PDHonline Course C275 (2 PDH)

How to Conduct Phase I Environmental Site Assessments

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Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process[1]

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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 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 inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" 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 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. Additionally, an evaluation of *business environmental risk* associated with a parcel of *commercial real estate* may necessitate investigation beyond that identified in this practice (see Sections 1.3 and 13).

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, ground water, 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 and 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 *Petroleum Products*—*Petroleum products* are included within the scope of this practice because they are of concern with respect to many parcels of *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*. (See X1.7 for discussion of *petroleum exclusion* to CERCLA liability.)

1.1.3 *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 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 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

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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*.

petroleum products discovered on the *property* that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance.

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 8.1.8 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 *commercial real estate*, *(2)* to facilitate high quality, standardized *environmental site assessments*, *(3)* to ensure that the standard of *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 the *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 (not an all-inclusive list) that may exist on a *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 *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 prior to initiation of the *environmental site assessment* process.

1.4 *Organization of This Practice*—This practice has thirteen sections and four appendixes. Section 1 is the Scope. Section 2 is Referenced Documents. Section 3, Terminology, has definitions of terms not unique to this practice, descriptions of terms unique to this practice, and acronyms. Section 4 is Significance and Use of this practice. Section 5 provides discussion regarding *activity and use limitations*. Section 6 describes *User's* Responsibilities. Sections 7-12 are the main body of the *Phase I Environmental Site Assessment*, including evaluation and *report* preparation. Section 13 provides additional information regarding non-scope considerations (see 1.3). The appendixes 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 C.F.R. 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*.

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.*

1.6 *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.*

2. Referenced Documents

2.1 *ASTM Standards:* [3]

E 1528 Guide for Environmental Site Assessments: 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 C.F.R. Part 312

Chapter 1 EPA, Subchapter J-Superfund, Emergency Planning, and Community Right-To-Know Programs, 40 C.F.R Parts 300-399

National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300

2.4 *Other Federal Agency Document:*

OSHA Hazard Communication Regulation, 29 C.F.R. §1910.1200

[3] 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.

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 *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 *activity and use limitations*—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*.[4]

3.2.3 *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 *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.

3.2.5 *aerial photographs*—photographs taken from an aerial platform with sufficient resolution 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 *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 *commercial real estate transaction* for one of threshold criteria for satisfying the *LLPs* to CERCLA liability (42 U.S.C §9601(35)(A) & (B), §9607(b)(3), §9607(q); and §9607(r)), assuming compliance with other elements of the defense. See Appendix X1.

3.2.7 *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.

3.2.8 *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.

3.2.9 *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*.

3.2.10 *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 8.3.4.7.

3.2.11 *business environmental risk*—a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of *commercial real estate*, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of *business environmental risk* issues may involve addressing one or more non-scope considerations, some of which are identified in Section 13.

3.2.12 *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, 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.

3.2.13 *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

[4] The term *AUL* is taken from the ASTM Standard 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*).

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.

3.2.14 *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)*—the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential *hazardous substance* contamination for possible inclusion on the *National Priorities List*.

3.2.15 *construction debris*—concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to *property*.

3.2.16 *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.

3.2.17 *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.

3.2.18 *CORRACTS list*—a 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) that have been notified by the U.S. Environmental Protection Agency to undertake corrective action under RCRA. The *CORRACTS list* is a subset of the EPA database that manages RCRA data.

3.2.19 *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 8.3.4.1 through 8.3.4.8 that are *reasonably ascertainable* and likely to be useful. *Data failure* is one type of *data gap*. See 8.3.2.3.

3.2.20 *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, etc.). See 12.7.

3.2.21 *demolition debris*—concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to *property*.

3.2.22 *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*.

3.2.23 *dry wells*—underground areas where soil has been removed and 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).

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

3.2.25 *dwelling*—structure or portion thereof used for residential habitation.

3.2.26 *engineering controls (EC)*—physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to *hazardous substances* or *petroleum products* in the soil or ground water on the *property*. *Engineering controls* are a type of activity and use limitation (AUL).

3.2.27 *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*.

3.2.28 *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) & 9607(r) and similar state or local laws.

3.2.29 *environmental professional*—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*.

3.2.30 *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 *LLPs*, less inquiry than that constituting *all appropriate inquiry*. An *environmental site assessment* is both different from and less rigorous than an *environmental compliance audit*.

3.2.31 *ERNS list*—EPA's emergency response notification system 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.

3.2.32 *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 Code of Federal Regulations (CFR), as well as published in the *Federal Register*.

3.2.33 *fill dirt*—dirt, soil, sand, or other earth, that is obtained off-site, 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.

3.2.34 *fire insurance maps*—maps produced for private fire insurance map 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.

3.2.35 *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.

3.2.36 *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.)

3.2.37 *hazardous waste*—any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of RCRA, as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §§6901-6992k) 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."

3.2.38 *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.

3.2.39 *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*.

3.2.40 *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), brownfields site list (Indiana, Missouri, Pennsylvania).

3.2.41 *innocent landowner defense*—(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.

3.2.42 *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).

3.2.43 *interviews*—those portions of this practice that are contained in Section 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.

3.2.44 *key site manager*—the person identified by the *owner* or *operator* of a *property* as having good knowledge of the uses and physical characteristics of the *property*. See 10.5.1.

3.2.45 *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.

3.2.46 *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).

3.2.47 *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.

3.2.48 *local street directories*—directories published by private (or sometimes government) sources that show ownership, occupancy, and/or use of sites by reference to street addresses. Often *local street directories* are available at libraries, or historical societies, and/or local municipal offices. See 8.3.4.6 of this practice.

3.2.49 *LUST sites*—state lists of leaking *underground storage tank* sites. 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).

3.2.50 *major occupants*—those tenants, subtenants, or other persons or entities each of which uses at least 40 % of the leasable area of the *property* or any anchor tenant when the *property* is a shopping center.

3.2.51 *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 C.F.R. §1910.1200.

3.2.52 *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.

3.2.53 *National Contingency Plan (NCP)*—the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 C.F.R. Part 300, that is the EPA's blueprint on how *hazardous substances* are to be cleaned up pursuant to CERCLA.

3.2.54 *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 C.F.R. Part 300.

3.2.55 *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*.

3.2.56 *occupants*—those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.

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

3.2.58 *other historical sources*—any source or sources other than those designated in 8.3.4.1 through 8.3.4.8 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 8.3.4.9.

3.2.59 *owner*—generally the fee *owner* of record of the *property*.

3.2.60 *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)."

3.2.61 *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, kerosine, diesel oil, jet fuels, and fuel oil, pursuant to Standard Definitions of Petroleum Statistics.[5])

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

[5] *Standard Definitions of Petroleum Statistics*, American Petroleum Institute, Fourth Edition, 1988.

3.2.63 *physical setting sources*—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a *property*. See 8.2.3.

3.2.64 *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.

3.2.65 *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 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*, it is not *practically reviewable*.

3.2.66 *property*—the real *property* that is the subject of the *environmental site assessment* described in this practice. Real *property* includes buildings and other fixtures and improvements located on the *property* and affixed to the land.

3.2.67 *property tax files*—the files kept for *property* tax purposes by the local jurisdiction where the *property* is located and may include 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.

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

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

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

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

3.2.72 *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.

3.2.73 *reasonably ascertainable*—information that is *(1) publicly available*, *(2)* obtainable from its source within reasonable time and cost constraints, and *(3) practically reviewable*

3.2.74 *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, ground water, 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 and 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*.

3.2.75 *recorded land title records*—records of historical fee ownership, which may include leases, land contracts, and AULs 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*. See 8.3.4.4.

3.2.76 *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).

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

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

3.2.79 *site reconnaissance*—that part that is contained in Section 9 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*.

3.2.80 *site visit*—the visit to the *property* during which observations are made constituting the *site reconnaissance* section of this practice.

3.2.81 *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.

3.2.82 *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.

3.2.83 *standard environmental record sources*—those records specified in 8.2.1.

3.2.84 *standard historical sources*—those sources of information about the history of uses of *property* specified in 8.3.4.

3.2.85 *standard physical setting source*—a current *USGS 7.5 Minute Topographic Map* (if any) showing the area on which the *property* is located. See 8.2.3.

3.2.86 *standard practice*—the activities set forth in this practice.

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

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

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

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

3.2.91 *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.

3.2.92 *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.

3.2.93 *user*—the party seeking to use Practice E 1527 to complete an *environmental site assessment* of the *property*. A *user* may include, without limitation, a potential purchaser of *property*, a potential tenant 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.

3.2.94 *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*.

3.2.95 *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.

3.2.96 *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 stormwater 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.

3.2.97 *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 8.3.4.8.

3.3 *Acronyms:*

3.3.1 *AULs*—Activity and Use Limitations.

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

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

3.3.4 *CFR*—Code of Federal Regulations.

3.3.5 *CORRACTS*—facilities subject to Corrective Action under RCRA.

3.3.6 *EPA*—United States Environmental Protection Agency.

3.3.7 *EPCRA*—Emergency Planning and Community Right to Know Act ((also known as SARA Title III), 42 U.S.C. §§11001-11050 *et seq*.).

3.3.8 *ERNS*—emergency response notification system.

3.3.9 *ESA*—Environmental Site Assessment (different than an *environmental compliance audit*, 3.2.27).

3.3.10 *FOIA*—U.S. Freedom of Information Act (5 U.S.C. §552 as amended by Public Law No. 104-231, 110 Stat.).

3.3.11 *FR*—Federal Register.

3.3.12 *ICs*—Institutional Controls.

3.3.13 *LLP*—Landowner Liability Protections under the *Brownfields Amendments*

3.3.14 *LUST*—Leaking Underground Storage Tank.

3.3.15 *MSDS*—Material Safety Data Sheet.

3.3.16 *NCP*—National Contingency Plan.

3.3.17 *NFRAP*—former CERCLIS sites where no further remedial action is planned under CERCLA.

3.3.18 *NPDES*—National Pollutant Discharge Elimination System.

3.3.19 *NPL*—National Priorities List.

3.3.20 *PCBs*—polychlorinated biphenyls.

3.3.21 *PRP*—Potentially Responsible Party (pursuant to CERCLA 42 U.S.C. §9607(a)).

3.3.22 *RCRA*—Resource Conservation and Recovery Act (as amended, 42 U.S.C.§§6901 *et seq*.).

3.3.23 *SARA*—Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA).

3.3.24 *TSDF—hazardous waste* treatment, storage or disposal facility.

3.3.25 *USC*—United States Code.

3.3.26 *USGS*—United States Geological Survey.

3.3.27 *UST*—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 *commercial real estate* taking into account commonly known and *reasonably ascertainable* information. While use of this practice is intended to constitute *all appropriate inquiry* for purposes of the *LLPs*, it is not intended that its use be limited to that purpose. This practice is intended primarily as an approach to conducting an inquiry designed to identify *recognized environmental conditions* in connection with a *property*. No implication is intended that a person must use this practice in order to be deemed to have conducted inquiry in a commercially prudent or reasonable manner in any particular transaction. Nevertheless, this practice is intended to reflect a commercially prudent and reasonable inquiry. (See Section 1.6.)

4.2 *Clarifications on Use*:

4.2.1 *Use Not Limited to CERCLA*—This practice is designed to assist the *user* in developing information about the environmental condition of a *property* and as such has utility for a wide range of persons, including those who may have no actual or potential CERCLA liability and/or may not be seeking the *LLPs*.

4.2.2 *Residential Tenants/Purchasers and Others*—No implication is intended that it is currently customary practice for residential tenants of multifamily residential buildings, tenants of single-family homes or other residential real estate, or purchasers of *dwellings* for one's own residential use, to conduct an *environmental site assessment* in connection with these transactions. Thus, these transactions are not included in the term *commercial real estate* transactions, and it is not intended to imply that such persons are obligated to conduct an *environmental site assessment* in connection with these transactions for purposes of *all appropriate inquiry* or for any other purpose. In addition, no implication is intended that it is currently customary practice for *environmental site assessments* to be conducted in other unenumerated instances (including but not limited to many commercial leasing transactions, many acquisitions of easements, and many loan transactions in which the lender has multiple remedies). On the other hand, anyone who elects to do an *environmental site assessment* of any *property* or portion of a *property* may, in such person's judgment, use this practice.

4.2.3 *Site-Specific*—This practice is site-specific in that it relates to assessment of environmental conditions on a specific parcel of *commercial real estate*. Consequently, this practice does not address many additional issues raised in transactions such as purchases of business entities, or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated or other off-site environmental liabilities.

4.3 *Who May Conduct*—A *Phase I Environmental Site Assessment* must be performed by an *environmental professional* as specified in Section 7.5.1. No practical standard can be designed to eliminate the role of judgment and the value and need for experience in the party performing the inquiry. The professional judgment of an *environmental professional* is, consequently, vital to the performance of *all appropriate inquiry*.

4.4 *Additional Services*—As set forth in 12.9, additional services may be contracted for between the *user* and the *environmental professional*. Such additional services may include *business environmental risk* issues not included within the scope of this practice, examples of which are identified in Section 13 under Non-Scope Considerations.

4.5 *Principles*—The following principles are an integral part of this practice and are intended to be referred to in resolving any ambiguity or exercising such discretion as is accorded the *user* or *environmental professional* in performing an *environmental site assessment* or in judging whether a *user* or *environmental professional* has conducted appropriate inquiry or has otherwise conducted an adequate *environmental site assessment*.

4.5.1 *Uncertainty Not Eliminated*—No *environmental site assessment* can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property*. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for *recognized environmental conditions* in connection with a *property*, and this practice recognizes reasonable limits of time and cost.

4.5.2 *Not Exhaustive—All appropriate inquiry* does not mean an exhaustive assessment of a clean *property*. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an *environmental site assessment* and the reduction of uncertainty about unknown conditions resulting from additional information.

4.5.3 *Level of Inquiry is Variable*—Not every *property* will warrant the same level of assessment. Consistent with good commercial or customary practice, the appropriate level of *environmental site assessment* will be guided by the type of

property subject to assessment, the expertise and risk tolerance of the *user*, and the information developed in the course of the inquiry.

4.5.4 *Comparison with Subsequent Inquiry*—It should not be concluded or assumed that an inquiry was not *all appropriate inquiry* merely because the inquiry did not identify *recognized environmental conditions* in connection with a *property*. *Environmental site assessments* must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. Subsequent *environmental site assessments* should not be considered valid standards to judge the appropriateness of any prior assessment based on hindsight, new information, use of developing technology or analytical techniques, or other factors.

4.6 *Continued Viability of Environmental Site Assessment*—Subject to Section 4.8, an *environmental site assessment* meeting or exceeding this practice and completed less than 180 days prior to the date of acquisition[6] of the *property* or (for transactions not involving an acquisition) the date of the intended transaction is presumed to be valid.[7] If within this period the assessment will be used by a different *user* than the *user* for whom the assessment was originally prepared, the subsequent *user* must also satisfy the User's Responsibilities in Section 6. Subject to Section 4.8 and the User's Responsibilities set forth in Section 6, an *environmental site assessment* meeting or exceeding this practice and for which the information was collected or updated within one year prior to the the date of acquisition of the *property* or (for transactions not involving an acquisition) the date of the intended transaction may be used provided that the following components of the inquiries were conducted or updated within 180 days of the date of purchase or the date of the intended transaction:

(i) *interviews* with *owners*, *operators*, and *occupants*;

(ii) searches for recorded environmental cleanup liens;

(iii) reviews of federal, tribal, state, and local government records;

(iv) visual inspections of the *property* and of *adjoining properties*; and

(v) the declaration by the *environmental professional* responsible for the assessment or update.

4.7 *Prior Assessment Usage*—This practice recognizes that *environmental site assessments* performed in accordance with this practice will include information that subsequent *users* may want to use to avoid undertaking duplicative assessment procedures. Therefore, this practice describes procedures to be followed to assist *users* in determining the appropriateness of using information in *environmental site assessments* performed more than one year prior to the date of acquisition of the *property* or (for transactions not involving an acquisition) the date of the intended transaction. The system of prior assessment usage is based on the following principles that should be adhered to in addition to the specific procedures set forth elsewhere in this practice:

4.7.1 *Use of Prior Information*—Subject to the requirements set forth in Section 4.6, *users* and *environmental professionals* may use information in prior *environmental site assessments* provided such information was generated as a result of procedures that meet or exceed the requirements of this practice. However, such information shall not be used without current investigation of conditions likely to affect *recognized environmental conditions* in connection with the *property*. Additional tasks may be necessary to document conditions that may have changed materially since the prior *environmental site assessment* was conducted.

4.7.2 *Contractual Issues Regarding Prior Assessment Usage*—The contractual and legal obligations between prior and subsequent *users* of *environmental site assessments* or between *environmental professionals* who conducted prior *environmental site assessments* and those who would like to use such prior *environmental site assessments* are beyond the scope of this practice.

4.8 *Actual Knowledge Exception*—If the *user* or *environmental professional(s)* conducting an *environmental site assessment* has *actual knowledge* that the information being used from a prior *environmental site assessment* is not accurate or if it is *obvious*, based on other information obtained by means of the *environmental site assessment* or known to the person conducting the *environmental site assessment*, that the information being used is not accurate, such information from a prior *environmental site assessment* may not be used.

4.9 *Rules of Engagement*—The contractual and legal obligations between an *environmental professional* and a *user* (and other parties, if any) are outside the scope of this practice. No specific legal relationship between the *environmental professional* and the *user* is necessary for the *user* to meet the requirements of this practice.

5. Significance of Activity and Use Limitations

5.1 *Activity and Use Limitations (AULs)*—AULs are one indication of a past or present release of a *hazardous substance* or *petroleum products*. AULs are an explicit recognition by a federal, tribal, state, or local regulatory agency that residual levels of *hazardous substances* or *petroleum products* may be present on a *property*, and that unrestricted use of the *property* may not be acceptable. AULs are important to both the *user* and the *environmental professional*. Specifically, the *environmental professional* can review agency records and *IC/EC registries* for the presence of AULs on the *property* to determine if a recognized environmental condition is present on the subject *property* (see Section 8.2.1, 8.2.2, and 11.5.1.4). The *user* must comply with AULs to maintain the LLP (see Appendix X1).

5.2 *Different Terms for AULs*—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. Agencies, organizations, and jurisdictions may define or utilize these terms differently (for example, Department of Defense and International City/County Management Association use "Land Use Controls" and the term "land use restrictions" is used but not defined in the *Brownfields Amendments*).

[6] Under "*All Appropriate Inquiry*" 40 C.F.R. Part 312, EPA defines date of acquisition as the date on which a person acquires title to the *property*.

[7] Subject to meeting the other requirements set forth in this section, for purpose of the *LLPs*, information collected in an assessment conducted prior to the effective date of the federal regulations for *All Appropriate Inquiry* or this practice can be used if the information was generated as a result of procedures that meet or exceed the requirements of the E 1527-97 or -00 standards.

5.3 *Information Provided by the AUL*—The AUL should provide information on the chemical(s) of concern, the potential exposure pathway(s) that the AUL is intended to control, the environmental medium that is being controlled, and the expected performance objective(s) of the AUL. AULs may be used to provide access to monitoring wells, sampling locations, or remediation equipment.

5.4 *Where AULs Can Be Found*—AULs are often recorded in land title records. AUL information is contained in the restrictions of record on the title, rather than a typical chain of title. Chain of title will not provide information regarding restrictions on title such as restrictive covenants, easements, or other types of AULs. Some AULs are maintained on a state *IC or EC Registry* and may not be recorded in land title records. While some states maintain readily accessible *IC/EC registries*, other states do not. The *environmental professional* is cautioned to determine whether AULs are considered readily available records in the state in which the *property* is located. Some AULs may only exist in project documentation, which may not be readily available to the *environmental professional*. This may be the case in states where project files are archived after a period of years and access to the archives is restricted. AULs imposed upon some properties by local agencies with limited environmental oversight may not be recorded in the land title records, particularly where a local agency has been delegated regulatory authority over environmental programs.

6. User's Responsibilities

6.1 *Scope*—The purpose of this section is to describe tasks to be performed by the *user* that will help identify the possibility of *recognized environmental conditions* in connection with the *property*. These tasks do not require the technical expertise of an *environmental professional* and are generally not performed by *environmental professionals* performing a *Phase I Environmental Site Assessment*. 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*.

6.2 *Review Title and Judicial Records for Environmental Liens or Activity and Use Limitations (AULs)—Reasonably ascertainable recorded land title records* and lien records that are filed under federal, tribal, state, or local law should be reviewed to identify *environmental liens* or *activity and use limitations*, if any, that are currently recorded against the *property*. *Environmental liens* and *activity and use limitations* that are imposed by judicial authorities may be recorded or filed in judicial records, and, where applicable, such records should be reviewed. Any *environmental liens* or *activity and use limitations* so identified shall be reported to the *environmental professional* conducting a *Phase I Environmental Site Assessment*. Unless added by a change in the scope of work to be performed by the *environmental professional*, this practice does not impose on the *environmental professional* the responsibility to undertake a review of *recorded land title records* and judicial records for *environmental liens* or *activity and use limitations*. The *user* should either *(1)* engage a title company or title professional to undertake a review of *reasonably ascertainable recorded land title records* and lien records for *environmental liens* or *activity and use limitations* currently recorded against or relating to the *property*, or *(2)* negotiate such an engagement of a title company or title professional as an addition to the scope of work to be performed by the *environmental professional*.

6.2.1 *Reasonably Ascertainable*—Except to the extent that applicable federal, state, local or tribal statutes, or regulations specify any place other than *recorded land title records* for recording or filing *environmental liens* or *activity and use limitations* or specify records to be reviewed to identify the existence of such *environmental liens* or *activity and use limitations*, *environmental liens* or *activity and use limitations* that are recorded or filed any place other than *recorded land title records* are not considered to be *reasonably ascertainable*.

6.3 *Specialized Knowledge or Experience of the User*—If the *user* is aware of any specialized knowledge or experience that is material to *recognized environmental conditions* in connection with the *property*, it is the *user's* responsibility to communicate any information based on such specialized knowledge or experience to the *environmental professional*. The *user* should do so before the *environmental professional* conducts the *site reconnaissance*.

6.4 *Actual Knowledge of the User*—If the *user* has *actual knowledge* of any *environmental lien* or AULs encumbering the *property* or in connection with the *property*, it is the *user's* responsibility to communicate such information to the *environmental professional*. The *user* should do so before the *environmental professional* conducts the *site reconnaissance*.

6.5 *Reason for Significantly Lower Purchase Price*—In a transaction involving the purchase of a parcel of *commercial real estate*, the *user* shall consider the relationship of the purchase price of the *property* to the fair market value of the *property* if the *property* was not affected by *hazardous substances* or *petroleum products*. The *user* should try to identify an explanation for a lower price which does not reasonably reflect fair market value if the *property* were not contaminated, and make a written record of such explanation. Among the factors to consider will be the information that becomes known to the *user* pursuant to the *Phase I Environmental Site Assessment*. This standard does not require that a real estate appraisal be obtained in order to ascertain fair market value of the *property*.

6.6 *Commonly Known or Reasonably Ascertainable Information*—If the *user* is aware of any commonly known or *reasonably ascertainable* information within the local community about the *property* that is material to *recognized environmental conditions* in connection with the *property*, it is the *user's* responsibility to communicate such information to the *environmental professional*. The *user* should do so before the *environmental professional* conducts the *site reconnaissance*.

6.7 *Other*—Either the *user* shall make known to the *environmental professional* the reason why the *user* wants to have the *Phase I Environmental Site Assessment* performed or, if the *user* does not identify the purpose of the *Phase I Environmental Site Assessment*, the *environmental professional* shall assume the purpose is to qualify for an LLP to CERCLA liability and state this in the *report*. In addition to satisfying one of the requirements to qualify for an LLP to CERCLA liability,

another reason for performing a *Phase I Environmental Site Assessment* might include the need to understand potential environmental conditions that could materially impact the operation of the business associated with the parcel of *commercial real estate*. The *user* and the *environmental professional* may also need to modify the scope of services performed under this practice for special circumstances, including, but not limited to, operating industrial facilities or large tracts of land (large areas or corridors).

7. Phase I Environmental Site Assessment

7.1 *Objective*—The purpose of this *Phase I Environmental Site Assessment* is to identify, to the extent feasible pursuant to the processes prescribed herein, *recognized environmental conditions* in connection with the *property*. (See 1.1.1.)

7.2 *Four Components*—A *Phase I Environmental Site Assessment* shall have four components, as described as follows:

7.2.1 *Records Review*—Review of records; see Section 8,

7.2.2 *Site Reconnaissance*—A visit to the *property*; see Section 9,

7.2.3 *Interviews*:

7.2.3.1 *Interviews* with present and past *owners*, *operators*, and *occupants* of the *property*; see Section 10, and

7.2.3.2 *Interviews* with local government officials; see Section 11, and

7.2.4 *Report*—Evaluation and *report*; see Section 12.

7.3 *Coordination of Parts*:

7.3.1 *Parts Used in Concert*—The *records review*, *site reconnaissance*, and *interviews* are intended to be used in concert with each other. If information from one source indicates the need for more information, other sources may be available to provide information. For example, if a previous use of the *property* as a gasoline station is identified through the *records review*, but the present *owner* and *occupants* interviewed report no knowledge of an *underground storage tank*, the person conducting the *site reconnaissance* should be alert for signs of the presence of an *underground storage tank*.

7.3.2 *User's Obligations*—The *environmental professional* shall note in the *report* whether or not the *user* has reported to the *environmental professional* information pursuant to Section 6.

7.4 *No Sampling*—This practice does not include any testing or sampling of materials (for example, soil, water, air, building materials).

7.5 *Who May Conduct a Phase I*:

7.5.1 *Environmental Professional's Duties*—The *environmental site assessment* must be performed by the *environmental professional* or conducted under the supervision or responsible charge of the *environmental professional*. The *interviews* and *site reconnaissance* shall be performed by a person possessing sufficient training and experience necessary to conduct the *site reconnaissance* and *interviews* in accordance with this practice, and having the ability to identify issues relevant to *recognized environmental conditions* in connection with the *property*. At a minimum, the *environmental professional* must be involved in planning the *site reconnaissance* and *interviews*. Review and interpretation of information upon which the *report* is based shall be performed by the *environmental professional*.

7.5.2 *Information Obtained From Others*—Information for the *records review* needed for completion of a *Phase I Environmental Site Assessment* may be provided by a number of parties including government agencies, third-party vendors, the *user*, and present and past *owners* and *occupants* of the *property*, provided that the information is obtained by or under the supervision of an *environmental professional* or is obtained by a third-party vendor specializing in retrieval of the information specified in Section 8. Prior assessments may also contain information that will be appropriate for usage in a current *environmental site assessment* provided the prior usage procedures set forth in Sections 8, 9, and 10 are followed. The *environmental professional(s)* responsible for the *report* shall review all of the information provided.

7.5.2.1 *Reliance*—An *environmental professional* is not required to verify independently the information provided but may rely on information provided unless he or she has *actual knowledge* that certain information is incorrect or unless it is *obvious* that certain information is incorrect based on other information obtained in the *Phase I Environmental Site Assessment* or otherwise actually known to the *environmental professional*.

8. Records Review

8.1 *Introduction*:

8.1.1 *Objective*—The purpose of the *records review* is to obtain and review records that will help identify *recognized environmental conditions* in connection with the *property*.

8.1.2 *Approximate Minimum Search Distance*—Some records to be reviewed pertain not just to the *property* but also pertain to properties within an additional *approximate minimum search distance* in order to help assess the likelihood of problems from migrating *hazardous substances* or *petroleum products*. When the term *approximate minimum search distance* includes areas outside the *property*, it shall be measured from the nearest *property* boundary. The term *approximate minimum search distance* is used in lieu of radius in order to include irregularly shaped properties.

8.1.2.1 *Adjustment to Approximate Minimum Search Distance*—When allowed by 8.2.1, the *approximate minimum search distance* for a particular record may be adjusted in the discretion of the *environmental professional*. Factors to consider in adjusting the *approximate minimum search distance* include: *(1)* the density (for example, urban, rural, or suburban) of the setting in which the *property* is located; *(2)* the distance that the *hazardous substances* or *petroleum products* are likely to migrate based on local geologic or hydrogeologic conditions; *(3)* the *property* type, *(4)* existing or past uses of surrounding properties, and *(5)* other reasonable factors. The justification for each adjustment and the *approximate minimum search distance* actually used for any particular record shall be explained in the *report*. If the *approximate minimum search distance* is specified as "*property* only," then the search shall be limited to the *property* and may not be reduced unless the particular record is not *reasonably ascertainable*.

8.1.3 *Accuracy and Completeness*—Accuracy and completeness of record information varies among information sources, including governmental sources. Record information is often inaccurate or incomplete. The *user* or *environmental*

professional is not obligated to identify mistakes or insufficiencies in information provided. However, the *environmental professional* reviewing records shall make a reasonable effort to compensate for mistakes or insufficiencies in the information reviewed that are *obvious* in light of other information of which the *environmental professional* has *actual knowledge*.

8.1.4 *Reasonably Ascertainable/Standard Sources*—Availability of record information varies from information source to information source, including governmental jurisdictions. The *user* or *environmental professional* is not obligated to identify, obtain, or review every possible record that might exist with respect to a *property*. Instead, this practice identifies record information that shall be reviewed from *standard sources*, and the *user* or *environmental professional* is required to review only record information that is *reasonably ascertainable* from those *standard sources*. Record information that is *reasonably ascertainable* means *(1)* information that is *publicly available*, *(2)* information that is obtainable from its source within reasonable time and cost constraints, and *(3)* information that is *practically reviewable*.

8.1.4.1 *Publicly Available*—Information that is *publicly available* means that the source of the information allows access to the information by anyone upon request.

8.1.4.2 *Reasonable Time and Cost*—Information that is obtainable within reasonable time and cost constraints means that the information will be provided by the source within 20 calendar days of receiving a written, telephone, or in-person request at no more than a nominal cost intended to cover the source's cost of retrieving and duplicating the information. Information that can only be reviewed by a visit to the source is *reasonably ascertainable* if the visit is permitted by the source within 20 days of request.

8.1.4.3 *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 records (such as *RCRA generators* and registered USTs), 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*, it is not required to be reviewed.

8.1.5 *Alternatives to Standard Sources*—Alternative sources may be used instead of *standard sources* if they are of similar or better reliability and detail, or if a standard source is not *reasonably ascertainable*.

8.1.6 *Coordination*—If records are not *reasonably ascertainable* from *standard sources* or alternative sources, the *environmental professional* shall attempt to obtain the requested information by other means specified in this practice, such as questions posed to the current *owner* or *occupant(s)* of the *property* or appropriate persons available at the source at the time of the request.

8.1.7 *Sources of Standard Source Information*—Standard source information or other record information from government agencies may be obtained directly from appropriate government agencies or from commercial services. Government information obtained from nongovernmental sources may be considered current if the source updates the information at least every 90 days or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public.

8.1.8 *Documentation of Sources Checked*—The *report* shall document each source that was used, even if a source revealed no findings. Sources shall be sufficiently documented, including name, date request for information was filled, date information provided was last updated by source, date information was last updated by original source (if provided other than by original source; see 8.1.7). Supporting documentation shall be included in the *report* or adequately referenced to facilitate reconstruction of the assessment by an *environmental professional* other than the *environmental professional* who conducted it.

8.1.9 *Significance*—If a standard environmental record source (or other sources in the course of conducting the *Phase I Environmental Site Assessment*) identifies the *property* or another site within the *approximate minimum search distance*, the *report* shall include the *environmental professional's* judgment about the significance of the listing to the analysis of *recognized environmental conditions* in connection with the *property* (based on the data retrieved pursuant to 8.2, additional information from the government source, or other sources of information). In doing so, the *environmental professional* may make statements applicable to multiple sites (for example, a statement to the effect that none of the sites listed is likely to have a negative impact on the *property* except ...).

8.2 *Environmental Information*:

8.2.1 *Standard Environmental Record Sources*—The following *standard environmental record sources* shall be reviewed, subject to the conditions of 8.1.1 through 8.1.7. The *approximate minimum search distance* may be reduced, pursuant to 8.1.2.1, for any of these *standard environmental record sources* except the Federal *NPL* site list and Federal RCRA TSD list.

Standard Environmental Record Sources (where available)	*Approximate Minimum Search Distance* miles (kilometres)
Federal *NPL* site list	1.0 (1.6)
Federal Delisted *NPL* site list	0.5 (0.8)
Federal CERCLIS list	0.5 (0.8)
Federal CERCLIS NFRAP site list	0.5 (0.8)
Federal RCRA CORRACTS facilities list	1.0 (1.6)
Federal RCRA non-CORRACTS TSD facilities list	0.5 (0.8)
Federal *RCRA generators list*	*property* and *adjoining properties*
Federal institutional control/engineering control registries	*property* only
Federal *ERNS list*	*property* only
State and tribal lists of *hazardous waste* sites identified for investigation or remediation:	
State- and tribal-equivalent *NPL*	1.0 (1.6)
State- and tribal-equivalent CERCLIS	0.5 (0.8)
State and tribal *landfill* and/or *solid waste disposal site* lists	0.5 (0.8)
State and tribal leaking storage tank lists	0.5 (0.8)
State and tribal registered storage tank lists	*property* and *adjoining properties*
State and tribal institutional control/ engineering control registries	*property* only
State and tribal voluntary cleanup sites	0.5 (0.8)
State and tribal Brownfield sites	0.5 (0.8)

8.2.2 *Additional Environmental Record Sources*—To enhance and supplement the *standard environmental record sources* in 8.2.1, local records and/or additional state or tribal records shall be checked when, in the judgment of the *environmental professional*, such additional records *(1)* are *reasonably ascertainable*, *(2)* are sufficiently useful, accurate, and complete in light of the objective of the *records review* (see 8.1.1), and *(3)* are generally obtained, pursuant to local good commercial or customary practice, in initial *environmental site assessments* in the type of *commercial real estate transaction* involved. To the extent additional sources are used to supplement the same record types listed in 8.2.1, *approximate minimum search distances* should not be less than those specified above (adjusted as provided in 8.2.1 and 8.1.2.1). Some types of records and sources that may be useful include:

Types of Records

Local Brownfield Lists
Local Lists of *Landfill/Solid Waste Disposal Sites*
Local Lists of *Hazardous waste/Contaminated Sites*
Local Lists of Registered Storage Tanks
Local Land Records (for *activity and use limitations*)
Records of Emergency Release Reports (42 U.S.C. 11004)
Records of Contaminated public wells

Sources

Department of Health/Environmental Division
Fire Department
Planning Department
Building Permit/Inspection Department
Local/Regional Pollution Control Agency
Local/Regional Water Quality Agency
Local Electric Utility Companies (for records relating to PCBs)

8.2.3 *Physical Setting Sources*—A current *USGS 7.5 Minute Topographic Map* (or equivalent) showing the area on which the *property* is located shall be reviewed, provided it is *reasonably ascertainable*. It is the only *standard physical setting source* and the only *physical setting source* that is required to be obtained (and only if it is *reasonably ascertainable*). One or more additional *physical setting sources* may be obtained in the discretion of the *environmental professional*. Because such sources provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a site, discretionary *physical setting sources* shall be sought when *(1)* conditions have been identified in which *hazardous substances* or *petroleum products* are likely to migrate to the *property* or from or within the *property* into the ground water or soil and *(2)* more information than is provided in the current *USGS 7.5 Minute Topographic Map* (or equivalent) is generally obtained, pursuant to local good commercial or customary practice in initial *environmental site assessments* in the type of *commercial real estate transaction involved*, in order to assess the impact of such migration on *recognized environmental conditions* in connection with the *property*.

Mandatory *Standard Physical Setting Source*

USGS—Current 7.5 Minute Topographic Map (or equivalent)

Discretionary and Non-Standard *Physical Setting Sources*

USGS and/or State Geological Survey—Groundwater Maps
USGS and/or State Geological Survey—Bedrock Geology Maps
USGS and/or State Geological Survey—Surficial Geology Maps
Soil Conservation Service—Soil Maps
Other *Physical Setting Sources* that are reasonably credible (as well as *reasonably ascertainable*)

8.3 *Historical Use Information*:

8.3.1 *Objective*—The objective of consulting historical sources is to develop a history of the previous uses of the *property* and surrounding area, in order to help identify the likelihood of past uses having led to *recognized environmental conditions* in connection with the *property*.

8.3.2 *Uses of the Property*—All *obvious* uses of the *property* shall be identified from the present, back to the *property's* first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the *standard historical sources* in 8.3.4.1 through 8.3.4.8 as are necessary and both *reasonably ascertainable* and likely to be useful (as described under *Data Failure* in 8.3.2.3). For example, if the *property* was developed in the 1700s, it might be feasible to identify uses back to the early 1900s, using sources such as *fire insurance maps* or USGS topographic maps (or equivalent). Although other sources such as *recorded land title records* might go back to the 1700s, it would not be required to review them unless they were both *reasonably ascertainable* and likely to be useful. As another example, if the *property* was reportedly not developed until 1960, it would still be necessary to attempt to confirm that it was undeveloped back to 1940. Such confirmation may come from one or more of the *standard historical sources* specified in 8.3.4.1 through 8.3.4.8, or it may come from *other historical sources* (such as someone with personal knowledge of the *property*; see 8.3.4.9). However, checking *other historical sources* (see 8.3.4.9) is not required. For purposes of 8.3.2, the term "developed use" includes agricultural uses and placement of *fill dirt*. The *report* shall describe all identified uses, justify the earliest date identified (for example, records showed no development of the *property* prior to the specific date), and explain the reason for any gaps in the history of use (for example, *data failure*).

8.3.2.1 *Intervals*—Review of *standard historical sources* at less than approximately five year intervals is not required by this practice (for example, if the *property* had one use in 1950 and another use in 1955, it is not required to check for a third use in the intervening period). If the specific use of the *property* appears unchanged over a period longer than five years, then it is not required by this practice to research the use during that period (for example, if *fire insurance maps* show the same apartment building in 1940 and 1960, then the period in between need not be researched).

8.3.2.2 *General Type of Use*—In identifying previous uses, more specific information about uses is more helpful than less specific information, but it is sufficient, for purposes of 8.3.2, to identify the general type of use (for example: office, retail, and residential) unless it is *obvious* from the source(s) consulted that the use may be more specifically identified. However, if the general type of use is industrial or manufacturing (for example, *zoning/land use records* show industrial zoning), then additional *standard historical sources* should be reviewed if they are likely to identify a more specific use and are *reasonably ascertainable*, subject to the constraints of *data failure* (see 8.3.2.3).

8.3.2.3 *Data Failure*—The historical research is complete when either: *(1)* the objectives in 8.3.1 through 8.3.2.2 are achieved; or *(2) data failure* is encountered. *Data failure* occurs when all of the *standard historical sources* that are *reasonably ascertainable* and likely to be useful have been reviewed and yet the objectives have not been met. *Data failure* is not uncommon in trying to identify the use of the *property* at five year intervals back to first use or 1940 (whichever is earlier). Notwithstanding a *data failure*, *standard historical sources* may be excluded if: *(1)* the sources are not *reasonably ascertainable*, or *(2)* if past experience indicates that the sources are not likely to be sufficiently useful, accurate, or complete in terms of satisfying the objectives. *Other historical sources* specified in 8.3.4.9 may be used to satisfy the objectives, but are not required to comply with this practice. If *data failure* is encountered, the *report* shall document the failure and, if any of the *standard historical sources* were excluded, give the reasons for their exclusion. If the *data failure* represents a significant *data gap*, the *report* shall comment on the impact of the *data gap* on the ability of the *environmental professional* to identify *recognized environmental conditions* (see 12.7).

8.3.3 *Uses of Properties in Surrounding Area*—Uses in the area surrounding the *property* shall be identified in the *report*, but this task is required only to the extent that this information is revealed in the course of researching the *property* itself (for example, an *aerial photograph* or *fire insurance map* of the *property* will usually show the surrounding area). If the *environmental professional* uses sources that include the surrounding area, surrounding uses should be identified to a distance determined at the discretion of the *environmental professional* (for example, if an aerial photo shows the area surrounding the *property*, then the *environmental professional* shall determine how far out from the *property* the photo should be analyzed). Factors to consider in making this determination include, but are not limited to: the extent to which information is *reasonably ascertainable*; the time and cost involved in reviewing surrounding uses (for example, analyzing *aerial photographs* is relatively quick, but reviewing *property tax files* for adjacent properties or reviewing *local street directories* for more than the few streets that surround the site is typically too time-consuming); the extent to which information is useful, accurate, and complete in light of the purpose of the *records review* (see 8.1.1); the likelihood of the information being significant to *recognized environmental conditions* in connection with the *property*; the extent to which potential concerns are *obvious*; known hydrogeologic/geologic conditions that may indicate a high probability of *hazardous substances* or *petroleum products* migration to the *property*; how recently local development has taken place; information obtained from *interviews* and other sources; and local good commercial or customary practice.

8.3.4 *Standard Historical Sources*:

8.3.4.1 *Aerial Photographs*—The term "*aerial photographs*" means photographs taken from an aerial platform with sufficient resolution 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.

8.3.4.2 *Fire Insurance Maps*—The term *fire insurance maps* means maps produced for private fire insurance map 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.

8.3.4.3 *Property Tax Files*—The term *property* tax files means 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*.

8.3.4.4 *Recorded Land Title Records*—The term *recorded land title records* means records of historical fee ownership, which may include leases, land contracts and AULs 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*, because often this source will provide only names of previous *owners*, lessees, easement holders, etc. and little or no information about uses or occupancies of the *property*, but when employed in combination with another source *recorded land title records* may provide helpful information about uses of the *property*. This source cannot be the sole historical source consulted. If this source is consulted, at least one additional standard historical source must also be consulted.

8.3.4.5 *USGS Topographic Maps*—The term USGS Topographic Maps means maps available from or produced by the United States Geological Survey (7.5 minute topographic maps are preferred).

8.3.4.6 *Local Street Directories*—The term *local street directories* means directories published by private (or sometimes government) sources and showing ownership and/or use of sites by reference to street addresses. Often *local street directories* are available at libraries of local governments, colleges or universities, or historical societies.

8.3.4.7 *Building Department Records*—The term *building department records* means 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.

8.3.4.8 *Zoning/Land Use Records*—The term *zoning/land use records* means 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.

8.3.4.9 *Other Historical Sources*—The term *other historical sources* means any source or sources other than those designated in 8.3.4.1 through 8.3.4.8 that are credible to a reasonable person and that identify past uses of the *property*. This category 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, or records in the files and/or personal knowledge of the *property owner* and/or *occupants*.

8.4 *Prior Assessment Usage—Standard historical sources* reviewed as part of a prior *environmental site assessment* do not need to be searched for or reviewed again, but uses of the *property* since the prior *environmental site assessment* should be identified either through *standard historical sources* (as specified in 8.3) or by alternatives to *standard historical sources*, to the extent such information is *reasonably ascertainable*. (See 4.7.)

9. Site Reconnaissance

9.1 *Objective*—The objective of the *site reconnaissance* is to obtain information indicating the likelihood of identifying *recognized environmental conditions* in connection with the *property*.

9.2 *Observation*—On a visit to the *property* (the *site visit*), the *property* shall be *visually and/or physically observed* and any structure(s) located on the *property* to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles shall be observed.

9.2.1 *Exterior*—The periphery of the *property* shall be *visually and/or physically observed*, as well as the periphery of all structures on the *property*, and the *property* should be viewed from all adjacent public thoroughfares. If roads or paths with no apparent outlet are observed on the *property*, the use of the road or path should be identified to determine whether it was likely to have been used as an avenue for disposal of *hazardous substances* or *petroleum products*.

9.2.2 *Interior*—On the interior of structures on the *property*, accessible common areas expected to be used by *occupants* or the public (such as lobbies, hallways, utility rooms, recreation areas, etc.), maintenance and repair areas, including boiler rooms, and a representative sample of occupant spaces, should be *visually and/or physically observed*. It is not necessary to look under floors, above ceilings, or behind walls.

9.2.3 *Methodology*—The *environmental professional* shall document, in the *report*, the method used (for example, grid patterns or other systematic approaches used for large properties, which spaces for *owner* or *occupants* were observed) to observe the *property*.

9.2.4 *Limitations*—The *environmental professional* shall document, in the *report*, general limitations and basis of review, including limitations imposed by physical obstructions such as adjacent buildings, bodies of water, asphalt, or other paved areas, and limiting conditions (for example, snow, rain).

9.2.5 *Frequency*—It is not expected that more than one visit to the *property* shall be made in connection with a *Phase I Environmental Site Assessment*. The one visit constituting part of the *Phase I Environmental Site Assessment* may be referred to as the *site visit*.

9.3 *Prior Assessment Usage*—The information supplied in connection with the *site reconnaissance* portion of a prior *environmental site assessment* may be used for guidance but shall not be relied upon without determining through a new *site reconnaissance* whether any conditions that are material to *recognized environmental conditions* in connection with the *property* have changed since the prior *environmental site assessment*.

9.4 *Uses and Conditions*—The uses and conditions specified in 9.4.1 through 9.4.4.7 should be noted to the extent *visually and/or physically observed* during the *site visit*. The uses and conditions specified in 9.4.4 through 9.4.4.7 should also be the subject of questions asked as part of *interviews* of *owners*, *operators*, and *occupants* (see Section 10). Uses and conditions to be noted shall be recorded in field notes but are only required to be described in the *report* to the extent specified in 9.4.1 through 9.4.4.7. The *environmental professional(s)* performing the *Phase I Environmental Site Assessment* are obligated to identify uses and conditions only to the extent that they may be *visually and/or physically observed* on a *site visit*, as described in this practice, or to the extent that they are identified by the *interviews* (see Sections 10 and 11) or *record review* (see Section 8) processes described in this practice.

9.4.1 *General Site Setting*:

9.4.1.1 *Current Use(s) of the Property*—The current use(s) of the *property* shall be identified in the *report*. Any current uses likely to involve the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products* shall be identified in the *report*. Unoccupied occupant spaces should be noted. In identifying current uses of the *property*, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

9.4.1.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually and/or physically observed* on the *site visit*, or are identified in the *interviews* or *record review*, they shall be identified in the *report*, and past uses so identified shall be described in the *report* if they are likely to have involved the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products*. (For example, there may be signs indicating a past use or a structure indicating a past use.)

9.4.1.3 *Current Uses of Adjoining Properties*—To the extent that current uses of *adjoining properties* are *visually and/or physically observable* on the *site visit*, or are identified in the *interviews* or *records review*, they shall be identified in the *report*, and current uses so identified shall be described in the *report* if they are likely to indicate *recognized environmental conditions* in connection with the *adjoining properties* or the *property*.

9.4.1.4 *Past Uses of Adjoining Properties*—To the extent that indications of past uses of *adjoining properties* are *visually and/or physically observed* on the *site visit*, or are identified in the *interviews* or *record review*, they shall be noted and past uses so identified shall be described in the *report* if they are likely to indicate *recognized environmental conditions* in connection with the *adjoining properties* or the *property*.

9.4.1.5 *Current or Past Uses in the Surrounding Area*—To the extent that the general type of current or past uses (for example, residential, commercial, industrial) of properties surrounding the *property* are *visually and/or physically observed* on the *site visit* or going to or from the *property* for the *site visit*, or are identified in the *interviews* or *record review*, they shall be noted and uses so identified shall be described in the *report* if they are likely to indicate *recognized environmental conditions* in connection with the *property*.

9.4.1.6 *Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions*—The topographic conditions of the *property* shall be noted to the extent *visually and/or physically observed* or determined from *interviews*, as well as the general topography of the area surrounding the *property* that is *visually and/or physically observed* from the periphery of the *property*. If any information obtained shows there are likely to be *hazardous substances* or *petroleum products* on the *property* or on nearby properties and those *hazardous substances* or *petroleum products* are of a type that may migrate, topographic observations shall be analyzed in connection with geologic, hydrogeologic, hydrologic, and topographic information obtained pursuant to *records review* (see 8.2.3) and *interviews* to evaluate whether *hazardous substances* or *petroleum products* are likely to migrate to the *property*, or within or from the *property*, into ground water or soil.

9.4.1.7 *General Description of Structures*—The *report* shall generally describe the structures or other improvements on the *property*, for example: number of buildings, number of stories each, approximate age of buildings, ancillary structures (if any), etc.

9.4.1.8 *Roads*—Public thoroughfares adjoining the *property* shall be identified in the *report* and any roads, streets, and parking facilities on the *property* shall be described in the *report*.

9.4.1.9 *Potable Water Supply*—The source of potable water for the *property* shall be identified in the *report*.

9.4.1.10 *Sewage Disposal System*—The sewage disposal system for the *property* shall be identified in the *report*. Inquiry shall be made as to the age of the system as part of the process under Sections 8, 10, or 11.

9.4.2 *Interior and Exterior Observations*:

9.4.2.1 *Current Use(s) of the Property*—The current use(s) of the *property* shall be identified in the *report*. Any current uses likely to involve the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products* shall be identified in the *report*. Unoccupied occupant spaces should be noted. In identifying current uses of the *property*, more specific information is more helpful than less specific information. (For example, it is more useful to identify uses such as a hardware store, a grocery store, or a bakery rather than simply retail use.)

9.4.2.2 *Past Use(s) of the Property*—To the extent that indications of past uses of the *property* are *visually and/or physically observed* on the *site visit*, or are identified in the *interviews* or *records review*, they shall be identified in the *report*, and past uses so identified shall be described in the *report* if they are likely to have involved the use, treatment, storage, disposal, or generation of *hazardous substances* or *petroleum products*. (For example, there may be signs indicating a past use or a structure indicating a past use.)

9.4.2.3 *Hazardous Substances and Petroleum Products in Connection with Identified Uses*—To the extent that present uses are identified that use, treat, store, dispose of, or generate *hazardous substances* and *petroleum products* on the *property*: *(1)* the *hazardous substances* and *petroleum products* shall be identified or indicated as unidentified in the *report*, and *(2)* the approximate quantities involved, types of containers (if any) and storage conditions shall be described in the *report*. To the extent that past uses are identified that used, treated, stored, disposed of, or generated *hazardous substances* and *petroleum products* on the *property*, the information shall be identified to the extent it is *visually and/or physically observed* during the *site visit* or identified from the *interviews* or the *records review*.

9.4.2.4 *Storage Tanks*—Above ground storage tanks, or *underground storage tanks* or vent pipes, fill pipes or access ways indicating *underground storage tanks* shall be identified (for example, content, capacity, and age) to the extent *visually and/or physically observed* during the *site visit* or identified from the *interviews* or *records review*.

9.4.2.5 *Odors*—Strong, pungent, or noxious odors shall be described in the *report* and their sources shall be identified in the *report* to the extent *visually and/or physically observed* or identified from the *interviews* or *records review*.

9.4.2.6 *Pools of Liquid*—Standing surface water shall be noted. Pools or *sumps* containing liquids likely to be *hazardous substances* or *petroleum products* shall be described in the *report* to the extent *visually and/or physically observed* or identified from the *interviews* or *records review*.

9.4.2.7 *Drums*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, *drums* shall be described in the *report*, whether or not they are leaking, unless it is known that their contents are not *hazardous*

substances or *petroleum products* (in that case the contents should be described in the *report*). *Drums* often hold 55 gal (208 L) of liquid, but containers as small as 5 gal (19 L) should also be described.

9.4.2.8 *Hazardous Substance and Petroleum Products Containers (Not Necessarily in Connection With Identified Uses)*—When containers identified as containing *hazardous substances* or *petroleum products* are *visually and/or physically observed* on the *property* and are or might be a recognized environmental condition: the *hazardous substances* or *petroleum products* shall be identified or indicated as unidentified in the *report*, and the approximate quantities involved, types of containers, and storage conditions shall be described in the *report*.

9.4.2.9 *Unidentified Substance Containers*—When open or damaged containers containing unidentified substances suspected of being *hazardous substances* or *petroleum products* are *visually and/or physically observed* on the *property*, the approximate quantities involved, types of containers, and storage conditions shall be described in the *report*.

9.4.2.10 *PCBs*—Electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs shall be described in the *report* to the extent *visually and/or physically observed* or identified from the *interviews* or *records review*. Fluorescent light ballast likely to contain PCBs does not need to be noted.

9.4.3 *Interior Observations*:

9.4.3.1 *Heating/Cooling*—The means of heating and cooling the buildings on the *property*, including the fuel source for heating and cooling, shall be identified in the *report* (for example, heating oil, gas, electric, radiators from steam boiler fueled by gas).

9.4.3.2 *Stains or Corrosion*—To the extent *visually and/or physically observed* or identified from the *interviews*, stains or corrosion on floors, walls, or ceilings shall be described in the *report*, except for staining from water.

9.4.3.3 *Drains and Sumps*—To the extent *visually and/or physically observed* or identified from the *interviews*, floor drains and *sumps* shall be described in the *report*.

9.4.4 *Exterior Observations*:

9.4.4.1 *Pits, Ponds, or Lagoons*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, *pits, ponds, or lagoons* on the *property* shall be described in the *report*, particularly if they have been used in connection with waste disposal or waste treatment. *Pits, ponds, or lagoons* on properties adjoining the *property* shall be described in the *report* to the extent they are *visually and/or physically observed* from the *property* or identified in the *interviews* or *records review*.

9.4.4.2 *Stained Soil or Pavement*—To the extent *visually and/or physically observed* or identified from the *interviews*, areas of stained soil or pavement shall be described in the *report*.

9.4.4.3 *Stressed Vegetation*—To the extent *visually and/or physically observed* or identified from the *interviews*, areas of stressed vegetation (from something other than insufficient water) shall be described in the *report*.

9.4.4.4 *Solid Waste*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, areas that are apparently filled or graded by non-natural causes (or filled by fill of unknown origin) suggesting trash *construction debris*, *demolition debris*, or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal, shall be described in the *report*.

9.4.4.5 *Waste Water*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, waste water or other liquid (including storm water) or any discharge into a drain, ditch, *underground injection* system, or stream on or adjacent to the *property* shall be described in the *report*.

9.4.4.6 *Wells*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, all wells (including *dry wells*, irrigation wells, injection wells, abandoned wells, or other wells) shall be described in the *report*.

9.4.4.7 *Septic Systems*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, indications of on-site septic systems or cesspools should be described in the *report*.

10. Interviews With Past and Present Owners and Occupants

10.1 *Objective*—The objective of *interviews* is to obtain information indicating *recognized environmental conditions* in connection with the *property*.

10.2 *Content—Interviews* with past and present *owners*, *operators*, and *occupants* of the *property*, consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall attempt to obtain information about uses and conditions as described in Section 9, as well as information described in 10.8 and 10.9.

10.3 *Medium*—Questions to be asked pursuant to this section may be asked in person, by telephone, or in writing, in the discretion of the *environmental professional*.

10.4 *Timing*—Except as specified in 10.8 and 10.9, it is in the discretion of the *environmental professional* whether to ask questions before, during, or after the *site visit* described in Section 9, or in some combination thereof.

10.5 *Who Should be Interviewed*:

10.5.1 *Key Site Manager*—Prior to the *site visit*, the *owner* should be asked to identify a person with good knowledge of the uses and physical characteristics of the *property* (the *key site manager*). Often the *key site manager* will be the *property* manager, the chief physical plant supervisor, or head maintenance person. (If the *user* is the current *property owner*, the *user* has an obligation to identify a *key site manager*, even if it is the *user* himself or herself.) If a *key site manager* is identified, the person conducting the *site visit* shall make at least one reasonable attempt (in writing or by telephone) to arrange a mutually convenient appointment for the *site visit* when the *key site manager* agrees to be there. If the attempt is successful, the *key site manager* shall be interviewed in conjunction with the *site visit*. If such an attempt is unsuccessful, when conducting the *site visit*, the *environmental professional* shall inquire whether an identified *key site manager* (if any) or if a person with good knowledge of the uses and physical characteristics of the *property* is available to be interviewed at that time; if so, that person shall be interviewed. In any case, it is within the discretion of the *environmental*

professional to decide which questions to ask before, during, or after the *site visit* or in some combination thereof.

10.5.2 *Occupants*—A reasonable attempt shall be made to interview a reasonable number of *occupants* of the *property*.

10.5.2.1 *Multi-Family Properties*—For multi-family residential properties, residential *occupants* do not need to be interviewed, but if the *property* has nonresidential uses, *interviews* should be held with the nonresidential *occupants* based on criteria specified in 10.5.2.2.

10.5.2.2 *Major Occupants*—Except as specified in 10.5.2.1, if the *property* has five or fewer current *occupants*, a reasonable attempt shall be made to interview a representative of each one of them. If there are more than five current *occupants*, a reasonable attempt shall be made to interview the major occupant(s) and those other *occupants* whose operations are likely to indicate *recognized environmental conditions* in connection with the *property*.

10.5.2.3 *Reasonable Attempts to Interview*—Examples of reasonable attempts to interview those *occupants* specified in 10.5.2.2 include (but are not limited to) an attempt to interview such *occupants* when making the *site visit* or calling such *occupants* by telephone. In any case, when there are several *occupants* to interview, it is not expected that the *site visit* must be scheduled at a time when they will all be available to be interviewed.

10.5.2.4 *Occupant Identification*—The *report* shall identify the *occupants* interviewed and the duration of their occupancy.

10.5.3 *Prior Assessment Usage*—Persons interviewed as part of a prior *Phase I Environmental Site Assessment* consistent with this practice do not need to be questioned again about the content of answers they provided at that time. However, they should be questioned about any new information learned since that time, or others should be questioned about conditions since the prior *Phase I Environmental Site Assessment* consistent with this practice.

10.5.4 *Past Owners, Operators, and Occupants*—*Interviews* with past *owners*, *operators*, and *occupants* of the *property* who are likely to have material information regarding the potential for contamination at the *property* shall be conducted to the extent that they have been identified and that the information likely to be obtained is not duplicative of information already obtained from other sources.

10.5.5 *Interview Requirements for Abandoned Properties*—In the case of inquiries conducted at abandoned properties where there is evidence of potential unauthorized uses of the *abandoned property* or evidence of uncontrolled access to the *abandoned property*, *interviews* with one or more *owners* or *occupants* of neighboring or nearby properties shall be conducted.

10.6 *Quality of Answers*—The person(s) interviewed should be asked to be as specific as reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in *good faith* and to the extent of their knowledge.

10.7 *Incomplete Answers*—While the person conducting the interview(s) has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them.

10.7.1 *User*—If the person to be interviewed is the *user* (the person on whose behalf the *Phase I Environmental Site Assessment* is being conducted), the *user* has an obligation to answer all questions posed by the person conducting the interview, in *good faith*, to the extent of his or her *actual knowledge* or to designate a *key site manager* to do so. If answers to questions are unknown or partially unknown to the *user* or such *key site manager*, this interview section of the *Phase I Environmental Site Assessment* shall not thereby be deemed incomplete.

10.7.2 *Non-user*—If the person conducting the interview(s) asks questions of a person other than a *user* but does not receive answers or receives partial answers, this section of the *Phase I Environmental Site Assessment* shall not thereby be deemed incomplete, provided that *(1)* the questions have been asked (or attempted to be asked) in person, by electronic mail, or by telephone and written records have been kept of the person to whom the questions were addressed and the responses, or *(2)* the questions have been asked in writing sent by first class mail or by private, commercial carrier and no answer or incomplete answers have been obtained and at least one reasonable follow up (telephone call or written request) was made again asking for responses.

10.8 *Questions About Helpful Documents*—Prior to the *site visit*, the *property owner*, *key site manager* (if any is identified), and *user* (if different from the *property owner*) shall be asked if they know whether any of the documents listed in 10.8.1 exist and, if so, whether copies can and will be provided to the *environmental professional* within reasonable time and cost constraints. Even partial information provided may be useful. If so, the *environmental professional* conducting the *site visit* shall review the available documents prior to or at the beginning of the *site visit*.

10.8.1 *Helpful Documents*:

10.8.1.1 Environment site assessment *reports*,

10.8.1.2 Environment compliance audit *reports*,

10.8.1.3 Environmental permits (for example, solid waste disposal permits, *hazardous waste* disposal permits, *wastewater* permits, NPDES permits, *underground injection* permits),

10.8.1.4 Registrations for underground and above-ground storage tanks,

10.8.1.5 Registrations for *underground injection* systems,

10.8.1.6 *Material safety data sheets*,

10.8.1.7 Community right-to-know plan,

10.8.1.8 Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc.,

10.8.1.9 *Reports* regarding hydrogeologic conditions on the *property* or surrounding area,

10.8.1.10 Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the *property* or relating to *environmental liens* encumbering the *property*,

10.8.1.11 *Hazardous waste* generator notices or *reports*,

10.8.1.12 Geotechnical studies,

10.8.1.13 Risk assessments, and

10.8.1.14 Recorded AULs.

10.9 *Proceedings Involving the Property*—Prior to the *site visit*, the *property owner*, *key site manager* (if any is identified), and *user* (if different from the *property owner*) shall be asked whether they know of: *(1)* any pending, threatened, or past litigation relevant to *hazardous substances* or *petroleum products* in, on, or from the *property*; *(2)* any pending, threatened, or past administrative proceedings relevant to *hazardous substances* or *petroleum products* in, on or from the *property*; and *(3)* any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to *hazardous substances* or *petroleum products*.

11. Interviews With State and/or Local Government Officials

11.1 *Objective*—The objective of *interviews* with state and/or local government officials is to obtain information indicating *recognized environmental conditions* in connection with the *property*.

11.2 *Content—Interviews* with state and/or local government officials consist of questions to be asked in the manner and of persons as described in this section. The content of questions to be asked shall be decided in the discretion of the *environmental professional(s)* conducting the *Phase I Environmental Site Assessment*, provided that the questions shall generally be directed towards identifying *recognized environmental conditions* in connection with the *property*.

11.3 *Medium*—Questions to be asked may be asked in person or by telephone, in the discretion of the *environmental professional*.

11.4 *Timing*—It is in the discretion of the *environmental professional* whether to ask questions before or after the *site visit* described in Section 9, or in some combination thereof.

11.5 *Who Should Be Interviewed*:

11.5.1 *State and/or Local Agency Officials*—A reasonable attempt shall be made to interview at least one staff member of any one of the following types of state and/or *local government agencies*:

11.5.1.1 Local fire department that serves the *property*,

11.5.1.2 State and/or local health agency or local/regional office of state health agency serving the area in which the *property* is located,

11.5.1.3 State and/or local agency or local/regional office of state agency having jurisdiction over *hazardous waste* disposal or other environmental matters in the area in which the *property* is located, or

11.5.1.4 Local agencies responsible for the issuance of building permits or groundwater use permits that document the presence of AULs which may identify a recognized environmental condition in the area in which the *property* is located.

11.6 *Prior Assessment Usage*—Persons interviewed as part of a prior *Phase I Environmental Site Assessment* consistent with this practice do not need to be questioned again about the content of answers they provided at that time. However, they should be questioned about any new information learned since that time, or others should be questioned about conditions since the prior *Phase I Environmental Site Assessment* consistent with this practice.

11.7 *Quality of Answers*—The person(s) interviewed should be asked to be as specific as reasonably feasible in answering questions. The person(s) interviewed should be asked to answer in *good faith* and to the extent of their knowledge.

11.8 *Incomplete Answers*—While the person conducting the interview(s) has an obligation to ask questions, in many instances the persons to whom the questions are addressed will have no obligation to answer them. If the person conducting the interview(s) asks questions but does not receive answers or receives partial answers, this section shall not thereby be deemed incomplete, provided that questions have been asked (or attempted to be asked) in person or by telephone and written records have been kept of the person to whom the questions were addressed and their responses.

12. Evaluation and Report Preparation

12.1 *Report Format*—The *report* for the *Phase I Environmental Site Assessment* should generally follow the recommended *report* format attached as Appendix X4 unless otherwise required by the *user*.

12.2 *Documentation*—The findings, opinions and conclusions in the *Phase I Environmental Site Assessment report* shall be supported by documentation. If the *environmental professional* has chosen to exclude certain documentation from the *report*, the *environmental professional* shall identify in the *report* the reasons for doing so (for example, a confidentiality agreement). Supporting documentation shall be included in the *report* or adequately referenced to facilitate reconstruction of the assessment by an *environmental professional* other than the *environmental professional* who conducted it. Sources that revealed no findings also shall be documented.

12.3 *Contents of Report*—The *report* shall include those matters required to be included in the *report* pursuant to various provisions of this practice. The *report* shall also identify the *environmental professional* and the person(s) who conducted the *site reconnaissance* and *interviews*. In addition, the *report* shall state whether the *user* reported to the *environmental professional* any information pursuant to the *user's* responsibilities described in Section 6 of this practice (for example, an *environmental lien* or AUL encumbering the *property* or any relevant specialized knowledge or experience of the *user*).

12.4 *Scope of Services*—The *report* shall describe all services performed in sufficient detail to permit another party to reconstruct the work performed.

12.5 *Findings*—The *report* shall have a findings section which identifies known or suspect *recognized environmental conditions*, and *historical recognized environmental conditions*, and de minimis conditions.

12.6 *Opinion*—The *report* shall include the *environmental professional's* opinion(s) of the impact on the *property* of conditions identified in the findings section. The logic and reasoning used by the *environmental professional* in evaluating information collected during the course of the investigation related to such conditions shall be discussed. Frequently, items initially suspected to be a recognized environmental condition are subsequently determined, upon further evaluation, to not be considered a *recognized environmental condition*. The opinion shall specifically include the *environmental professional's* rationale for concluding that a condition is or is not currently a *recognized environmental condition*. Conditions identified by

the *environmental professional* as *recognized environmental conditions* currently shall be listed in the conclusions section of the *report*.

12.6.1 *Additional Investigation*—The *environmental professional* should provide an opinion regarding additional appropriate investigation, if any, to detect the presence of *hazardous substances* or *petroleum products*. This opinion should only be provided in the unusual circumstance when greater certainty is required regarding the identified recognized environmental conditions. A *Phase I Environmental Site Assessment* which includes such an opinion by the *environmental professional* does not render the assessment incomplete. This opinion is not intended to constitute a requirement that the *environmental professional* include any recommendations for Phase II or other assessment activities.

12.7 *Data Gaps*—The *report* shall identify and comment on significant *data gaps* that affect the ability of the EP to identify *recognized environmental conditions* and identify the sources of information that were consulted to address the *data gaps*. A *data gap* by itself is not inherently significant. For example, if a *property's* historical use is not identified back to 1940 because of *data failure* (see 8.3.2.3), but the earliest source shows that the *property* was undeveloped, this *data gap* by itself would not be significant. A *data gap* is only significant if other information and/or professional experience raises reasonable concerns involving the *data gap*. For example, if a building on the *property* is inaccessible during the *site visit*, and the *environmental professional's* experience indicates that such a building often involves activity that leads to a recognized environmental condition, the inability to inspect the building would be a significant *data gap* warranting comment.

12.8 *Conclusions*—The *report* shall include a conclusions section that summarizes all *recognized environmental conditions* connected with the *property*. The *report* shall include one of the following statements:

12.8.1 "We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527 of [insert address or legal description], the *property*. Any exceptions to, or deletions from, this practice are described in Section [ ] of this *report*. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the *property*," or

12.8.2 "We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527 of [insert address or legal description], the *property*. Any exceptions to, or deletions from, this practice are described in Section [ ] of this *report*. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the *property* except for the following: (list)."

12.9 *Additional Services*—Any additional services contracted for between the *user* and the *environmental professional(s)*, including a broader scope of assessment, more detailed conclusions, liability/risk evaluations, recommendation for Phase II testing, remediation techniques, etc., are beyond the scope of this practice, and should only be included in the *report* if so specified in the terms of engagement between the *user* and the *environmental professional*.

12.10 *Deviations*—All deletions and deviations from this practice (if any) shall be listed individually and in detail, including client-imposed constraints, and all additions should be listed.

12.11 *References*—The *report* shall include a references section to identify published referenced sources relied upon in preparing the *Phase I Environmental Site Assessment*. Each referenced source shall be adequately annotated to facilitate retrieval by another party.

12.12 *Signature*—The *environmental professional(s)* responsible for the *Phase I Environmental Site Assessment* shall sign the *report*.

12.13 *Environmental Professional Statement*—As required by 40 CFR 312.21(d), the *report* shall include the following statements of the *environmental professional(s)* responsible for conducting the *Phase I Environmental Site Assessment* and preparation of the *report*.

12.13.1 "[I, We] declare that, to the best of [my, our] professional knowledge and belief, [I, we] meet the definition of *Environmental professional* as defined in §312.10 of 40 CFR 312" and

12.13.2 "[I, We] have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. [I, We] have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

12.14 *Appendices*—The *report* shall include an appendix section containing supporting documentation and the qualifications of the *environmental professional* and the qualifications of the personnel conducting the *site reconnaissance* and *interviews* if conducted by someone other than an *environmental professional*.

13. Non-Scope Considerations

13.1 *General*:

13.1.1 *Additional Issues*—There may be environmental issues or conditions at a *property* that parties may wish to assess in connection with *commercial real estate* that are outside the scope of this practice (the non-scope considerations). As noted by the legal analysis in Appendix X1 of this practice, some substances may be present on a *property* in quantities and under conditions that may lead to contamination of the *property* or of nearby properties but are not included in CERCLA's definition of *hazardous substances* (42 U.S.C. §9601(14)) or do not otherwise present potential CERCLA liability. In any case, they are beyond the scope of this practice.

13.1.2 *Outside Standard Practices*—Whether or not a *user* elects to inquire into non-scope considerations in connection with this practice or any other *environmental site assessment*, no assessment of such non-scope considerations is required for appropriate inquiry as defined by this practice.

13.1.3 *Other Standards*—There may be standards or protocols for assessment of potential hazards and conditions associated with non-scope conditions developed by governmental entities, professional organizations, or other private entities.

13.1.4 *Compliance With AULs*—Parties who wish to qualify for one of the *LLPs* will need to know whether they are in compliance with AULs, including land use restrictions that

were relied upon in connection with a response action. A determination of compliance with AULs is beyond the scope of this practice.

13.1.5 *List of Additional Issues*—Following are several non-scope considerations that persons may want to assess in connection with *commercial real estate*. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive:

13.1.5.1 Asbestos-Containing Building Materials,
13.1.5.2 Radon,
13.1.5.3 Lead-Based Paint,
13.1.5.4 Lead in Drinking Water,
13.1.5.5 Wetlands,
13.1.5.6 Regulatory compliance,
13.1.5.7 Cultural and historic resources,
13.1.5.8 Industrial hygiene,
13.1.5.9 Health and safety,
13.1.5.10 Ecological resources,
13.1.5.11 Endangered species,
13.1.5.12 Indoor air quality,
13.1.5.13 Biological agents, and
13.1.5.14 Mold.

APPENDIXES

(Nonmandatory Information)

X1. LEGAL BACKGROUND TO FEDERAL LAW AND THE PRACTICES ON ENVIRONMENTAL ASSESSMENTS IN COMMERCIAL REAL ESTATE TRANSACTIONS

INTRODUCTION

The Legal Task Group of Subcommittee E50.02 on Environmental Assessments In Commercial Real Estate Transactions provides the following background to the "*all appropriate inquiry*" obligation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996 (the "Lender Liability Amendments"), and the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"). This background to CERCLA, (also commonly known as the Superfund law), outlines the parties' potential liability for the cleanup of *hazardous substances* under CERCLA, potentially available protections from such liability, the requirement for "*all appropriate inquiry*" under CERCLA, the statutory definition of *hazardous substances*, *petroleum products* and *petroleum exclusion* to CERCLA, and reasons why certain constituents of potential environmental concern are excluded from the scope of CERCLA and this practice. The Legal Task Group also notes that, with the changes to CERCLA brought about by the *Brownfields Amendments* and the implementation of said amendments by EPA, the Environmental Transaction Screen Practice (E 1528), although still a useful transactional environmental screening tool, no longer meets the requirement for "*all appropriate inquiry*" which is key to establishing CERCLA's *landowner liability protections*, or *LLPs*.

Practice E 1527 has been developed to define "*all appropriate inquiry*" for purposes of establishing any of the three *LLPs* available under CERCLA as amended by the *Brownfields Amendments*. This Legal Appendix makes informational reference to the other criteria, beyond the "*all appropriate inquiry*" criterion, that are necessary for successfully asserting any of the three *LLPs*. This practice and Legal Appendix do not address other business risk issues, such as the presence of other constituents of potential environmental concern (such as asbestos, radon and mold/fungi). Finally, this Legal Appendix is intended for informational purposes only and is not intended to be nor interpreted as legal advice.

The specter of strict, joint and several liability under the Federal Superfund law, and analogous state environmental laws, has been a primary driver of Environmental Assessments in Commercial Real Estate Transactions. A knowledge of

CERCLA, and especially its potential *landowner liability protections*, or *LLPs*, is crucial to understanding and applying Practice E 1527.

X1.1 CERCLA Liability[8]

X1.1.1 Each of the following elements must be established by a plaintiff (that is, government or private party) before a defendant may be found liable under CERCLA for response costs at a site:[9]

X1.1.1.1 The site is a facility, as defined at 42 U.S.C. §9601(9);[10]

X1.1.1.2 A release or threatened release of a hazardous substance from the site occurred (§9607(a)(4)) (release is defined at §9601(22) as any "*spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment (including the abandonment or discarding of barrels, containers and other closed receptacles containing any hazardous substance, or pollutant or contaminant)*"); "Hazardous substance" is defined at §9601(14) and is discussed in section X1.6 (Statutory Definition of Hazardous Substance);

X1.1.1.3 A release or threatened release caused the incurrence of response costs. Response costs are indirectly defined at §9601(25) to mean costs related to both removal actions (§9601(23)) and remedial actions (§9601(24)); and

X1.1.1.4 Defendants fall within at least one of the four classes of potentially responsible parties identified in §9607(a). These classes include:

X1.1.1.5 The (current) *owner* and *operator*[11] of a facility;

X1.1.1.6 Any person who at the time of disposal of any *hazardous substance* owned or operated any facility at which such *hazardous substances* were disposed of;

X1.1.1.7 Any person who by contract, agreement, or otherwise arranged for disposal or treatment or transport of *hazardous substances*; and

X1.1.1.8 Any person who accepts or accepted any *hazardous substances* for transport to a disposal or treatment facility selected by such person.

X1.1.1.9 The CERCLA *contiguous property owner liability protection* excludes from the definition of "*owner*" or "*operator*" a person who 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 but "solely by reason of the contamination."

X1.1.1.10 When it promulgated CERCLA and the amendments thereto, Congress recognized potential hardships that CERCLA liability could place on holders of security interests in *property* (for example, lenders) where those parties were not responsible for acts or omissions of others that caused or contributed to *property* contamination. In an effort to ease these burdens, Congress created the so-called "secured creditor" exemption within the definition of "*owner* or *operator*" which, in very brief terms, exempts persons holding an "indicia of

[8] 42 U.S.C. §9607(a). (All statutory references are to Title 42 of the United States Code, unless otherwise specified.)

[9] See *United States v. Aceto Agric. Chems 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 be aware of the alternative option of conducting a cleanup and then seeking response costs from other responsible parties.

[10] 42 U.S.C. §9601(9) defines the term "facility" to mean "(A) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, *landfill*, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a *hazardous substance* has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel."

[11] 42 U.S.C. §9601(20)(A) defines "*owner* or *operator*" as any person owning or operating a facility or the person who owned, operated or otherwise controlled activities at a facility immediately prior to such facility's transfer to a unit of state or local government due to bankruptcy, foreclosure, tax delinquency, abandonment or similar means. The term *owner* or *operator* does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility (this exemption is commonly referred to as the secured creditor exemption) See 42 U.S.C.§9601(E). Persons who have been found liable as *owners* include: bankruptcy estates (*In re Duplan Corp*., 212 F.3d 144 (2d Cir. 2000)), trustees (*Briggs & Stratton Corp. v. Concrete Sales & Servs., Inc*., 20 F. Supp. 2d 1356 (M.D. Ga. 1998)), passive landlords (*Nurad, Inc. v. William E. Hooper & Sons Co*., 966 F.2d 837 (4th Cir. 1992); *United States. v. A & N Cleaners & Launderers, Inc*., 788 F. Supp. 1317 (S.D.N.Y. 1992)), parent corporations (*United States. v. Kayser-Roth, Corp*., 910 F.2d 24 (1st Cir. 1990)), easement holders (*United States v. Union Gas Co*., 35 ERC (BNA) 1750 (E.D. Pa. 1992)), and franchisors (*Shell Oil Co. v. Meyers*, No. 79504-9801-CV-043, 1998 Ind. Lexis 755 (Ind. Sup. Ct. Jan. 18, 1998)). Some courts have also sought to expand liability to former *owners* and *operators* of facilities that did not own or operate the facility at the time of actual disposition and/or release of *hazardous substances*, but during whose tenure passive migration of *hazardous substances* was occurring. *Briggs & Stratton Corp. v. Concrete Sales & Servs*., Inc., 20 F. Supp. 2d 1356 (M.D. Ga. 1998). It appears that the majority of courts however, require that the past *owner* or *operator* actively disposed of the *hazardous substances*. *ABB Indus. Sys., Inc. v. Prime Tech, Inc*., 120 F.2d 1351 (2d Cir. 1997).

ownership primarily to protect his security interest" so long as the person did not participate in the management of the facility. Numerous courts and state legislatures have recognized the secured creditor exemption[12] and in 1992 EPA sought to further clarify the scope of the exemption through its "Lender Liability" rule.[13]

X1.1.1.11 In 1994, the Lender Liability rule was struck down (see *Kelley v. EPA*, 15 F.3d 1100 (D.C. Cir), reh'g denied 25 F.3d 1088 (D.C. Cir. 1994)). Subsequently, in September 1996, Congress passed the Lender Liability Amendments[14] which amended CERCLA sections 101 and 107 to clarify the scope of the secured creditor exemption (as well as the fiduciary liability exemption[15]).

X1.1.1.12 The Lender Liability Amendments to CERCLA make it clear that a secured creditor or lender will not fall within the definition of "*owner* or *operator*" (and therefore be potentially liable under CERCLA) where the lender merely holds an indicia of ownership and acts primarily to protect its security interest in a facility (for example, through foreclosure or post foreclosure acts) but does not participate in the management of the facility. (See 42 U.S.C. §9601(20)(E-G)).[16]

X1.1.1.13 The Lender Liability Amendments clarify that (i) the term "participate in management" --(I) means actually participating in the management or operational affairs of a vessel or facility; and (II) does not include merely having the capacity to influence, or the unexercised right to control, vessel or facility operations; and (ii) a person that is a lender and that holds indicia of ownership primarily to protect a security interest in a vessel or facility shall be considered to participate in management only if, while the borrower is still in possession of the vessel or facility encumbered by the security interest, the person --(I) exercises decision making control over the environmental compliance related to the vessel or facility, such that the person has undertaken responsibility for the *hazardous substance* handling or disposal practices related to the vessel or facility; or (II) exercises control at a level comparable to that of a manager of the vessel or facility, such that the person has assumed or manifested responsibility --(aa) for the overall management of the vessel or facility encompassing day-to-day decision making with respect to environmental compliance. 42 U.S.C. §9601(20)(F)(i)(I),(ii)(I-II)(aa).

X1.1.2 In order to recover response costs, a government plaintiff must prove that the costs were not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan (commonly referred to as the *National Contingency Plan* or *NCP*), 40 C.F.R. Part 300.[17] A private plaintiff must prove its costs were necessary costs of response consistent with the *NCP*. 42 U.S.C. §9607 (a)(4).[18]

X1.1.3 If there is a release or threatened release of *hazardous substances* on a site, private parties, even if they are not PRPs, may decide to incur response costs and seek recovery from other private parties, and PRPs may seek contribution from other PRPs.

X1.1.4 There is an important difference between the government's burden to show that its response costs are "not inconsistent with the *NCP*" and the burden a private party bears to show that its response costs are "consistent with the *NCP*." See §9607(a)(4)(A) and (B). Courts have interpreted this statutory difference to give the government a rebuttable presumption that its response costs are consistent with the *NCP*, whereas a private party who incurs response costs and seeks recovery from responsible parties bears the burden of proving its response costs were consistent with the *NCP*.[19] The 1990 amendments to the *NCP* provide that private plaintiffs only have to demonstrate "substantial compliance" with the *NCP* rather than strict technical compliance as long as a CERCLA-quality cleanup is achieved. The *NCP* requirements for a private party response-action are set forth at 40 C.F.R. §300.700. Some cases have held that cleanup costs incurred pursuant to a consent decree will be presumed to be in compliance with the *NCP*.[20]

X1.2 Defenses to CERCLA Liability

X1.2.1 Assuming all the elements of liability exist (and no specific exclusion to liability applies), a party may still avoid CERCLA liability by meeting one of the so-called affirmative defenses listed in §9607(b). These listed affirmative defenses are exclusive of other common law defenses that a defendant could assert.[21] Section 9607(b) provides that a party shall not be liable under 42 U.S.C. §9607(a) if it can establish by a preponderance of the evidence [the lowest evidentiary standard available, meaning more probable than not] that the release or

[12] See *In re: Bergsoe Metal Corp*., 910 F.2d 668 (9th Cir. 1990); *Guidice v. BFG Electroplating and Mfg. Co*., 732 F. Supp. 556 (W.D. Pa. 1989); *United States v. Mirabile*, 23 ERC (BNA) 1511 (E.D. Pa. 1985). But see *United States v. Fleet Factors Corp*., 901 F.2d 1550 (11th Cir. 1990); *United States v. Maryland Bank and Trust Co*., 632 F. Supp. 573 (D. Md. 1986).

[13] See 57 Fed. Reg. 18344 (Apr. 29, 1992).

[14] Pub. L. No. 104-208, §§2501-2505, 110 Stat. 3009 (Sept. 30, 1996).

[15] A discussion of the Superfund liability exemptions applicable to fiduciaries such as trustees, receivers and conservators as a result of the 1996 Lender Liability Amendments is presented in "Fiduciary Liability: A New Safe Harbor Under CERCLA," Lawrence J. Horan III, Environmental Regulation and Permitting, Spring 1997, John Wiley & Sons. See also *Canadyne-Georgia, Corp. v. Bank of Am*., 174 F. Supp. 2d 1360 (M.D. Ga. 2001) wherein a bank acting in the capacity of a co-trustee of a trust whose assets included a general partnership interest in a contaminated *property* was found exempt from Superfund liability.

[16] See, for example, *Monarch Tile, Inc. v. City of Florence*, 212 F.3d 1219, 1222 (11th Cir. 2000), and *United States v. Marvin Pesses, et al*. (No. 90-0654 (W.D. Pa. May 6, 1998). *United States v. Pesses*, No. 90-CV-0654, 1998 U.S. Dist. Lexis 7902 (W.D. Pa. May 6, 1998).

[17] The *National Contingency Plan* is the federal government's blueprint on how *hazardous substances* are to be cleaned up pursuant to CERCLA. See 42 U.S.C. §9605; 40 C.F.R. Part 300.

[18] See *Dedham Water Co. v. Cumberland Farms Dairy, Inc*., 889 F.2d 1146 (1st Cir. 1989); other cases cited at ABA, *Natural Resources, Energy, and Environmental Law: 1989 The Year In Review*, p. 215, n. 155.

[19] *Amland Properties Corp. v. Aluminum Co. of America*, 711 F. Supp. 784, 794 (D. N.J. 1989); *Artesian Water Co. v. New Castle County*, 659 F. Supp. 1269, 1291 (D. Del. 1987); *United States v. Northeastern Pharmaceutical and Chemical Co*., 579 F. Supp. 823 (W.D. Mo. 1984), *aff'd in part, rev'd on other grounds*, 810 F.2d 726 (8th Cir. 1986), *cert. denied*, 484 U.S. 848 (1987).

[20] *United States v. Western Processing Co*., 1991 U.S. Dist. LEXIS 16021 (W.D. Wash. July 31, 1991).

[21] *United States v. Aceto Agricultural Chemicals Corp*., 872 F.2d 1373 (8th Cir. 1989). But see *United States v. Marisol, Inc*., 725 F. Supp. 833 (M.D. Pa. 1989) (equitable defenses under Superfund may be available after the development of a factual record). The equitable defenses may be considered by the Court when resolving or apportioning contribution claims under 42 U.S.C. §9613(f). *AT&T Global Info. Solutions Co. v. Union Tank Car Co*., 1997 U.S. Dist. LEXIS 6090 (S.D. Ohio March 31, 1997).

threat of release of a *hazardous substance* and the damages resulting therefrom were caused solely by—*(1)* an act of God; *(2)* an act of war; *(3)* the third party defense. The so-called CERCLA *innocent landowner defense* is a subset of the CERCLA third party defense in 42 U.S.C. §9607(b)(3). See 42 U.S.C. §9601(35).

X1.2.2 In the context of a *commercial real estate transaction*, whether the 9607(b)(3) third party defense will be available turns on the meaning of "contractual relationship." By statutory definition, the term "contractual relationship" includes land contracts, deeds and other instruments transferring title or possession and, therefore would preclude use of the third party defense. Congress, however, in defining the term contractual relationship (see 42 U.S.C. §9601(35)(A)), provided for the *innocent landowner defense*, the assertion of which requires that the release or threatened release of *hazardous substance(s)* occurred on the *property* prior to the defendant acquiring the *property* and the defendant "did not know and had no reason to know of the *hazardous substance*" with respect to the *property*. Section 9601(35)(B) then clarifies that "*all appropriate inquiry*" must be undertaken by the defendant in order to establish that the defendant "did not know and had no reason to know of the *hazardous substance*."

X1.2.2.1 The 1986 SARA Amendments modified CERCLA's definition of "contractual relationship" in §9601(35)(A). As a result, a contractual relationship specifically "includes, but is not limited to, land contracts, deeds, easements, leases or other instruments transferring title or possession ..." The presence of such contractual relationships with third parties would act to negate the §9607(b)(3) third party defense unless the real *property* on which the facility is located was acquired by the defendant after disposal or placement of the *hazardous substance* ... and one or more of the following circumstances is also established by the defendant by a preponderance of the evidence: (i) At the time the defendant acquired the facility the defendant did not know and had no reason to know that any *hazardous substance* which is the subject of the release or threatened release was disposed of on, in, or at the facility; (ii) The defendant is the government . . .; (iii) The defendant acquired the facility by inheritance or bequest."

X1.2.3 Thus, the key elements necessary to qualify for the CERCLA §9607(b)(3) third party defense include the following:

X1.2.3.1 The release or threat of release of *hazardous substance* was caused solely by a third party,

X1.2.3.2 The third party is not an employee or agent of the defendant, or the acts or omissions of the third party did not occur in connection with a direct or indirect contractual relationship to the defendant, or if there was a contractual relationship, the defendant acquired the *property* after disposal or placement of the *hazardous substance*, and at the time the defendant acquired the facility the defendant **did not know and had no reason to know** [emphasis added] that any *hazardous substance* that is the subject of the release or threatened release was disposed of on, in, or at the facility, and

X1.2.3.3 The defendant exercised due care with respect to the *hazardous substances*, and

X1.2.3.4 Took precautions against foreseeable acts or omissions of the third party.[22]

X1.2.4 The SARA Amendments clarify the meaning of §9601(35)(B)'s "had no reason to know" and provide guidance as to the meaning of "*all appropriate inquiry*" by stating: "To establish that the defendant had no reason to know of the matter described in subparagraph §9601(35)(A)(i), the defendant must demonstrate to a court that: (i) on or before the date on which the defendant acquired the facility, the defendant carried out all appropriate inquiries, as provided in clauses (ii) and (iv), into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices; and (II) the defendant took reasonable steps to (aa) stop any continuing release; and (bb) prevent any future threatened release; and (cc) prevent or limit any human, environmental, or natural resources exposure to any previously released *hazardous substance*."

X1.2.4.1 To further clarify the scope of "*all appropriate inquiry*," the *Brownfields Amendments* mandate that the U.S. Environmental Protection Agency promulgate regulatory standards and practices "for the purpose of satisfying the requirement to carry out all appropriate inquiries under §9601(35)(B)(i)." 42 U.S.C. §9601(35)(B)(ii).

X1.2.4.2 To guide EPA in meeting this mandate, Congress specified ten criteria to be included in the regulatory standards and practices to be established by EPA. The ten criteria include: (i) the results of an inquiry by an *environmental professional*; (ii) *interviews* with past and present *owners*, *operators*, and *occupants* of the facility for the purpose of gathering information regarding the potential for contamination at the facility; (iii) reviews of historical sources, such as chain-of-title documents, *aerial photographs*, *building department records*, and land use records, to determine previous uses and occupancies of the real *property* since the *property* was first developed; (iv) searches for recorded environmental cleanup liens against the facility that are filed under Federal, State, or local law; (v) reviews of Federal, State and local governmental records, waste disposal records, *underground storage tank* records, and *hazardous waste* handling, treatment, disposal and spill records, concerning contamination at or near the facility; (vi) visual inspections of the facility and of *adjoining properties*; (vii) specialized knowledge or experience on the part of the defendant; (viii) the relationship of the purchase price to the value of the *property*, if the *property* was not contaminated; (ix) commonly known or *reasonably ascertainable* information about the *property*; and (x) the degree of obviousness of the presence or likely presence of contamination at the *property*, and the ability to detect contamination by appropriate investigation. 42 U.S.C. §9601(35)(B)(iii).

X1.3 Interim Standards and Practices Until EPA Regulatory Standards and Practices are Established

X1.3.1 Congress, recognizing the need for immediate clarification of the "*all appropriate inquiry*" included in the *Brownfields Amendments* specific interim standards to clarify

[22] *United States v. A&N Cleaners & Launderers, Inc.*, 854 F. Supp. 229, 239 (S.D.N.Y. 1994).

"*all appropriate inquiry*" in *commercial real estate transactions* until such time as EPA should establish regulatory standards and practices. 42 U.S.C. §9601(35)(B)(iv).

X1.3.2 Congress promulgated two separate sets of interim standards and practices through the *Brownfields Amendments* (i) a standard and practice applicable to *property* purchased before May 31, 1997; and (ii) a standard and practice for *commercial real estate transactions* occurring on or after May 31, 1997.

X1.3.3 The interim Standard and Practice applicable to commercial properties purchased prior to May 31, 1997 sets forth five elements to be considered by a court in determining whether a defendant conducted "*all appropriate inquiry*": (i) any specialized knowledge or experience on the part of the defendant; (ii) the relationship of the purchase price to the value of the *property* if the *property* were not contaminated; (iii) commonly known or *reasonably ascertainable* information about the *property*; (iv) the obviousness of the presence or likely presence of contamination at the *property*; and (v) the ability of the defendant to detect the contamination by appropriate inspection. These criteria are essentially unchanged from the statutory provisions pre-existing the *Brownfields Amendments* which rely upon case law for clarification.

X1.3.4 The interim Standard and Practice applicable to commercial properties purchased on or after May 31, 1997 sets forth a single criteria for meeting "*all appropriate inquiry*" and states: "the procedures of the American Society for Testing and Materials, including the document known as standard E1527-97, entitled 'Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process' shall satisfy the requirements" for "*all appropriate inquiry*." Notably, the wording of this provision appears to be expansive in that it cites "the procedures of the American Society for Testing and Materials" and then goes on to include Practice E 1527-97. EPA subsequently clarified that Practice E1527-00 satisfied the interim Standard and Practice for "*all appropriate inquiry*" (See 68 FR 24888, May 9, 2003).

X1.3.5 While not applicable to commercial real restate transactions, the *Brownfields Amendments* also provide a separate and reduced standard for meeting "*all appropriate inquiry*" applicable to properties for residential use or other similar use purchased by a nongovernmental or noncommercial entity. Under this reduced standard, the performance of a facility inspection and title search which does not reveal a basis for further investigation would satisfy "*all appropriate inquiry*" (See 42 U.S.C. §9601(35)(B)(v)).

X1.4 Case Law Interpretation of "All Appropriate Inquiry" in Commercial Real Estate Transactions

X1.4.1 While the *Brownfields Amendments* outline and direct EPA to promulgate regulations and/or guidance identifying requirements necessary to meet "*all appropriate inquiry*," it is premature to conclude what those requirements may actually be. However, in promulgating its interim provisions, Congress made clear what will satisfy, during the interim period, "*all appropriate inquiry*." For *property* transactions occurring prior to May 31, 1997, CERCLA will require a court to consider a party's specialized knowledge or experience and further mandates a court to consider: what is "*reasonably ascertainable* information about the *property*," what contamination is obviously present, and the party's "ability to detect such contamination". These requirements are essentially the same as those predating the *Brownfields Amendments* and inherently rely on case law interpretation. The continued use of terms "appropriate" and "reasonably" and "specialized knowledge and experience" and "ability" in conjunction with the specific person attempting to utilize the *LLPs* signifies that Congress did not intend the appropriateness of the inquiry be judged by a bright line standard. In contrast, Congress has set forth a far more explicit interim standard for *property* transactions occurring on or after May 31, 1997 by specifying that ASTM protocols (including Practice E1527-97) meet the requirements of "*all appropriate inquiry*."

X1.4.2 *Court Interpretations of The Appropriate Level of Inquiry*:

X1.4.2.1 As suggested above, case law continues to define the parameters for "*all appropriate inquiry*," at least for pre-May 31, 1997 *commercial real estate transactions*. A review of this case law reveals that the requirements for meeting "*all appropriate inquiry*" to achieve the *LLPs* can vary depending upon the nature of the *property* and transaction. As articulated by one court, "[w]hat constitutes appropriate inquiry is a mixed question of law and fact and will depend on the totality of the circumstances." *Advance Technology Corp. v. Eliskim*, Inc. 87 F. Supp. 2d 780, 785 (N.D. Ohio 2000). The statutory language, including the *Brownfields Amendments*, Congressional history, and common sense, support this conclusion with case law describing what constitutes "*all appropriate inquiry*."[23]

X1.4.2.2 While not specifically stated in CERCLA, the duty to make inquiry under this provision shall be judged as of the time of acquisition. Defendants shall be held to a higher standard as public awareness of the hazards associated with hazardous releases has grown, as reflected by this Act, the 1980 Act [CERCLA] and other Federal and State statutes. Moreover, good commercial or customary practice with respect to inquiry in an effort to minimize liability shall mean that a reasonable inquiry must have been made in all circumstances, in light of best business and land transfer principles. Those engaged in commercial transactions should, however, be held to a higher standard than those who are engaged in private residential transactions.[24]

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[23] See, for example, *United States v. Serafini*, 706 F. Supp. 346 (M.D. Pa. 1988), 791 F. Supp. 107 (M.D. Pa. 1990) (By entertaining disputed facts as to the custom and practice of viewing land prior to purchase, the court implied that appropriate inquiry necessarily varies on a site-by-site basis); *United States v. Pacific Hide and Fur Depot, Inc*., 716 F. Supp. 1341 (D. Idaho 1989) (No inquiry was required by those who received an ownership interest in *property* via corporate stock transfer and warranty deed under the facts of this case); *International Clinical Laboratories, Inc. v. Stevens*, 1990 U.S. Dist. LEXIS 3685' 30 ERC 2066, 20 ELR 20,560 (E.D.N.Y. 1990) (Despite a long history of toxic *wastewater* disposal and presence of the site on the state's *hazardous waste* disposal site list, the purchaser was able to establish the *innocent landowner defense* since there were no visible environmental problems at the site, the defendant had no knowledge of environmental problems at the site and the purchase price did not reflect a reduction on account of the problem).

[24] H.R. Rep. No. 962, 99th Cong., 2d Sess. 187 (1986), *reprinted at* 1986 U.S.C.C.A.N. 3276, 3280.

X1.4.3 *The Minimum Inquiries to Satisfy "All Appropriate Inquiry"*:

X1.4.3.1 Recognizing that the extent of inquiry is not static and may change with the underlying circumstances, the next question is what specific level of inquiry, if any, is required to meet any of the three *LLPs*?

X1.4.3.2 The interim standards set forth in the *Brownfields Amendments* outline the basic level of inquiry necessary to support the *LLPs*. However, it is important to understand that additional inquiry ultimately may be necessary depending upon the outcome of base-level inquiry. For instance, the outcome of initial inquiry may indicate the necessity for additional subsurface investigation (commonly referred to as a "Phase II" environmental investigation) and in some arenas such subsurface investigation has become routine in *commercial real estate transactions*. It is important to note, however, that even a subsurface investigation has its limitations since one can always dig down one foot deeper, take one more sample, or conduct one more test. The problem of how much inquiry should be conducted, or at what level a party should begin, in one sense involves proving a negative, that is, that no contamination is present.[25] Since, according to the statute, inquiries should be judged by the circumstances existing at the time of acquisition, then there could be some properties and parties to real estate transactions where it may be appropriate to begin the inquiry with an intrusive subsurface investigation in order to support the particular LLP.

X1.4.3.3 At the other extreme, the minimum level of inquiry that a party would be expected to conduct is found by looking at the least environmentally obtrusive class of *property* and party from a CERCLA perspective. This transaction likely involves the lay buyer of a residence. Assuming these parties meet the other prerequisites for establishing an LLP, what level of environmental inquiry must they conduct to avoid CERCLA liability? Prior to the *Brownfields Amendments*, the answer was probably none, unless a particular residential purchaser or renter has some specialized knowledge about or experience with the *property* in question that would lead a court to conclude that the purchaser should have made some inquiries about the environmental conditions of the *property*. Post *Brownfields Amendments*, it is clear that the statute requires at least an onsite inspection and a title search for non commercial residential properties.[26] Even so, it seems unlikely that Congress intends to change its position and begin tasking residential *owners* with investigation and cleanup obligations. EPA has previously established its position in its 1991 statement of enforcement policy to the effect that it will not generally pursue *owners* of single family residences pursuant to CERCLA.[27] Therefore, for some properties and purchasers of real estate for residential purposes, it is appropriate to conduct minimal environmental inquiry in order to qualify for an *LLP*. The language of the recent *Brownfields Amendments* indicates that even purchasers of *property* for residential uses must now conduct an inspection and title search to meet its "*all appropriate inquiry*" obligation.[28]

X1.4.3.4 The minimum level of appropriate inquiry under CERCLA, therefore, may range from little or no inquiry (such as a private party purchasing real estate for its own residential use) to conducting an intrusive subsurface investigation. Even so, commercial and customary practices and best business and land transfer principles, do not always dictate that *environmental site assessments* be conducted, particularly those real estate transactions involving smaller properties, vacant land, or transactions of low monetary value. This practice and the minimum level of inquiry set forth under this practice, therefore, actually raises the average level of inquiry that should be performed, especially in these more limited types of transactions, where the parties want to establish *all appropriate inquiry* to qualify for one or more of the *LLPs*.

X1.4.3.5 The burden of proof is on the defendant to show by a preponderance of the evidence that the defendant qualifies for any *LLP* or other defense to CERCLA liability.[29] This is the least onerous burden of proof available to a party in litigation. The defendant must show only that the evidence offered to support the level of inquiry that was taken at the time of acquisition is of greater weight or more convincing than the evidence offered in opposition to it. In other words, the evidence on the inquiry issue taken as a whole shows that the fact sought to be proved is more probable than not. There may be technical or business judgments on whether the inquiry conducted or any other fact in a particular case is sufficient to meet the needs or concerns of a party to the real estate transaction. The bottom line, however, is that the judgment on whether the specific facts of a case, in light of the statutory language, are sufficient to produce liability or a viable defense to liability is a legal one, and such judgments constitute the practice of law.

X1.4.3.6 The Legal Task Group notes that, although Practice E 1528 (Transaction Screen) was originally intended to satisfy the initial level of inquiry for the *innocent landowner defense*, as a result of the *Brownfields Amendments* and the criteria mandated to be followed by EPA to establish "*all appropriate inquiry*," it appears that Practice E 1528, unless modified, likely will no longer meet the threshold for "*all appropriate inquiry*."

[25] The inability to prove a negative creates a dilemma for the potential defendant. If the party's inquiry discovers contamination, then under the statute, the party will not be able to avail itself of either the *Contiguous Property Owner protection* or *innocent landowner defense*. If the inquiry does not discover contamination, EPA or another private party can argue in a response action that the inquiry was not "appropriate" and, if concurred by the court, the defendant would not qualify for protection provided by these *LLPs*. This dilemma is explicitly recognized by Subcommittee E50.02 as beyond any reasonable interpretation of Congressional intent. The scope of the E50.02 Standard Practice resolves the party's dilemma in the only reasonable way by stating: "It should not be concluded or assumed that the inquiry was not appropriate inquiry merely because the inquiry did not identify existing *recognized environmental conditions* in connection with a *property*. *Environmental site assessments* must be evaluated based on the reasonableness of the judgments made at the time and under the circumstances in which they were made." See 4.5.4.

[26] 42 U.S.C. 9601(35)(B)(v).

[27] EPA, *Policy Towards Owners of Residential Property at Superfund Sites*, OSWER Directive No. 9834.6, July 3, 1991.

[28] 42 U.S.C. 9601(35)(B)(v).

[29] *United States v. Domenic Lombardi Realty, Inc.*, 290 F. Supp. 2d 198 (D.R.I. 2003).

X1.5 Landowner Liability Protections under the Brownfields Amendments

X1.5.1 On January 11, 2002, the *Brownfields Amendments* became law and amended CERCLA §9607 by adding two new subsections providing protection from CERCLA liability: (i) The *Contiguous Property Owner* liability protection pursuant to 42 U.S.C. §9607(q); and (ii) the *Bona Fide Prospective Purchaser liability protection* pursuant to 42 U.S.C. §9607(r), and amended the *innocent landowner defense*. 42 U.S.C. §9601(35)(B)(i)(II).

X1.5.2 *The Contiguous Property Owner (CPO) Liability Protection*—42 U.S.C. §9607(q) excludes from *owner* or *operator* status "a person that owns real *property* that is contiguous to or otherwise similarly situated with respect to, and that is or may be contaminated by a release or threatened release of *hazardous substance* from, real *property* that is not owned by that person solely by reason of the contamination if: (i) the person did not cause, contribute, or consent to the release or threatened release; (ii) the person is not: (a) potentially liable, or affiliated with any other person that is potentially liable, for response costs at a facility through any direct or indirect familial relationship or any contractual, corporate, or financial relationship (other than a contractual, corporate, or financial relationship that is created by a contract for the sale of goods or services), or (b) the result of a reorganization of a business entity that was potentially liable; (iii) the person takes reasonable steps to: (a) stop any continuing release, (b) prevent any threatened future release, and (c) prevent or limit human, environmental, or natural resource exposure to any *hazardous substance* released on or from *property* owned by that person; (iv) the person provides full cooperation, assistance, and access to persons that are authorized to conduct response actions or natural resource restoration at the vessel or facility from which there has been a release or threatened release (including the cooperation and access necessary for the installation, integrity, operation, and maintenance of any complete or partial response action or natural resource restoration at the vessel or facility); (v) the person: (a) is in compliance with any land use restrictions established or relied on in connection with the response action at the facility, and (b) does not impede the effectiveness or integrity of any institutional control employed in connection with a response action; (vi) the person is in compliance with any request for information or administrative subpoena issued by the President under this Act; (vii) the person provides all legally required notices with respect to the discovery or release of any *hazardous substances* at the facility; and (viii) at the time at which the person acquired the *property*, the person; (a) conducted *all appropriate inquiry* within the meaning of 42 U.S.C. §9601(35)(B) with respect to the *property*, and (b) did not know or have reason to know that the *property* was or could be contaminated by a release or threatened release of one or more *hazardous substances* from other real *property* not owned or operated by the person."

X1.5.2.1 The *Brownfields Amendments* indicate that, to qualify for the CPO liability protection, a person must establish by a preponderance of the evidence that the conditions in clauses (i) through (viii) of subparagraph §9607(q)(1)(A) (see above) have been met.

X1.5.3 *The Bonafide Prospective Purchaser (BFPP) Liability Protection*—The second protection from CERCLA liability is the BFPP liability protection pursuant to 42 U.S.C. §9607(r) which provides for a limitation on §9607(a)(1) liability for persons meeting the definition of a BFPP whose potential liability for a release or threatened release is based solely on the purchaser's being considered to be an *owner* or *operator* of a facility. The exclusion apparently requires that the BFPP does not impede the performance of a response action or natural resource restoration.

X1.5.3.1 The statutory text indicates that, in order to take advantage of the BFPP liability protection, the potentially responsible party must meet the definition of a BFPP. As defined at 42 U.S.C. §9601(40), the term BFPP means a person (or a tenant of a person) that acquires ownership of a facility after the date of enactment [that is, January 11, 2002] and that establishes each of the following by a preponderance of the evidence: (i) all disposal of *hazardous substances* at the facility occurred before the person acquired the facility; (ii) the 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 in accordance with the standards and practices referred to in clauses (ii) and (iv) of paragraph (35)(B) or in the case of *property* in residential or other similar use at the time of purchase by a nongovernmental or noncommercial entity, a facility inspection and title search that reveal no basis for further investigation shall be considered to satisfy the requirements of this subparagraph; (iii) the person provides all legally required notices with respect to the discovery or release of any *hazardous substances* at the facility; (iv) the person exercises appropriate care with respect to *hazardous substances* found at the facility by taking reasonable steps to (a) stop any continuing release, (b) prevent any threatened future release; and (c) prevent or limit human, environmental, or natural resource exposure to any previously released *hazardous substance*; (v) the person provides full cooperation, assistance, and access to persons that are authorized to conduct response actions or natural resource restoration at a vessel or facility (including the cooperation and access necessary for the installation, integrity, operation, and maintenance of any complete or partial response actions or natural resource restoration at the vessel or facility); (vi) the person (a) is in compliance with any land use restrictions established or relied on in connection with the response action at a vessel or facility, and (b) does not impede the effectiveness or integrity of any *institutional control* employed at the vessel or facility in connection with a response action; (vii) the person complies with any request for information or administrative subpoena issued by the President under this Act; (viii) the person is not (a) potentially liable, or affiliated with any other person that is potentially liable, for response costs at a facility through (xx) any direct or indirect familial relationship; or (yy) any contractual, corporate, or financial relationship (other than a contractual, corporate, or financial relationship that is created by the instruments by which title to the facility is conveyed or financed or by a

contract for the sale of goods or services); or (b) the result of a reorganization of a business entity that was potentially liable.

X1.5.4 On March 6, 2003, the EPA issued the "Common Elements" Interim Guidance Memorandum regarding criteria landowners must meet to achieve and maintain *LLPs*. The Guidance only covered the criteria "common" to all three *LLPs*. These common elements include two threshold criteria: "*all appropriate inquiry*" and "no-affiliation" with a liable party; and five continuing obligations: *(1)* complying with land use restrictions and *institutional controls*; *(2)* taking reasonable steps with respect to *hazardous substance* releases; *(3)* providing full cooperation, assistance, and access to persons that are authorized to conduct response actions or natural resource restoration; *(4)* complying with information requests and administrative subpoenas; and *(5)* providing legally required notices.

X1.5.4.1 The no-affiliation threshold question refers to the "affiliation" language in the BFPP and CPO provisions. See 42 U.S.C. §9601(40)(H), and 42 U.S.C. §9607(q)(1)(A)(ii), respectively.

X1.5.4.2 The *Innocent Landowner defense* does not include this "affiliation" language but requires that no "contractual relationship" exist between the landowner and the third party causing *hazardous substance* contamination.

X1.5.4.3 The "continuing obligations" common elements are beyond the scope of this standard and Legal Appendix.

X1.6 CERCLA Definition of Hazardous Substance

X1.6.1 CERCLA defines *hazardous substance* by referring to five other statutes as well as to a separate grant of authority in CERCLA to designate *hazardous substances*. See 42 U.S.C. §§9601(14)(A)-(F), 9602(a). The following is a description of the relevant portions of these statutory provisions:

X1.6.1.1 42 U.S.C. §9601(14)(A): "[A]ny substance designated pursuant to section 1321(b)(2)(A) of Title 33." Title 33 U.S.C. §1321 is a section of the Clean Water Act and refers to, among other things, *hazardous substance* liability. 33 U.S.C. §1321(b)(2)(A) states that the EPA shall develop, "as may be appropriate, regulations designating as *hazardous substances*, other than oil as defined in this section, such elements and compounds which, when discharged in any quantity into or upon" the navigable waters of the United States ..., present an imminent and substantial danger to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches."

X1.6.1.2 42 U.S.C. §9601(14)(B): "[A]ny element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title." Section 9602 gives EPA the authority to designate as a *hazardous substance*, in addition to those substances covered by the statutes cross-referenced in 42 U.S.C. §9601(14), "such elements, compounds, mixtures, solutions, and substances which, when released into the environment may present substantial danger to the public health or welfare or the environment...."

X1.6.1.3 42 U.S.C. §9601(14)(C): "[A]ny hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [also known as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C. §§6901 *et seq*.] has been suspended by Act of Congress)." The Solid Waste Disposal Act Amendments of 1980 amended RCRA. 42 U.S.C. §6921 of RCRA provides authority to the EPA to develop criteria for identifying characteristics of hazardous waste and for listing particular hazardous wastes within the meaning of 42 U.S.C. §6903(5). RCRA defines hazardous waste to mean "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." 42 U.S.C. §6903(5). For the identification and listing of hazardous wastes under RCRA, see 40 C.F.R. Part 261.

X1.6.1.4 42 U.S.C. §9601(14)(D): "[A]ny toxic pollutant listed under Section 1317(a) of Title 33." Section 1317(a) of Title 33 refers to toxic and pretreatment effluent standards under the Clean Water Act. The EPA is charged in this section with publishing and revising from time to time a list of toxic pollutants, taking "into account toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms." Each toxic pollutant listed according to this section shall be subject to effluent limitations. For toxic pollutant effluent standards, see 40 C.F.R. §§129.1 *et seq*.

X1.6.1.5 42 U.S.C. §9601(14)(E): "[A]ny hazardous air pollutant listed under Section 112 of the Clean Air Act [42 U.S.C. §7412]." That section deals with national emission standards for hazardous air pollutants. The EPA is charged here with publishing and revising from time to time "a list which includes each hazardous air pollutant for which [it] intends to establish an emission standard under this section." The term "hazardous air pollutant" means an air pollutant that in EPA's judgment "causes, or contributes to, air pollution which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness." For emission standards for hazardous pollutants, see 40 C.F.R. §§61.01 *et seq*.

X1.6.1.6 42 U.S.C. §9601(14)(F): "[A]ny imminently hazardous chemical substance or mixture with respect to which the [EPA] has taken action pursuant to Section 2606 of Title 15." Section 2606 of Title 15 deals with imminent hazards under the Toxic Substances Control Act (TSCA). The EPA is authorized under 15 U.S.C. §2606 to seize an imminently hazardous chemical substance or mixture or seek other relief, such as requiring notice to *users* of the chemical substance or public notice of the risk associated with the substance or mixture. The term "imminently hazardous chemical substance or mixture" means a chemical substance or mixture which presents an imminent and unreasonable risk of serious or widespread injury to health or the environment." TSCA, 15 U.S.C. §2606(f).

X1.6.2 After Subsections A–F, outlined above, the CERCLA definition of "hazardous substance" goes on to state: "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)." 42 U.S.C. §9601(14).

X1.6.3 The EPA has collected a list of "those substances in the statutes referred to in section 101(14) of the Act" [42 U.S.C. §9601(14)]" 40 C.F.R. §302.1 (See "List of Hazardous Substances and Reportable Quantities," 40 C.F.R. Part 302, Table 302). This list changes with notices in the *Federal Register*. Also, any time a new *hazardous waste* is listed under RCRA, the waste automatically becomes a *hazardous substance*.

X1.7 Petroleum Products

X1.7.1 Under the *petroleum exclusion* of CERCLA (42 U.S.C. §9601(14)), petroleum and crude oil have been explicitly excluded from the definition of *hazardous substances* under CERCLA. Nevertheless, *petroleum products* are included within the scope of this practice and the Legal Appendix because they are of concern in many *commercial real estate transactions* and current custom and usage is to include an inquiry into the presence of *petroleum products* in an *environmental site assessment*. Inclusion of *petroleum products* within the scope of this practice is not based upon the applicability, if any, of CERCLA to *petroleum products*.

X1.7.2 One reason to include *petroleum products* within the scope of this practice is because to do so reflects custom and usage: when environmental assessments are conducted in connection with *commercial real estate transactions*, they customarily include an assessment of the presence or likely presence of *petroleum products* under conditions that may lead to contamination. For example, environmental assessments ordinarily seek to assess whether there may be underground or aboveground storage tank systems that may be leaking, whether those tanks contain *petroleum products* or some other product.

X1.7.3 In addition, although CERCLA may exclude *petroleum products*, other laws require cleanup of releases or spills of *petroleum products*. For example, *petroleum products* sometimes (for example, when they cannot be reclaimed from soil) become *hazardous wastes* subject to RCRA Subtitle C (42 U.S.C §6921 *et seq*.), must be cleaned up if released from *underground storage tanks* pursuant to RCRA Subtitle I (42 U.S.C. §6991 *et seq*.), must be cleaned up pursuant to the Oil Pollution Act of 1990 (33 U.S.C. §§1321 *et seq*.), and must be cleaned up if released into the navigable waters of the United States pursuant to the Clean Water Act (33 U.S.C. §§1251 *et seq*.).

X1.7.4 Moreover, case law and EPA interpretations of the *petroleum exclusion* require an analysis of the facts of each case to determine whether a particular petroleum product is included in CERCLA's *petroleum exclusion*. The exclusion has been broadly interpreted to exclude gasoline and leaded gasoline from CERCLA's definition of *hazardous substances* regardless of the fact that gasoline and leaded gasoline contain certain indigenous components and additives which have themselves been designated as hazardous pursuant to CERCLA. See *Wilshire Westwood Associates v. Atlantic Richfield Corp*., 881 F.2d 801 (9th Cir. 1989). This interpretation was narrowed when a judicial distinction was made between petroleum fractions produced by distillation processes and waste products resulting from contaminated tank scale. See *United States v. Western Processing Co*., 761 F. Supp. 713 (W.D. Wash. 1991). Another decision narrowly interpreted CERCLA's *petroleum exclusion* to be inapplicable to oil-related wastes containing *hazardous substances* because the primary purpose of the exclusion is to remove "spills or other releases strictly of oil" from the scope of CERCLA response and liability (not releases of *hazardous substances* mixed with oil). See *City of New York v. Exxon Corp*., 744 F. Supp. 474 (S.D.N.Y. 1990). One recent decision has potentially expanded the *petroleum exclusion* to include both unused and used *petroleum products* as well as *hazardous substances* inherent in or added to unused petroleum during the refining process. *Organic Chemical Site PRP Group v. Total Petroleum, Inc*., 58 F. Supp. 2d 755 (W.D. Mich. 1999). More recently, the *petroleum exclusion* was held not applicable in an instance where petroleum had commingled with *hazardous substances* in the subsurface beneath a refinery. *Tosco Corp. v. Koch Industries, Inc*. 216 F3d 886 (10th Cir. 2000). For additional discussion, see EPA Memorandum entitled, "The Petroleum Exclusion Under the Comprehensive Environmental Response Compensation and Liability Act," issued by EPA's General Counsel, Francis S. Blake, July 31, 1987.

X1.8 Exclusion of Certain Constituents of Potential Environmental Concern from CERCLA

X1.8.1 The information that follows is provided to explain why the following constituents of potential environmental concern are not necessarily covered by CERCLA's "*all appropriate inquiry*" obligation thereunder:

X1.8.2 As a preliminary matter, it should be noted that an *environmental site assessment* that does not address substances excluded from CERCLA (whether those substances are excluded because they are *petroleum products* or by virtue of other characteristics) but that otherwise constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" should nevertheless entitle the *user* to the *LLPs*, assuming that other requirements of the provisions are met.

X1.8.3 *Radon*:

X1.8.3.1 A case discussing CERCLA and radon is *Amoco Oil Co. v. Borden, Inc*., 889 F.2d 664 (5th Cir. 1989). This case dealt with a private cost recovery action by the buyer of a site against the seller for response costs relating to radiation from phosphogypsum wastes left on the site. Radon emanated from these radioactive wastes. The case points out that the "EPA has designated radionuclides as *hazardous substances* under §9602(a) of CERCLA... . Additionally, the ... EPA under §112 of the Clean Air Act ... lists radionuclides as a hazardous air pollutant. Radon and its daughter products are considered radionuclides, which are defined as 'any nuclide that emits radiation.'" *Id.* at 668-69. Therefore, radon is a CERCLA

hazardous substance. Also, when discussing what constitutes a release of a *hazardous substance* under the statute, the statute is plain that there is no quantitative requirement and that a release, broadly defined at 42 U.S.C. §9601(22), of any amount constitutes a CERCLA release.

X1.8.3.2 Liability under CERCLA depends on several factors, as noted in X1.1. Only one of four factors is the release or threatened release of a *hazardous substance*. The other three factors are *(1)* the site is a facility, *(2)* the defendant falls within at least one of four classes of potentially responsible parties (PRPs), and *(3)* the release or threatened release caused the plaintiff (that can be the government or another private party) to incur response costs. Further, response costs must not be inconsistent with the *National Contingency Plan (NCP)*, and must not be limited by 42 U.S.C.§9604(a)(3). And, of course, there is no need to raise the *LLPs* and their *all appropriate inquiry* requirements unless the elements of liability will be met.

X1.8.3.3 Where radon from any source occurs in a building, three of the liability elements under CERCLA are met. There is a release of a *hazardous substance*, the building is a facility, and we can assume the defendant is a PRP. However, under 42 U.S.C. §9604(a)(3)(A), "[r]emedial actions taken in response to *hazardous substances* as they occur naturally are specifically excluded from the *NCP* and are therefore not recoverable." *Amoco Oil Co. v. Borden, Inc*., 889 F.2d at 570.[30]

X1.8.3.4 Therefore, no liability under CERCLA attaches for naturally occurring radon. If a party to a real estate transaction wants to look for radon within a building, no amount of radon investigation will have any bearing on one's *LLPs* under CERCLA. Investigation of naturally occurring radon would be included, if at all, in the portion of the practice and Legal Appendix that deals with non-scope issues.

X1.8.4 *Asbestos*:

X1.8.4.1 The analysis of asbestos is similar to that involving radon. Before considering appropriate inquiry responsibilities, the four elements of CERCLA liability must be satisfied. Once again, as with radon, they are not met.

X1.8.4.2 42 U.S.C. §9604(a)(3)(B) prohibits response actions involving a release or threat of release "from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures." There are a number of cases dealing with asbestos that interpret this statutory language. One such case is *First United Methodist Church of Hyattsville v. United States Gypsum Co*., 882 F.2d 862 (4th Cir. 1989), that cites to other relevant cases.

X1.8.4.3 In *First United* the church brought a private cost recovery action against the manufacturer of asbestos-containing acoustical plaster. In holding that the action was barred by a state statute of repose (a certain time allowed by statute for bringing litigation) and that CERCLA did not preempt the state statute of repose, the court stated that §9604(a)(3)(B) of CERCLA "represents much more than a procedural limitation on the President's authority; it is a substantive limitation of the breadth of CERCLA itself."[31] Therefore, the limitations of §9604(a)(3) apply to private parties as well.

X1.8.4.4 Citing to the legislative history, the *First United* court concluded, "[i]n view of this clear expression of Congressional intent, we wil[l] not expand CERCLA to encompass asbestos-removal actions." 882.F.2d at 868. The court also stated:[32] "we note that this interpretation of CERCLA fully comports with the most fundamental guide to statutory construction—common sense. To extend CERCLA's strict liability scheme to all past and present *owners* of buildings containing asbestos as well as to all persons who manufactured, transported, and installed asbestos products into buildings, would be to shift literally billions of dollars of removal cost liability based on nothing more than an improvident interpretation of a statute that Congress never intended to apply in this context. [FN12[33]] ... Certainly, if Congress had intended for CERCLA to address the monumental asbestos problem, it would have said so more directly when it passed SARA.

X1.8.4.5 Since asbestos that is a part of the structure of, and results in exposure within, residential buildings or business or community structures is excluded from CERCLA liability, it should not be investigated pursuant to a party's "*all appropriate inquiry*" obligation in order to establish one of the *LLPs*. Like naturally occurring radon, investigation of asbestos-containing materials that are part of the structure of buildings should be included, if at all, in the portion of this practice that deals with non-scope issues. Note, however, if asbestos is disposed of on a site and, therefore, is no longer part of the structure of a building, the cleanup of the disposed asbestos is subject to CERCLA response actions. Likewise, if a building is sold with the knowledge that it will be demolished, one court

[30] 42 U.S.C. §9604(a)(3) and (4) state "(3) Limitations on response - The President shall not provide for a removal or remedial action under this section in response to a release or threat of release—(A) of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found; (B) from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures; or (C) into public or private drinking water supplies due to deterioration of the system through ordinary use. "(4) EXCEPTION TO LIMITATIONS—Notwithstanding paragraph 3 of this subsection, to the extent authorized by this section, the President may respond to any release or threat of release if in the President's discretion, it constitutes a public health or environmental emergency and no other person with the authority and capability to respond to the emergency will do so in a timely manner." (Emphasis added).

[31] One such case is *First United Methodist Church of Hyattsville v. United States Gypsum Co*., 882 F.2d 862 (4th Cir. 1989), that cites to other relevant cases.

[32] The same at 869; See also *3550 Stevens Creek Associates v. Barclays Bank of California*, 915 F.2d 1355 (9th Cir. 1990).

[33] *FN12*—It is for this reason, that Congress simply did not intend for CERCLA to remedy the asbestos-removal problem, that we decline to follow the reasoning of *Prudential, Knox and Covalt* in rejecting First United's preemption argument. Instead of recognizing the fact that CERCLA is out of context in this situation, these courts rejected similar attempts to invoke the statute by construing CERCLA's key terms in a way to exclude asbestos-removal actions. *Covalt*, 860 F.2d [1434] at 1438-39 (defining" environment" to exclude the interior of a workplace); *Knox*, 690 F. Supp at 756-57 (defining "release" in terms of "spills" or "disposal"); *Prudential*, [711 F. Supp 1244] at 1254-55 (defining "disposal" to exclude the sale of a product for consumer use). We find this analysis unsatisfactory because it runs the risk of unnecessarily restricting the scope of CERCLA merely to dispose of claims that the statute was never intended to encompass in the first place. It is far better to simply acknowledge the inapplicability of CERCLA to asbestos-removal claims than to restrict its operative terms."

ruled that the sale constitutes a disposal falling under CERCLA's liability provisions.[34]

X1.8.5 *Lead in Drinking Water*—Lead in drinking water can be evaluated in terms of the exclusions of 42 U.S.C. §9604(a)(3)(B) and (C), in an analysis similar to the analysis applied above to radon and asbestos. While there is no reported case law on lead in drinking water as related to CERCLA, the statutory language seems clear that these environmental hazards are not encompassed by CERCLA's appropriate inquiry responsibilities.

X1.8.6 *Lead-Based Paint*—Lead-based paint hazards can be evaluated in terms of the exclusions of 42 U.S.C. §9604(a)(3)(B) and (C), in an analysis similar to the analysis applied above to radon and asbestos. While no reported case law was found on the presence or use of lead-based paint as related to CERCLA, the statutory language seems clear that lead-based paint hazards are not encompassed by CERCLA's appropriate inquiry responsibilities. Note, however, like asbestos, where there is a disposal of these substances on the site or in a facility, CERCLA liability may arise.

X1.8.7 *Mold, Fungi and Microbial Growth in Building Structures*—These hazards can be evaluated in terms of the exclusion of 42 U.S.C. §9604(a)(3)(A), in an analysis similar to the analysis applied above to radon and asbestos. While there is no reported case law on these environmental issues as they relate to CERCLA, the statutory language seems clear that these environmental hazards are not encompassed by CERCLA's appropriate inquiry responsibilities.

[34] *CP Holdings, Inc. v. Goldberg-Zoino & Associates, Inc*., 769 F. Supp. 432 (D.N.H. 1991).

X2. DEFINITION OF ENVIRONMENTAL PROFESSIONAL AND RELEVANT EXPERIENCE THERETO, PURSUANT TO 40 CFR.10

X2.1 Environmental Professional

X2.1.1 *Environmental Professional* means:

(1) a person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases (see §312.1(c)) on, at, in, or to a property, sufficient to meet the objectives and performance factors in §312.20(e) and (f).

(2) Such a person must: (i) hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or (ii) be licensed or certified by the federal government, a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries as defined in §312.21 and have the equivalent of three (3) years of full-time relevant experience; or (iii) have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and the equivalent of five (5) years of full-time relevant experience; or (iv) have the equivalent of ten (10) years of full-time relevant experience.

(3) An environmental professional should remain current in his or her field through participation in continuing education or other activities.

(4) The definition of environmental professional provided above does not preempt state professional licensing or registration requirements such as those for a professional geologist, engineer, or site remediation professional. Before commencing work, a person should determine the applicability of state professional licensing or registration laws to the activities to be undertaken as part of the inquiry identified in §312.21(b).

(5) A person who does not qualify as an environmental professional under the foregoing definition may assist in the conduct of all appropriate inquiries in accordance with this part if such person is under the supervision or responsible charge of a person meeting the definition of an environmental professional provided above when conducting such activities.

X2.2 Relevant Experience

X2.2.1 *Relevant experience*, as used in the definition of environmental professional in this section, means: participation in the performance of all appropriate inquiries investigations, environmental site assessments, or other site investigations that may include environmental analyses, investigations, and remediation which involve the understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions and for which professional judgment was used to develop opinions regarding conditions indicative of releases or threatened releases (see §312.1(c)) to the subject property.

X3. USER QUESTIONNAIRE

INTRODUCTION

In order to qualify for one of the *Landowner Liability Protections (LLPs)*[35] offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"),[36] the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

(1.) Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).
Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?

(2.) Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).
Are you aware of any AULs, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).
As the *user* of this *ESA* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

(4.) Relationship of the purchase price to the fair market value of the *property* if it were not contaminated (40 CFR 312.29).
Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

(5.) Commonly known or *reasonably ascertainable* information about the *property* (40 CFR 312.30).
Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,
(a.) Do you know the past uses of the *property*?
(b.) Do you know of specific chemicals that are present or once were present at the *property*?
(c.) Do you know of spills or other chemical releases that have taken place at the *property*?
(d.) Do you know of any environmental cleanups that have taken place at the *property*?

(6.) The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).
As the *user* of this *ESA*, based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?

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[35] *Landowner Liability Protections*, or *LLPs*, is the term used to describe the three types of potential defenses to Superfund liability in EPA's *Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability* ("*Common Elements*" Guide) issued on March 6, 2003.
[36] P.L. 107-118.

X3.1 In addition, certain information should be collected, if available, and provided to the *environmental professional* selected to conduct the Phase I. This information is intended to assist the *environmental professional* but is not necessarily required to qualify for one of the *LLPs*. The information includes:

(a) the reason why the Phase I is required,

(b) the type of *property* and type of *property* transaction, for example, sale, purchase, exchange, etc.,

(c) the complete and correct address for the *property* (a map or other documentation showing *property* location and boundaries is helpful),

(d) the scope of services desired for the Phase I (including whether any parties to the *property* transaction may have a required standard scope of services on whether any considerations beyond the requirements of Practice E 1527 are to be considered),

(e) identification of all parties who will rely on the Phase I *report*,

(f) identification of the site contact and how the contact can be reached,

(g) any special terms and conditions which must be agreed upon by the *environmental professional*, and

(h) any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* (for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental condition).

X4. RECOMMENDED TABLE OF CONTENTS AND REPORT FORMAT

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X4.2 Introduction

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X4.2.2 Detailed Scope-of-Services
X4.2.3 Significant Assumptions
X4.2.4 Limitations and Exceptions
X4.2.5 Special Terms and Conditions
X4.2.6 User Reliance

X4.3 Site Description

X4.3.1 Location and Legal Description
X4.3.2 Site and Vicinity General Characteristics
X4.3.3 Current Use of the *Property*
X4.3.4 Descriptions of Structures, Roads, Other Improvements on the Site (including heating/cooling system, sewage disposal, source of potable water)
X4.3.5 Current Uses of the Adjoining Properties

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X4.5.2 Additional Environmental Record Sources
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X4.9 Opinion

X4.10 Conclusions

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X4.14 Signature(s) of Environmental Professional(s)

X4.15 Qualification(s) of Environmental Professional(s)

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X4.16.2 Site Plan
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X4.16.5 Regulatory Records Documentation
X4.16.6 Interview Documentation
X4.16.7 Special Contractual Conditions between User and Environmental Professional
X4.16.8 Qualification(s) of the Environmental Professional(s)