASTM standard practice does not necessarily represent 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 unique aspects. The word "standard" in the title means only that the document has been approved through the ASTM consensus process.

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>3</sup>

E 1527 [Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process](#)

~~E 1528 Practice for Environmental Site Assessments: Transaction Screen Process~~ [Practice for Limited Environmental Due Diligence: Transaction Screen Process](#)

E 2091 [Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls](#)

### 2.2 Federal Statutes:

[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.](#)

[Freedom of Information Act, 5 U.S.C. §552 as amended by Public Law No. 104-231, 110 Stat. 3048](#)

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

### 2.3 USEPA Documents:

["All Appropriate Inquiry" Final Rule \(40 CFR Part 312\)](#)

[Chapter 1 EPA, Subchapter J—Superfund, Emergency Planning, and Community Right-To-Know Programs, 40 CFR Parts 300-399](#)

[National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR Part 300](#)

### 2.4 Other Federal Agency Documents:

[OSHA Hazard Communication Regulation, 29 CFR §1910.1200](#)

## 3. Terminology

3.1 This section provides definitions, descriptions of terms, and a list of acronyms for many of the words used in this practice. The terms are an integral part of this practice and are critical to an understanding of the practice and its use.

### 3.2 Definitions:

3.2.1 ~~apiary~~—a place where bees are kept; a collection of hives or colony of bees. ~~abandoned property~~—property that can be presumed to be deserted, or an intent to relinquish possession or control can be inferred from the general disrepair or lack of activity thereon such that a reasonable person could believe that there was an intent on the part of the current owner to surrender rights to the property.

3.2.2 ~~Best Management Practices (BMPs)~~—minimum standards necessary for protecting and maintaining a particular State's water quality, as well as certain wildlife habitat values, during forestry activities. (See Section 12, non-scope considerations.) ~~activity and use limitations (AULs)~~—legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to *hazardous substances* or petroleum products in the soil or ground water on the *property*, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include *institutional* and/or *engineering controls*, are intended to prevent adverse impacts to individuals or populations that may be exposed to *hazardous substances* and petroleum products in the soil or ground water on the *property*.<sup>4</sup>

3.2.3 ~~Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)~~—the list of sites compiled by the United States Environmental Protection Agency (EPA) that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List. ~~actual knowledge~~—the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge; that is, knowledge imputed to an individual or entity.

3.2.4 ~~construction debris~~—concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to *property*. ~~adjoining properties~~—any real *property* or properties the border of which is contiguous or partially contiguous with that of the *property*, or that would be contiguous or partially contiguous with that of the *property* but for a street, road, or other thoroughfare separating them.

<sup>3</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>4</sup> Standard Definitions of Petroleum Statistics, American Petroleum Institute, Fourth Edition, 1988.

<sup>4</sup> The term *AUL* is taken from Guide E 2091 to include both legal (that is, institutional) and physical (that is, engineering) controls within its scope. Other agencies, organizations, and jurisdictions may define or utilize these terms differently (for example, EPA and California do not include physical controls within their definitions of "institutional controls." Department of Defense and International County/City Management Association use "Land Use Controls." The term "land use restrictions" is used but not defined in the Brownfields Amendments).



3.2.5 contaminated public wells—public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances (for example, chlorinated solvents), or as having water unsafe to drink without treatment. aerial photographs—photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the *property*. Aerial photographs are often available from government agencies or private collections unique to a local area. See 8.3.4.1 of this practice.

3.2.6 CORRACTS list—list of hazardous waste treatment, storage, or disposal facilities and other RCRA facilities (due to past interim status or storage of hazardous waste beyond 90 days) who have been notified by the EPA to undertake corrective action under the Resource Conservation and Recovery Act (RCRA).

3.2.7 demolition debris—concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to *property*. all appropriate inquiry—that inquiry constituting “*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice” as defined in CERCLA, 42 U.S.C. §9601(35)(B), that will qualify a party to a *foremland* or *rural property* transaction for one of the threshold criteria for satisfying the *LLPs* to CERCLA liability (42 U.S.C. §9601(A) and (B) and §9607(b)(3), §9607(q); and §9607(r)), assuming compliance with other elements of the defense. See Appendix X1.

3.2.7 apiary—a place where bees are kept; a collection of hives or colony of bees.

3.2.8 drum—a container (typically, but not necessarily, holding 55 gal [208 L] of liquid) that may be used to store *hazardous substances* or *petroleum products*. approximate minimum search distance—the area for which records must be obtained and reviewed pursuant to Section 8 subject to the limitations provided in that section. This may include areas outside the *property* and shall be measured from the nearest *property* boundary. This term is used in lieu of radius to include irregularly shaped properties.

3.2.9 dry wells—underground areas where soil has been removed and typically replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional), and wastewater disposal. Best Management Practices (BMPs)—minimum standards necessary for protecting and maintaining a particular State’s water quality, as well as certain wildlife habitat values, during forestry activities. (See Section 13, non-scope considerations.)

3.2.10 dwelling—structure or portion thereof used for residential habitation. bona fide prospective purchaser liability protection—(42 U.S.C. §9607(r)). A person may qualify as a bona fide prospective purchaser if, among other requirements, such person made “all appropriate inquiries into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices.” Knowledge of contamination resulting from *all appropriate inquiry* would not generally preclude this liability protection. A person must make *all appropriate inquiry* on or before the date of purchase. The facility must have been purchased after January 11, 2002. See Appendix X1 for the other necessary requirements that are beyond the scope of this Practice.

3.2.11 environmental lien—a charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including, but not limited to, liens imposed pursuant to CERCLA 42 USC § 9607(1) and similar state or local laws. Brownfields Amendments—amendments to CERCLA pursuant to the Small Business Liability Relief and Brownfields Revitalization Act, Pub. L. No. 107-118 (2002), 42 U.S.C. §§9601 *et seq.*

3.2.12 Emergency Response Notification System (ERNS) list—EPA’s list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 Code of Federal Regulations (CFR) Parts 302 and 355.

3.2.13 Federal Register (FR)—publication of the United States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the CFR, as well as published in the *Federal Register*—building department records—those records of the local government in which the *property* is located indicating permission of the local government to construct, alter, or demolish improvements on the *property*. Often *building department records* are located in the building department of a municipality or county. See 8.3.4.3 (5).

3.2.13 commercial real estate—any real *property* except a dwelling or *property* with no more than four dwelling units exclusively for residential use (except that a dwelling or *property* with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes, but is not limited to, undeveloped real *property* and real *property* used for industrial, retail, office, agricultural, forestry, other commercial, medical, or educational purposes; *property* used for residential purposes that has more than four residential dwelling units; and *property* with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

3.2.14 hazardous substance—a substance defined as a *hazardous substance* pursuant to CERCLA 42 USC § 9601(14), as interpreted by EPA regulations and the courts: “(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under

section 112 of the Clean Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)” See Appendix X1. commercial real estate transaction—a transfer of title to or possession of real *property* or receipt of a security interest in real *property*, except that it does not include transfer of title to or possession of real *property* or the receipt of a security interest in real *property* with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real *property* purchased or leased by persons or entities in the business of building or developing dwelling units.

3.2.15 *hazardous waste*—any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 *et seq.*) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. RCRA defines a *hazardous waste*, in 42 USC § 6903, as: “A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.” Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)—the list of sites compiled by the United States Environmental Protection Agency (EPA) that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

3.2.16 *landfill*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term. construction debris—concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to property.

3.2.17 *lessee*—individual or entity which does not own the *property* but has a written lease or other agreement to use the *property*. contaminated public wells—public wells used for drinking water that have been designated by a government entity as contaminated by hazardous substances (for example, chlorinated solvents), or as having water unsafe to drink without treatment.

3.2.18 *material safety data sheet (MSDS)*—written or printed material concerning a *hazardous substance* which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA’s Hazard Communication Standard, 29 CFR 1910.1200. contiguous property owner liability protection—(42 U.S.C. §9607(q)). A person may qualify for the contiguous property owner liability protection if, among other requirements, such person owns real property that is contiguous to, and that is or may be contaminated by hazardous substances from other real property that is not owned by that person. Furthermore, such person conducted all appropriate inquiry at the time of acquisition of the property and did not know or have reason to know that the property was or could be contaminated by a release or threatened release from the contiguous property. The all appropriate inquiry must not result in knowledge of contamination. If it does, then such person did “know” or “had reason to know” of contamination and would not be eligible for the contiguous property owner liability protection . See Appendix X1 for the other necessary requirements that are beyond the scope of this Practice.

3.2.19 *National Contingency Plan (NCP)*—the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR § 300; that is, the EPA’s blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA. CORRACTS list—list maintained by EPA of hazardous waste treatment, storage, or disposal facilities and other RCRA-regulated facilities (due to past interim status or storage of hazardous waste beyond 90 days) who have been notified by the EPA to undertake corrective action under the Resource Conservation and Recovery Act (RCRA).

3.2.20 *National Priorities List (NPL)*—list compiled by EPA pursuant to CERCLA 42 USC § 9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA’s Hazard Ranking System. See 40 CFR Part 300. data failure—a failure to achieve the historical research objectives in 8.3.1 through 8.3.2.2 even after reviewing the standard historical sources in 8.3.4 that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap. See 8.3.2.3.

3.2.21 *Natural Areas Inventory (NAI)*—list compiled by various state agencies that shows records of reported observations of threatened and endangered species. data gap—a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, and so forth). See 12.7.

3.2.22 *occupant*—a person or entity who is using the *property* or a portion of the *property* and includes, but is not limited to, scattered residential tenancies, agricultural and silvicultural tenancies, small-scale commercial/industrial tenancies, and recreational tenancies such as hunting clubs. demolition debris—concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to property.

3.2.23 *owner*—generally the fee owner of record of the *property* drum—a container (typically, but not necessarily, holding 55 gal [208 L] of liquid) that may be used to store hazardous substances or petroleum products.

3.2.24 *petroleum exclusion*—the exclusion from CERCLA liability provided in 42 USC § 9601(14), as interpreted by the courts

and EPA: “The term (*hazardous substance*) does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).” dry wells—underground areas where soil has been removed and typically replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional), and wastewater disposal (often illegal).

3.2.25 *petroleum products*—those substances included within the meaning of the *petroleum exclusion* to CERCLA, 42 USC § 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a *hazardous substance* under Subparagraphs (A) through (F) of 42 USC § 9601(14); natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil; pursuant to *Standard Definitions of Petroleum Statistics* due diligence—the process of inquiring into the environmental characteristics of a parcel of forestland or rural property or other conditions, usually in connection with a real estate transaction. The degree and kind of due diligence vary for different properties and differing purposes. See Appendix X1.

3.2.26 *Phase I Environmental Site Assessment*—the process described in this practice. dwelling—structure or portion thereof used for residential habitation.

3.2.27 *pits, ponds, or lagoons*—man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge. Emergency Response Notification System (ERNS) list—EPA’s list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR Parts 302 and 355.

3.2.28 *property*—the real *property* that is the subject of the *environmental site assessment* described in this practice. Real *property* includes, but is not limited to, buildings and other fixtures, and improvements located on the *property* and affixed to the land. endangered species—any species as defined in the Federal Endangered Species Act...“which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insect as determined by the Secretary to constitute a pest whose protection under the provisions of this Act (Endangered Species Act) would present an overwhelming and overriding risk to man.” (See non-scope considerations.)

3.2.29 *property tax files*—the files kept for *property* tax purposes by the local jurisdiction where the *property* is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is *reasonably ascertainable* and pertaining to the *property*. See 7.3.4.3. Endangered Species Act—7 U.S.C. 136; 16 U.S.C. 1531 et seq. (1973)

3.2.30 *RCRA generators*—those persons or entities that generate hazardous wastes, as defined and regulated by RCRA. environmental lien—a charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including, but not limited to, liens imposed pursuant to CERCLA 42 U.S.C. §§9607(1) and 9607(r) and similar state or local laws.

3.2.31 *RCRA generators list*—list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

3.2.32 *RCRA TSD facilities*—those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.33 *RCRA TSD facilities list*—list kept by EPA of those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.34 *recorded land title records*—records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the *property* recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the *property* that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located, are not considered part of *recorded land title records*.

3.2.35 *records of emergency release notifications (SARA § 304)*—Section 304 of EPCRA or Title III of SARA requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and state emergency response commission (as defined in EPCRA) of any release beyond the facility’s boundary of any reportable quantity of any extremely *hazardous substance*. Often the local fire department is the local emergency planning committee. Records of such notifications are “Records of Emergency Release Notifications” (SARA § 304).

3.2.36 *report*—the written record prepared by the *environmental professional* and constituting part of a “Phase I Environmental Site Assessment,” as required by this practice.

3.2.37 *silvicultural*—following generally accepted forest management principles for tending, harvesting, and reproducing forests and crops.

3.2.38 *solid waste disposal site*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined



by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term:

3.2.39*solvent*—a chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance*, used in a number of manufacturing/industrial processes including, but not limited to, the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

3.2.40*state registered USTs list*—state lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

3.2.41*sump*—a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

3.2.42*TSD facility*—treatment, storage, or disposal facility (see *RCRA TSD facilities*).

3.2.43*underground storage tank (UST)*—any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10% or more beneath the surface of the ground.

3.2.44*USGS 7.5 Minute Topographic Map*—the map (if any) available from or produced by the United States Geological Survey, entitled “USGS 7.5 Minute Topographic Map,” and showing the *property*. See 7.3.4.2.

3.2.45*wastewater*—water that (1) is or has been used in an industrial or manufacturing process, (2) conveys or has conveyed sewage, or (3) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as storm water flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

3.2.46*zoning/land use records*—those records of the local government in which the *property* is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county. See 7.3.4.3(6).

3.3*Definitions of Terms Specific to This Standard:*

3.3.1*actual knowledge*—the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge; that is, knowledge imputed to an individual or entity.

3.3.2*adjoining properties*—any real *property* or properties the border of which is contiguous or partially contiguous with that of the *property*, or that would be contiguous or partially contiguous with that of the *property* but for a street, road, or other public thoroughfare separating them.

3.3.3*aerial photographs*—photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the *property*. *Aerial photographs* are often available from government agencies or private collections unique to a local area. See 7.3.4.1 of this practice.

3.3.4*appropriate inquiry*—that inquiry constituting “all *appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice” as defined in CERCLA, 42 USC § 9601(35)(B), that will give a party to a *forestland* or *rural property* transaction the *innocent landowner defense* to CERCLA liability (42 USC § 9601(A) and (B) and § 9607(b)(3)), assuming compliance with other elements of the defense. See Appendix X1.

3.3.5*approximate minimum search distance*—the area for which records must be obtained and reviewed pursuant to Section 7 subject to the limitations provided in that section. This may include areas outside the *property* and shall be measured from the nearest *property* boundary. This term is used in lieu of radius to include irregularly shaped properties.

3.3.6*building department records*—those records of the local government in which the *property* is located indicating permission of the local government to construct, alter, or demolish improvements on the *property*. Often *building department records* are located in the building department of a municipality or county. See 7.3.4.3(3).

3.3.7*commercial real estate*—any real *property* except a dwelling or *property* with no more than four dwelling units exclusively for residential use (except that a dwelling or *property* with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes, but is not limited to, undeveloped real *property* and real *property* used for industrial, retail, office, agricultural, forestry, other commercial, medical, or educational purposes; *property* used for residential purposes that has more than four residential dwelling units; and *property* with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

3.3.8*commercial real estate transaction*—a transfer of title to or possession of real *property* or receipt of a security interest in real *property*, except that it does not include transfer of title to or possession of real *property* or the receipt of a security interest in real *property* with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real *property* purchased or leased by persons or entities in the business of building or developing dwelling units.

3.3.9*due diligence*—the process of inquiring into the environmental characteristics of a parcel of *forestland* or *rural property* or other conditions, usually in connection with a *real estate* transaction. The degree and kind of *due diligence* vary for different properties and differing purposes. See Appendix X1.

3.3.10*endangered species*—any species as defined in the Federal Endangered Species Act (USC 42 guidance document for incorporation of Endangered Species Act considerations) ... “which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insect as determined by the Secretary to constitute a pest whose protection under the

provisions of this Act (Endangered Species Act) would present an overwhelming and overriding risk to man.” (See non-scope considerations):

3.3.11 *environmental audit*—the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe this practice, although an environmental audit may include an *environmental site assessment* or, if prior audits are available, may be part of an *environmental site assessment* environmental compliance audit—the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe this practice, although an environmental compliance audit may include an *environmental site assessment* or, if prior audits are available, may be part of an *environmental site assessment*. See Appendix X1.

3.3.12

3.2.32 *environmental professional*—a person possessing sufficient training and experience necessary to conduct a *site reconnaissance*, *interviews*, and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding *recognized environmental conditions* in connection with the *property* in question. An individual’s status as an *environmental professional* may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the *user*—a person meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b). See Appendix X2. The person may be an independent contractor or an employee of the *user*.

3.3.13 *Endangered Species Act*—USC 42 guidance document for incorporation of Endangered Species Act considerations.

3.3.14

3.2.33 *environmental site assessment (ESA)*—the process by which a person or entity seeks to determine if a particular parcel of real *property* (including improvements) is subject to *recognized environmental conditions*. At the option of the *user*, an *environmental site assessment* may include more inquiry than that constituting *all appropriate inquiry* or, if the *user* is not concerned about qualifying for the *innocent landowner defense* *LLPs*, less inquiry than that constituting *all appropriate inquiry* (see Appendix X1). An *environmental site assessment* is both different from and less rigorous than an *environmental compliance audit*.

3.3.15

3.2.34 *Federal Register (FR)*—publication of the United States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the CFR, as well as published in the *Federal Register*.

3.2.35 *fill dirt*—dirt, soil, sand, or other earth, that is obtained offsite, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real *property*. It does not include material that is used in limited quantities for normal landscaping activities.

3.3.16

3.2.36 *fire insurance maps*—maps produced for private fire insurance companies that indicate uses of properties at specified dates and that encompass the property. These maps are often available at local libraries, historical societies, private resellers, or from the map companies who produced them.

3.2.37 *forestland-property*—that is either *historically undeveloped* (see 3.3.183.2.43) or *managed forestland* (see 3.3.253.2.55).

3.3.17

3.2.38 *good faith*—the absence of any intention to seek an unfair advantage or to defraud another party; an honest and sincere intention to fulfill one’s obligations in the conduct or transaction concerned.

3.2.39 *hazardous substance*—a substance defined as a *hazardous substance* pursuant to CERCLA 42 U.S.C. §9601(14), as interpreted by EPA regulations and the courts: “(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. §7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)” See Appendix X1.

3.2.40 *hazardous waste*—any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of the RCRA, as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §6901 *et seq.*) has been suspended by Act of Congress). RCRA is sometimes also identified as the Solid Waste Disposal Act. RCRA defines a *hazardous waste*, at 42 U.S.C. §6903, as: “A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.”



3.2.41 hazardous waste/contaminated sites—sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance, hazardous waste-, or petroleum products*, and that release or suspected release has been reported to a government entity. 3.3-18

3.2.42 historical recognized environmental condition—an environmental condition which in the past would have been considered a *recognized environmental condition*, but which may or may not be considered a *recognized environmental condition* currently. The final decision rests with the *environmental professional* and will be influenced by the current impact of the *historical recognized environmental condition* on the *property*. If a past release of any *hazardous substances* or petroleum products has occurred in connection with the *property* and has been remediated, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a no further action letter or equivalent), this condition shall be considered an *historical recognized environmental condition* and included in the findings section of the *Phase I environmental site assessment* report. The *environmental professional* shall provide an opinion of the current impact on the *property* of this *historical recognized environmental condition* in the opinion section of the report. If this *historical recognized environmental condition* is determined to be a *recognized environmental condition* at the time the *Phase I environmental site assessment* is conducted, the condition shall be identified as such and listed in the conclusions section of the report.

3.2.43 historically undeveloped forestland—a *property* is historically undeveloped or unmanaged forestland if it contains no *relevant man-made changes* and is of such size or of such a nature that *visible* and *physical* observance of the *property* as contemplated in Section 8 of this practice is not capable of being accomplished within reasonable time and cost constraints, will yield little information relevant to the *property*, or will generate extraordinary amounts of irrelevant information. Large tracts of *historically undeveloped forestland* may contain isolated areas of *commercial real estate* which are not relevant to the *historically undeveloped forestland*.

3.3-199 of this practice is not capable of being accomplished within reasonable time and cost constraints, will yield little information relevant to the property, or will generate extraordinary amounts of irrelevant information. Large tracts of *historically undeveloped forestland* may contain isolated areas of *commercial real estate* which are not relevant to the *historically undeveloped forestland*. See 4.5.3 regarding appropriate assessment of *commercial real estate* that may be involved in the transaction.

3.2.44 IC/EC registries—databases of *institutional controls* or *engineering controls* that may be maintained by a federal, state or local environmental agency for purposes of tracking sites that may contain residual contamination and *AULs*. The names for these may vary from program to program and state to state, and include terms such as Declaration of Environmental Use Restriction database (Arizona), list of “deed restrictions” (California), environmental real covenants list (Colorado), and brownfields site list (Indiana, Missouri, Pennsylvania).

3.2.45 innocent landowner defense—that defense to CERCLA liability provided in 42 USC § 9601(35) and § 9607(b)(3). One of the requirements to qualify for this defense is that the party makes “all appropriate inquiry into the previous ownership and uses of the *property* consistent with good commercial or customary practice.” There are additional requirements to qualify for this defense. See —(42 U.S.C. §§9601(35) & 9607(b)(3)). A person may qualify as one of three types of innocent landowners: (i) a person who “did not know and had no reason to know” that contamination existed on the *property* at the time the purchaser acquired the property; (ii) a government entity which acquired the property by escheat, or through any other involuntary transfer or acquisition, or through the exercise of eminent domain authority by purchase or condemnation; and (iii) a person who “acquired the facility by inheritance or bequest.” To qualify for the first type of innocent landowner *LLP*, such person must have made *all appropriate inquiry* on or before the date of purchase. Furthermore, the *all appropriate inquiry* must not have resulted in knowledge of the contamination. If it does, then such person did “know” or “had reason to know” of contamination and would not be eligible for the *innocent landowner defense*. See Appendix X1 for the other necessary requirements that are beyond the scope of this practice.

3.2.46 institutional controls (IC)—a legal or administrative restriction (for example, “deed restrictions,” restrictive covenants, easements, or zoning) on the use of, or access to, a site or facility to (1) reduce or eliminate potential exposure to *hazardous substances* or petroleum products in the soil or ground water on the *property*, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. An *institutional control* is a type of *Activity and Use Limitation (AUL)*.

3.3-20

3.2.47 interviews—those portions of this practice that are contained in Sections 9 and 10 thereof and address questions to be asked of *owners* and *occupants* of the *property* 10 and 11 thereof and address questions to be asked of past and present *owners, operators*, and *occupants* of the *property* and questions to be asked of local government officials.

3.3-21

3.2.48 key site manager—the person identified by the *owner* of a *property* as having good knowledge of the uses and physical characteristics of the *property*. See 9.5-+10.5.1.

3.3-22

3.2.49 landfill—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

3.2.50 Landowner Liability Protections (LLPs)— *landowner liability protections* under CERCLA; these protections include the

bona fide prospective purchaser liability protection, contiguous property owner liability protection, and innocent landowner defense from CERCLA liability. See 42 U.S.C. §9601(35)(A), 9601(40), 9607(b), 9607(q), 9607(r).

3.2.51 leaking underground storage tank (LUST) sites list—state lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so (42 U.S.C. §6991b).

3.2.52 lessee—individual or entity which does not own the property but has a written lease or other agreement to use the property.

3.2.53 local government agencies—those agencies of municipal or county government having jurisdiction over the property. Municipal and county government agencies include, but are not limited to, cities, parishes, townships, and similar entities.

~~3.3.23 leaking underground storage tanks (LUST) sites list—state lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.~~

3.3.24

3.2.54 major occupants—those occupants, suboccupants, or other persons or entities each of which uses at least 40 % of the leasable area of the property or any anchor occupant when the property is a shopping center. 3.3.25

3.2.55 managed forestland—a property is managed forestland if it has received the practical application of biological, physical, quantitative, managerial, economic, social, and policy principles to the regeneration, management, utilization, and conservation of forests to meet specific goals and objectives while maintaining the productivity of the forest. The management of forestland may include the management for aesthetics, fish, recreation, urban values, water, wilderness, wildlife, wood products, and/or other forest resource values, goals, or objectives.

3.3.26

3.2.56 material safety data sheet (MSDS)—written or printed material concerning a hazardous substance which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA’s Hazard Communication Standard, 29 CFR 1910.1200.

3.2.57 material threat—a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment. An example might include an aboveground storage tank system that contains a hazardous substance and which shows evidence of damage. The damage would represent a material threat if it is deemed serious enough that it may cause or contribute to tank integrity failure with a release of contents to the environment.

3.2.58 National Contingency Plan (NCP)—the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR Part 300; that is, the EPA’s blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

3.2.59 National Priorities List (NPL)—list compiled by EPA pursuant to CERCLA 42 U.S.C. §9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA’s Hazard Ranking System. See 40 CFR Part 300.

3.2.60 Natural Areas Inventory (NAI)—list compiled by various state agencies that shows records of reported observations of threatened and endangered species.

3.2.61 obvious—that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the property.

3.3.27

3.2.62 occupant—a person or entity who is using the property or a portion of the property and includes, but is not limited to, scattered residential tenancies, agricultural and silvicultural tenancies, small-scale commercial/industrial tenancies, and recreational tenancies such as hunting clubs.

3.2.63 operator—the person responsible for the overall operation of a facility.

3.2.64 other historical sources—any source or sources other than those designated in 7.3.4.18.3.4.1 and 7.3.4.28.3.4.2 that are credible to a reasonable person and that identify past uses of the property. The term includes, but is not limited to: miscellaneous maps, newspaper archives, internet sites, community organizations, local libraries, historical societies, current owners or occupants of neighboring properties, and records in the files and/or personal knowledge of the property owner—and/or occupants. See 7.3.4.38.3.4.3.

3.3.28

3.2.65 owner—generally the fee owner of record of the property.

3.2.66 petroleum exclusion—the exclusion from CERCLA liability provided in 42 U.S.C. §9601(14), as interpreted by the courts and EPA: “The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).”

3.2.67 petroleum products—those substances included within the meaning of the petroleum exclusion to CERCLA, 42 U.S.C. §9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 U.S.C. §9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic

gas). The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to *Standard Definitions of Petroleum Statistics*.<sup>5</sup>

3.2.68 Phase I Environmental Site Assessment— the process described in this practice.

3.2.69 physical setting sources—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a property-property. See 7.2.38.2.3.

3.3.29

3.2.70 practically reviewable—information that is *practically reviewable* means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *property* without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the *user* can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *property* or a geographic area in which the *property* is located are not generally *practically reviewable*. Most databases of public records are *practically reviewable* if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally *practically reviewable*. Listings in publicly available records, which do not have adequate address information to be located geographically, are not generally considered *practically reviewable*. For large databases with numerous ~~facility~~-records (such as RCRA hazardous waste generators and registered underground storage tanks), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be *practically reviewable*. In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the property , property, it is not *practically reviewable*.

3.3.30

3.2.71 pits, ponds, or lagoons—man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

3.2.72 property—the real *property* that is the subject of the *environmental site assessment* described in this practice. Real *property* includes, but is not limited to, buildings and other fixtures, and improvements located on the *property* and affixed to the land.

3.2.73 property tax files—the files kept for *property tax purposes* by the local jurisdiction where the *property* is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is *reasonably ascertainable* and pertaining to the *property*. See 8.3.4.3.

3.2.74 publicly available—information that is *publicly available* means that the source of the information allows access to the information by anyone upon request.

3.3.31 <https://standards.iteh.ai/catalog/standards/sist/7891bca0-3b06-4e62-b502-6c74690647e0/astm-e2247-08>

3.2.75 RCRA generators—those persons or entities that generate hazardous wastes, as defined and regulated by RCRA.

3.2.76 RCRA generators list—list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

3.2.77 RCRA TSD facilities—those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.78 RCRA TSD facilities list—list kept by EPA of those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

3.2.79 reasonably ascertainable—for purposes of this practice, information that is ~~(1)~~(1) *publicly available*, ~~(2)~~(2) *obtainable* from its source within reasonable time and cost constraints, and ~~(3)~~(3) *practically reviewable*.

3.3.32

3.2.80 recognized environmental conditions—the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into *structures* on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment or that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

3.3.33—the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that

<sup>5</sup> 42 USC § 9607(a). (All statutory references are to Title 42 of the United States Code, unless otherwise specified.) See *United States versus Aceto Agricultural Chemicals Corp.*, 872 F.2d 1373 (8th Cir. 1989). Private plaintiffs, as well as the government, may seek response costs under Superfund from defendants. While many users of these ASTM practices or other private parties may think in terms of how to defend against Superfund liability, they should recognize that they may decide to conduct cleanup actions and seek response costs from other parties.

<sup>3</sup> *Standard Definitions of Petroleum Statistics*, American Petroleum Institute, Fourth Edition, 1988.



indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into *structures* on the *property* or into the ground, groundwater, or surface water of the property. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment or that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not *recognized environmental conditions*.

3.2.81 *recorded land title records*—records of historical fee ownership, leases, land contracts, *AULs*, easements, liens, and other encumbrances on or of the *property* recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the *property* that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located, are not considered part of *recorded land title records*.

3.2.82 *records of emergency release notifications*—EPCRA, (42 U.S.C. §11004) requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and state emergency response commission (as defined in EPCRA) of any release beyond the facility’s boundary of any reportable quantity of any extremely *hazardous substance*. Often the local fire department is the local emergency planning committee. Records of such notifications are “Records of Emergency Release Notifications” (42 U.S.C. 11004).

3.2.83 *records review*—that part that is contained in Section 7-8 of this practice that addresses which records shall or may be reviewed.

3.3.34

3.2.84 *relevant man-made changes*—generally include commercial or industrial buildings intended to enhance a *property’s* value or adapt it for new or further purposes such that said changes render the *property commercial real estate* as defined in Section 3.3.8 of Practice E1527.

3.3.35

3.2.85 *report*—the written record prepared by the *environmental professional* and constituting part of a “Phase I *environmental site assessment*,” as required by this practice.

3.2.86 *rural property*—*property* that includes non-*commercial real estate*, undeveloped *property*, real *property* used for agricultural purposes, or *commercial real estate* used only for the transportation of people or products (including, but not limited to, natural resource development, for example, mining, oil and gas, etc.) and so forth).

3.3.363.2.87 *silvicultural*—following generally accepted forest management principles for tending, harvesting, and reproducing forests and crops.

3.2.88 *site reconnaissance*—that part that is contained in Section 89 of this practice and addresses what should be done in connection with the *site visit*. The *site reconnaissance* includes, but is not limited to, the *site visit* done in connection with such a Phase I *Environmental Site Assessment* environmental site assessment.

3.3.37

3.2.89 *site visit*—the visit to the *property* during which observations are made constituting the *site reconnaissance* section of this practice. The *site visit* may include several visits to the site to ensure the *methodology* of the *site visit* is met (for example, large parcels of land).

3.3.38

3.2.90 *solid waste disposal site*—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

3.2.91 *solvent*—a chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance*, used in a number of manufacturing/industrial processes including, but not limited to, the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

3.2.92 *standard environmental record sources*— those records specified in 7.2.1.18.2.1.1.

3.3.39

3.2.93 *standard historical sources*—those sources of information about the history of uses of *property* specified in 7.3.48.3.4.

3.3.40

3.2.94 *standard physical setting source*—a current USGS 7.5 minute topographic map (if any) showing the area on which the *property* is located. See 7.2.38.2.3.

3.3.41

3.2.95 *standard practice(s)*—the activities set forth in this practice.

3.3.42

3.2.96 *standard sources*—sources of environmental, physical setting, or historical records specified in Section 7-8 of this practice.

3.3.43

3.2.97 state registered USTs list—state lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

3.2.98 Streamside Management Zone (SMZ)—an area of varying width adjacent to a watercourse in which special management precautions are necessary to protect natural resources.

3.3.44

3.2.99 sump—a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

3.2.100 “taking”—the process defined in the Endangered Species Act, that is: the term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, collect a plant or animal listed as threatened or endangered, or to attempt to engage in any such conduct.

3.3.453.2.101 threatened species—the term means, as defined in the Federal Endangered Species Act (USC 42 guidance document for incorporation of Endangered Species Act considerations), any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

3.3.46—the term means, as defined in the Federal Endangered Species Act, any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

3.2.102 TSD facility—treatment, storage, or disposal facility (see RCRA TSD facilities).

3.2.103 underground injection—the emplacement or discharge of fluids into the subsurface by means of a well, improved sinkhole, sewage drain hole, subsurface fluid distribution system or other system, or groundwater point source.

3.2.104 underground storage tank (UST)—any tank, including underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10 % or more beneath the surface of the ground.

3.2.105 user—the party seeking to use this practice to perform an environmental site assessment of the property. A user may include, without limitation, a purchaser of property, a potential occupant of property, an owner of property, a lender, or a property manager.

3.3.47—the party seeking to use this practice to complete an environmental site assessment of the property. A user may include, without limitation, a purchaser of property, a potential occupant of property, an owner of property, a lender, or a property manager. The user has specific obligations for completing a successful application of this practice as outlined in Section 6.

3.2.106 USGS 7.5 Minute Topographic Map—the map (if any) available from or produced by the United States Geological Survey, entitled “USGS 7.5 Minute Topographic Map,” and showing the property. See 8.3.4.2.

3.2.107 visually and/or physically observed—during a site visit pursuant to this practice, this term means observations made by vision while walking through a property and the structures located on it and observations made by the sense of smell, particularly observations of noxious or foul odors. The term “walking through” is not meant to imply that disabled persons who cannot physically walk may not conduct a site visit; they may do so by the means at their disposal for moving through the property and the structures located on it.

3.4—during a site visit pursuant to this practice, this term means observations made by vision while walking through a property and the structures located on it and observations made by the sense of smell, particularly observations of noxious or foul odors. Due to the remoteness and size of large acreage forestland and rural properties covered by this practice, the term visually and/or physically observed also includes aerial photography, aerial imagery, and/or aerial flyovers that may be used in conjunction with walking through areas identified as suspect (such as clearings/disturbed soil, mounds, trenches, structures, and so forth) to “ground-truth” the observations. The term “walking through” is not meant to imply that disabled persons who cannot physically walk may not conduct a site visit; they may do so by the means at their disposal for moving through the property and the structures located on it.

3.2.108 wastewater—water that (1) is or has been used in an industrial or manufacturing process, (2) conveys or has conveyed sewage, or (3) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as storm water flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

3.2.109 zoning/land use records—those records of the local government in which the property is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county. See 8.3.4.3(6) .

3.3 Acronyms:

3.4.1

3.3.1 AULs—Activity and Use Limitations.

3.3.2 BMPs—Best Management Practices.

3.3.3 CERCLA—Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (as amended, 42 U.S.C. §9601 et seq.).

3.4.2

3.3.4 CERCLIS—Comprehensive Environmental Response, Compensation, and Liability Information System (maintained by EPA).

- 3.4.3
- 3.3.5 CFR—Code of Federal Regulations.
- 3.4.4
- 3.3.6 CORRACTS—TSD facilities subject to Corrective Action under RCRA.
- 3.4.5—facilities subject to Corrective Action under RCRA.
- 3.3.7 CWA—Clean Water Act; see Appendix X1.
- 3.4.6
- 3.3.8 EPA—United States Environmental Protection Agency.
- 3.4.7
- 3.3.9 EPCRA—Emergency Planning and Community Right to Know Act ((also known as SARA Title III), 42 U.S.C. §11001 *et seq.*).
- 3.4.8
- 3.3.10 ERNS—emergency response notification system.
- 3.4.9—Emergency Response Notification System.
- 3.3.11 ESA—environmental site assessment (different than an—Environmental Site Assessment (different than an environmental audit; see 3.3.14, herein referred to as the Assessment).
- 3.4.10; *see* 3.2.33).
- 3.3.12 FIFRA—Federal Insecticide, Fungicide, and Rodenticide Act.
- 3.4.11
- 3.3.13 FOIA—U.S. Freedom of Information Act (5 USC 552 *et seq.*).
- 3.4.12—U.S. Freedom of Information Act (5 U.S.C. 552 as amended by Public Law No. 104-231, 110 Stat.).
- 3.3.14 FR—Federal Register.
- 3.4.13
- 3.3.15 ICs—Institutional Controls.
- 3.3.16 LLP—Landowner Liability Protections under the *Brownfields Amendments.*
- 3.3.17 LUST—leaking underground storage tank.
- 3.4.14—Leaking Underground Storage Tank.
- 3.3.18 MSDS—material safety data sheet.
- 3.4.15—Material Safety Data Sheet.
- 3.3.19 NCP—National Contingency Plan.
- 3.4.16
- 3.3.20 NFRAP—Archived CERCLIS sites where no further remedial action is planned under CERCLA.
- 3.3.21 NPDES—national pollutant discharge elimination system.
- 3.4.17—National Pollutant Discharge Elimination System.
- 3.3.22 NPL—national priorities list.
- 3.4.18—National Priorities List.
- 3.3.23 PCBs—polychlorinated biphenyls.
- 3.4.19
- 3.3.24 PRP—potentially responsible party (pursuant to CERCLA 42 USC § 9607(a)).
- 3.4.20—Potentially Responsible Party (pursuant to CERCLA 42 U.S.C. §9607(a)).
- 3.3.25 RCRA—Resource Conservation and Recovery Act (as amended, 42 U.S.C. §6901 *et seq.*).
- 3.4.21
- 3.3.26 SARA—Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA).
- 3.4.22
- 3.3.27 SMZ—Streamside Management Zone.
- 3.4.23
- 3.3.28 TSCA—Toxic Substances Control Act.
- 3.4.24
- 3.3.29 TSDF—*hazardous waste* treatment, storage or disposal facility.
- 3.3.30 USC—United States Code.
- 3.4.25
- 3.3.31 USDA —Unites States Department of Agriculture.
- 3.4.26
- 3.3.32 USGS—United States Geological Survey.
- 3.4.27
- 3.3.33 UST—underground storage tank. —Underground Storage Tank.

#### 4. Significance and Use

- 4.1 *Uses*—This practice is intended for use on a voluntary basis by parties who wish to assess the environmental condition of