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

This standard is issued under the fixed designation E1527; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 *Purpose*—The purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment*[2] of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations on CERCLA liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"): that is, the practice that constitutes *all appropriate inquiries* into the previous ownership and uses of the *property* consistent with good commercial and customary 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* in, on, or at a *property*: (*1*) due to any *release* to the *environment*; (*2*) under conditions indicative of a *release* to the *environment*; or (*3*) under conditions that pose a *material threat* of a future *release* to the *environment*. *De minimis* conditions 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 X1.1.2.1 for discussion of *petroleum exclusion* to CERCLA liability.)

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

1.1.4 *Other Federal, State, and Local Environmental Laws*—This practice does not address requirements of any state or local laws or of any federal laws other than the *all appropriate inquiries* provisions of the *LLPs*. *Users* are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. *Users* should also be aware that there are likely to be other legal obligations with regard to *hazardous substances* or *petroleum products* discovered 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] This practice is under the jurisdiction of ASTM Committee E50 on Environmental Assessment, Risk Management and Corrective Action and is the direct responsibility of Subcommittee E50.02 on Real Estate Assessment and Management.

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

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

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

1.3 *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 five 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 Inquiries*" 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*. Appendix X5 summarizes non-scope considerations that persons may want to assess.

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]

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

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

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 (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 Inquiries" 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. 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] 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.

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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, soil vapor, groundwater, and/or surface 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, soil vapor, groundwater, and/or surface water on the *property*. See Note 1.

NOTE 1—The term *AUL* is taken from Guide E2091 to include both legal (that is, institutional) and physical (that is, engineering) controls within its scope. Other agencies, organizations, and jurisdictions may define or utilize these terms differently (for example, EPA and California do not include physical controls within their definitions of "*institutional controls*." Department of Defense and International County/City Management Association use "Land Use Controls." The term "land use restrictions" is used but not defined in the *Brownfields Amendments*).

3.2.3 *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 inquiries*—that inquiry constituting *all appropriate inquiries* into the previous ownership and uses of the *property* consistent with good commercial and 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 the 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 inquiries* would not generally preclude this liability protection. A person must make *all appropriate inquiries* 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 *dwelling* for occupancy by a purchaser, but a *commercial real estate*

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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 inquiries* 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 inquiries* 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 *controlled recognized environmental condition*—a *recognized environmental condition* resulting from a past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*). (See Note 2.) A condition considered by the *environmental professional* to be a *controlled recognized environmental condition* shall be listed in the findings section of the *Phase I Environmental Site Assessment report*, and as a *recognized environmental condition* in the conclusions section of the *Phase I Environmental Site Assessment report*. (See Note 3.)

NOTE 2—For example, if a leaking underground storage tank has been cleaned up to a commercial use standard, but does not meet unrestricted residential cleanup criteria, this would be considered a controlled recognized environmental condition. The "control" is represented by the restriction that the property use remain commercial.

NOTE 3—A condition identified as a *controlled recognized environmental condition* does not imply that the *environmental professional* has evaluated or confirmed the adequacy, implementation, or continued effectiveness of the required control that has been, or is intended to be, implemented.

3.2.19 *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.

3.2.20 *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.

3.2.21 *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.

3.2.22 *de minimis condition*—a condition that generally does 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 conditions* are not *recognized environmental conditions* nor *controlled recognized environmental conditions*.

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

3.2.24 *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*.

3.2.25 *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).

3.2.26 *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.

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

3.2.28 *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 groundwater on the *property*. *Engineering controls* are a type of activity and use limitation (AUL).

3.2.29 *environment*—environment shall have the same meaning as the definition of environment in CERCLA 42

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U.S.C. § 9601(8)). For additional background information, see Legal Appendix (Appendix X1) to section XI. 1.1 "Releases and Threatened Release."

3.2.30 *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*.

3.2.31 *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.

3.2.32 *environmental professional*—a person meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b). For the convenience of the reader, this section is reprinted in Appendix X2. The person may be an independent contractor or an employee of the *user*.

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

3.2.34 *ERNS list*—EPA's emergency response notification system list of reported CERCLA *hazardous substancereleases* 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.

3.2.35 *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*.

3.2.36 *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.

3.2.37 *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.

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

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

3.2.40 *hazardous waste*—any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of 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."

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

3.2.42 *historical recognized environmental condition*—a past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the *property* to any required controls (for example, *property* use restrictions, *activity and use limitations*, *institutional controls*, or *engineering controls*). Before calling the past *release* a *historical recognized environmental condition*, the *environmental professional* must determine whether the past *release* is a *recognized environmental condition* at the time the *Phase I Environmental*

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Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past *release* to be a *recognized environmental condition* at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a *recognized environmental condition*.

3.2.43 *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) and the Pennsylvania Activity and Use Limitation (PA AUL) Registry.

3.2.44 *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 innocent landowner defense, such person must have made *all appropriate inquiries* on or before the date of purchase. Furthermore, the *all appropriate inquiries* 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.

3.2.45 *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 groundwater 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)*.

3.2.46 *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.

3.2.47 *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.

3.2.48 *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.

3.2.49 *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).

3.2.50 *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.

3.2.51 *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.

3.2.52 *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).

3.2.53 *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.

3.2.54 *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.

3.2.55 *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*.

3.2.56 *migrate/migration*—for the purposes of this practice, "migrate" and "migration" refers to the movement of *hazardous substances* or *petroleum products* in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface. See Note 4.

NOTE 4—Vapor migration in the subsurface is described in Guide E2600; however, nothing in this practice should be construed to require application of the Guide E2600 standard to achieve compliance with all appropriate inquiries.

3.2.57 *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.

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3.2.58 *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.

3.2.59 *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*.

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

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

3.2.62 *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.

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

3.2.64 *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)."

3.2.65 *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.[4])

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

3.2.67 *physical setting sources*—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a *property*. See 8.2.4.

3.2.68 *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.

3.2.69 *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*.

3.2.70 *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.

3.2.71 *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.

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

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

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

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

[4] *Standard Definitions of Petroleum Statistics*, American Petroleum Institute, Fifth Edition, 1995.

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3.2.76 *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.

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

3.2.78 *recognized environmental conditions*—the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: (*1*) due to release to the environment; (*2*) under conditions indicative of a *release* to the *environment*; or (*3*) under conditions that pose a *material threat* of a future *release* to the *environment*. *De minimis conditions* are not *recognized environmental conditions*.

3.2.79 *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.

3.2.80 *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).

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

3.2.82 *release*—a *release* of any *hazardous substance* or *petroleum product* shall have the same meaning as the definition of "release" in CERCLA 42 U.S.C. § 9601(22)). For additional background information, see Legal Appendix (Appendix X1) to X1.1.1 "Releases and Threatened Release."

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

3.2.84 *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*.

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

3.2.86 *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.

3.2.87 *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.

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

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

3.2.90 *standard physical setting source*—a current *USGS 7.5 Minute Topographic Map* (if any) showing the area on which the *property* is located. See 8.2.4.

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

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

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

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

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

3.2.96 *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.

3.2.97 *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.

3.2.98 *user*—the party seeking to use Practice E1527 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 outlined in Section 6.

3.2.99 *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*.

3.2.100 *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

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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.

3.2.101 *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.

3.2.102 *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*, 3.2.30).

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 inquiries* 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 inquiries* 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*

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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 inquiries*.

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 inquiries* does not mean an exhaustive assessment of a *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 and 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 inquiries* 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[5] of the *property* or (for transactions not involving an acquisition) the date of the intended transaction is presumed to be valid.[6] If within this period the assessment will be used by a *user* different 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 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:

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

[6] 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 Inquiries* or this practice can be used if the information was generated as a result of procedures that meet or exceed the requirements of the E1527-97 or -00 standards.

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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, 8.2.3, 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 E2091 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*).

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 at the land title office, that is, County Recorder/Registry of Deeds. Notice of an AUL is given to the public by recording the AUL instrumental at the appropriate land title agency. Preliminary Title Reports, Title Commitments, Condition of Title, or Title Abstracts are the types of title reports that will commonly disclose AULs. However, these reports will only disclose AULs filed in the land title office. AUL information is not typically contained in a chain of title report. In some cases, an AUL may not have been filed at the land title office but may be found in a separate environmental agency database. While some states maintain reasonably ascertainable *IC/EC registries*, other states do not. The *environmental professional* should 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*. The "All Appropriate Inquiries" Final Rule (40 CFR Part 312) requires that these tasks be performed by or on behalf of a party seeking to qualify for an LLP to CERCLA liability. These tasks must also be completed by or on behalf of EPA Brownfield Assessment and Characterization grantees. While such information is not required to be provided to the *environmental professional*, the *environmental professional* shall request that the user provide the results of these tasks as such information can assist the *environmental professional* in identifying *recognized environmental conditions*. 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*. If the *user* does not communicate the information to the *environmental professional* in connection with 6.1 through 6.6, the *environmental professional* should consider the significance of the absence of such information pursuant to 12.7.

NOTE 5—Nothing in this section relieves the environmental professional of satisfying the environmental professional responsibilities set forth in the All Appropriate Inquiries Final Rule (40 CFR Part 312).

6.2 *Review Title and Judicial Records for Environmental Liens and Activity and Use Limitations (AULs)*—To meet the requirements of 40 CFR 312.20 and 312.25, a search for the existence of *environmental liens* and AULs that are filed or

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recorded against the *property* must be conducted. *Environmental liens* and AULs are legally distinct instruments and have very different purposes and both can commonly be found within *recorded land title records* (e.g., County Recorder/Registry of Deeds). The types of title reports that may disclose *environmental liens* and AULs include Preliminary Title Reports, Title Commitments, Condition of Title, and Title Abstracts. Chain of title reports will not normally disclose *environmental liens* or AULs. *Environmental liens* and AULs that are imposed by judicial authorities may be recorded or filed in judicial records only. In jurisdictions where *environmental liens* or AULs are only recorded or filed in judicial records, the judicial records must be searched for *environmental liens* and AULs. Any *environmental liens* and AULs known to the user should 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* and AULs. The *user* should either (*1*) engage a title company, real estate attorney, or title professional to undertake a review of *reasonably ascertainable recorded land title records* and lien records for *environmental liens* and AULs currently recorded against or relating to the *property*, or (*2*) negotiate such an engagement of a title company, real estate attorney, or title professional as an addition to the scope of work of the *environmental professional*. The search for *environmental liens* and AULs in this section is in addition to the *environmental professional's* search of *institutional control* and *engineering control* registries in 8.2.

6.2.1 *Reasonably Ascertainable Title and Judicial Records for Environmental Liens and Activity and Use Limitations*—For this Section 6 (but not 8.2), *environmental liens* and AULs that are recorded or filed in any place other than *recorded land title records* are not considered to be *reasonably ascertainable* unless applicable federal, tribal, state, or local statutes, or regulations specify a place other than *recorded land title records* for recording or filing of *environmental liens* and AULs.

6.3 *Specialized Knowledge or Experience of the User*—*Users* must take into account their specialized knowledge to identify conditions indicative of *releases* or threatened *releases*. If the *user* has any specialized knowledge or experience that is material to *recognized environmental conditions* in connection with the *property*, the *user* should 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*, the *user* should 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* was 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 practice does not require that a real estate appraisal be obtained in order to ascertain fair market value of the *property*. The *user* should inform the *environmental professional* if the *user* believes that the purchase price of the *property* is lower than the fair market value due to contamination. The *user* is not required to disclose the purchase price to the *environmental professional*.

6.6 *Commonly Known or Reasonably Ascertainable Information*—Commonly known or reasonably ascertainable information within the local community about the *property* must be taken into account by the *user*. 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*, the *user* should communicate such information to the *environmental professional*. The *user* should do so before the *environmental professional* conducts the *site reconnaissance*. The *user* must gather such information to the extent necessary to identify conditions indicative of *releases* or threatened *releases* of *hazardous substances* or *petroleum products*.

6.7 *Degree of Obviousness*—The *user* must consider the degree of obviousness of the presence or likely presence of *releases* or threatened *releases* at the *property* and the ability to detect *releases* or threatened *releases* by appropriate investigation including the information collected under 6.2, 6.3, 6.5, 6.6, 8.2, 8.3, Section 9, and Section 10.

6.8 *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*.

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:*

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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*. The *environmental professional* shall, based on professional judgment, evaluate the relevant lines of evidence obtained as a part of the Phase I process to identify *recognized environmental conditions* in connection with the *property*.

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 an impact to the *property* 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

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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*.

8.1.5 *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.

8.1.6 *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*.

8.1.7 *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.

8.1.8 *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.

8.1.9 *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 8.1.8). 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.

8.1.10 *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 current or former *releases* of *hazardous substances* and/or *petroleum products* with the potential to *migrate* to the *property* except ...).

8.2 *Environmental Information:*

8.2.1 *Standard Federal, State, and Tribal Environmental Record Sources*—The following *standard environmental record sources* shall be reviewed, subject to the conditions of 8.1.1 through 8.1.8. 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 *Regulatory Agency File and Records Review:*

8.2.2.1 If the *property* or any of the *adjoining properties* is identified on one or more of the standard environmental record sources in 8.2.1, pertinent regulatory files and/or records associated with the listing should be reviewed in accordance with 8.1.1 through 8.1.8. The purpose of the regulatory file review is to obtain sufficient information to assist the *environmental professional* in determining if a *recognized environmental condition*, *historical recognized environmental condition*, *controlled recognized environmental condition*, or a *de minimis condition* exists at the *property* in connection with the listing. If, in the *environmental professional's* opinion, such a review is not warranted, the *environmental professional* must explain within the report the justification for not conducting the regulatory file review.

8.2.2.2 As an alternative, the *environmental professional* may review files/records from an alternative source(s) (for example, on-site records, user provided records, records from local government agencies, interviews with regulatory officials or other individuals knowledgeable about the environmental conditions that resulted in the standard environmental record source listing, etc.). A summary of the information obtained from the file/record review shall be included in the report and

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the *environmental professional* must include in the report his/her opinion on the sufficiency of the information obtained from the files/records review to evaluate the existence of a *recognized environmental condition*, *historical recognized environmental condition*, *controlled recognized environmental condition*, or a *de minimis condition*.

8.2.3 *Additional Federal, State, Tribal, and Local Environmental Record Sources*—To enhance and supplement the *standard environmental record sources* in 8.2.1, local records and/or additional federal, 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 and 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). Examples of 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)

8.2.4 *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. 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 groundwater 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 and 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*. The *environmental professional* shall exercise professional judgment and consider the possible *releases* that might have occurred at a property in light of the historical uses and, in concert with other relevant information gathered as part of the Phase I process, use this information to assist in identifying *recognized environmental conditions*.

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).

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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* shall 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 and 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.

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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* shall 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 shall 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, shall 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, etc.) to observe the *property*.

9.2.4 *Limiting Conditions*—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 other physical constraints (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 shall 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*

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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 8.2.4) and *interviews* to evaluate whether *hazardous substances* or *petroleum products* are likely to migrate to the *property*, or within or from the *property*, into groundwater 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* (for example, due to damage that represents a *material threat* or abandonment (see the definition of *release* in

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X1.1.1)); 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 ballasts likely to contain PCBs do not need to be noted.

9.4.3 *Interior Observations*—Interior observations shall be made with the intent to identify *releases* or *material threat* of future *releases* of *hazardous substances* or *petroleum products* to the *environment*:

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 *Wastewater*—To the extent *visually and/or physically observed* or identified from the *interviews* or *records review*, wastewater 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 shall 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 *Interviews:*

10.5.1 *Key Site Manager*—Prior to the *site visit*, the *owner* shall 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*.

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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 Environmental site assessment *reports*,

10.8.1.2 Environmental 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; facility response 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,

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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, by telephone, or in writing, 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 Assessmentreport* 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). Relevant 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*, *controlled recognized environmental conditions*, *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

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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 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* (including *controlled recognized environmental conditions*) connected with the *property*. The *report* shall include a statement substantially similar to 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 E1527 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 E1527 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 or other assessment activities, 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 *Limiting Conditions/Deviations*—All limiting conditions, deletions, and deviations from this practice (if any) shall be listed individually and in detail, including client-imposed constraints, and all additions shall 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*.

12.15 *Recommendations*—Recommendations are not required by this standard. A *user* should consider whether recommendations for additional inquiries or other services are desired. Recommendations are an additional service that may be useful in the *user*'s analysis of LLPs or *business environmental risk*.

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

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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*. Some common non-scope considerations are discussed further in Appendix X1 and Appendix X5. 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 Biological agents,

13.1.5.3 Cultural and historic resources,

13.1.5.4 Ecological resources,

13.1.5.5 Endangered species,

13.1.5.6 Health and safety,

13.1.5.7 Indoor air quality unrelated to *releases* of *hazardous substances* or *petroleum products* into the *environment*,

13.1.5.8 Industrial hygiene,

13.1.5.9 Lead-Based Paint,

13.1.5.10 Lead in Drinking Water,

13.1.5.11 Mold,

13.1.5.12 Radon,

13.1.5.13 Regulatory compliance, and

13.1.5.14 Wetlands.

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APPENDIXES

(Nonmandatory Information)

X1. LEGAL BACKGROUND ON CERCLA AND THE APPLICATION OF "ALL APPROPRIATE INQUIRIES" TO THE PRACTICE ON ENVIRONMENTAL ASSESSMENTS IN COMMERCIAL REAL ESTATE TRANSACTIONS

INTRODUCTION

(Note that EPA was not a party to the development of the appendix and the information and conclusions provided in the appendix do not in any way reflect the opinions, guidance, or approval of EPA. This appendix was completed on January 31, 2013. Users of this appendix are cautioned that statutes, regulations, guidance, case law, and/or other authorities analyzed and/or referenced in the appendix may have changed since that date. Thus, before relying on any of the analyses, conclusions and/or guidance provided by this appendix, users should ensure that those analyses, conclusions and/or guidance are current and correct at the time use is made of this appendix. In addition, this appendix is provided for background information purposes only and does not alter, amend, or change the meaning of E1527. If any inconsistency between this appendix and E1527 arises, E1527 applies, not this appendix or any interpretation based on this appendix.)

The specter of strict, joint and several liability under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq. (CERCLA) and analogous state laws, has been a primary driver for Environmental Assessments in Commercial Real Estate Transactions. While the E1527 practice can be used in many contexts, a familiarity with CERCLA, and especially its potential landowner liability protections (LLPs), is crucial to understanding and applying Practice E1527.

CERCLA authorizes the federal government to respond to releases of hazardous substances,[7] to seek reimbursement from potentially responsible parties ("PRPs")[8] or to order PRPs to abate releases or threatened releases of hazardous substances that may present an "imminent and substantial endangerment" to the public health or welfare or the environment.[9] In addition, CERCLA requires anyone who is in charge of a facility or vessel to immediately report releases of hazardous substances that they become aware of which exceed the reportable quantity threshold established by EPA.[10] In addition, PRPs and other persons may seek cost recovery or contribution for response costs from other PRPs, provided they comply with certain requirements.[11]

EPA promulgated an "all appropriate inquiries" ("AAI") rule[12] that became effective in November 2006. EPA has indicated that this Practice E1527 is consistent with the requirements of AAI and may be used to comply with the provisions of the AAI rule.[13] This Legal Appendix provides background on CERCLA liability, the scope of the potential liability protections that may be available to owners and operators of commercial real estate and the AAI rule. It should be noted that with the adoption of AAI, the Environmental Transaction Screen Practice (E1528) no longer meets the requirement for establishing the CERCLA LLPs. However, Practice E1528 may still be a useful transactional environmental screening tool.

This Legal Appendix is intended for informational purposes only and is not intended to be nor interpreted as legal advice.

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[7] Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9604(a)(1).

[8] 42 U.S.C. § 9607(a)(4)(A).

[9] 42 U.S.C. § 9606.

[10] 42 U.S.C. § 9603.

[11] 42 U.S.C. § 9607(a)(4)(B)(authorizing innocent parties and PRPs to obtain cost recovery from other liable parties); 42 U.S.C. § 9613(f) (specifying the circumstances under which PRPs may seek contribution). *See also United States v. Atlantic Research Corp.*, 551 U.S. 128, 134-41 (2007); *Cooper Indus. Inc. v. Aviall Services., Inc.*, 543 U.S. 157, 165-68 (2004).

[12] 70 Fed. Reg. 66081 (Nov. 1, 2005). Codified at 40 C.F.R. § 312.

[13] 70 Fed. Reg. 66081 (Nov. 1, 2005).

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X1.1 *Elements of CERCLA Liability*—A plaintiff (federal government, state or local government, or private party) must establish the following elements before a defendant may be found liable under CERCLA for response costs:[14]

X1.1.1 *Release or Threatened Release*—The first element for establishing CERCLA liability is that there must be a release or threatened release of hazardous substances from a facility or a vessel. A release or threatened release of a hazardous substance includes 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)*."[15]

X1.1.1.1 Courts have generally broadly interpreted the term "release." There is no minimum quantity requirement in order to qualify as a CERCLA release.[16] Likewise, courts have liberally construed the meaning of "threatened release" so that corroding or deteriorating drums have been interpreted to be a threatened release.[17] The release must also be "into the environment."[18]

X1.1.1.2 *Exclusions From Definition of "Release":*

(1) Section 101(22) contains a number of exclusions from the definition of release. For example, section 101(22)(A) excludes any release that results in exposures solely within the workplace for claims that may be asserted against an employer.[19] In a 1983 notice of proposed rulemaking to adjust the reportable quantities for the CERCLA release notification requirements, EPA discussed this so-called "workplace exclusion." EPA said the provision was a relic of an earlier House bill that had contemplated that CERCLA would provide a remedy for personal injury. The bill would have provided compensation to persons injured in the workplace from releases of *hazardous substances* unless they could file a workers compensation claim to avoid duplicate claims.[20] Citing to the legislative history, EPA said the "workplace exposure" exclusion was apparently intended to limit the potential scope of third-party actions for personal injuries under the Act.[21] EPA then went on to say that when the personal injury remedy for exposure to releases of *hazardous substances* was deleted Congress apparently failed to remove the workplace exclusion.[22] When EPA finalized the rule in 1985, the agency said that the workplace exclusion only applied to "claims compensable through workers compensation."[23] EPA then went on to say that the legislative history clearly indicates that Congress did not intend to exclude all workplace releases of *hazardous substances* from CERCLA reporting requirements and response authorities.[24] As a result, EPA said that if a release of a *hazardous substance* does not remain wholly contained within a building or structure, then it is a release "into the environment" for CERCLA purposes, whether or not it occurs within a workplace.[25]

(2) In 1993, EPA issued guidance on the use of authority under section 104(a) of CERCLA to conduct response actions to address releases of hazardous substances, pollutants, or contaminants that are found within buildings. EPA clarified that the phrase "*release into the environment*" refers to the location of the release itself and does not address the location of the hazard that the release poses. The guidance document then provided examples where EPA could exercise its authority. These included:

...[c]ontamination that is the direct result of a release into the environment from a non-natural source that migrates into a building or structure. For example, contamination in a

[14] *See United States v. Aceto Agriculture Chemical Corp*., 872 F. 2d 1373 (8th Cir. 1989). Private plaintiffs, as well as the government, may seek response costs under CERCLA from defendants. While many users of these ASTM practices or other private parties may think in terms of how to defend against CERCLA liability, they should be aware of the alternative option of conducting a cleanup and then seeking response costs from other responsible parties.

[15] 42 U.S.C.§ 9601(22). The complete definition of a *release* is "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), but excludes (*A*) any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons, (*B*) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine, (*C*) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954 [42 USCS §§ 2011 et seq.], if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of such Act [42 USCS § 2210], or, for the purposes of section 104 of this title [42 USCS § 9604] or any other response action, any release of source byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978 [42 USCS § 7912(a) or 7942(a)], and (*D*) the normal application of fertilizer.

[16] *Amcast Industry Corp. v. Detrex Corp*., 779 F. Supp. 1519 (N.D. Ind. 1991). Note that 40 C.F.R. § 312.20(h) provides that the environmental professional need not specifically identify extremely small quantities or amounts of contaminants, so long as the contaminants generally would not pose a threat to human health or the environment.

[17] *New York v. Shore Realty Corp*., 759 F.2d 1032 (2d Cir. 1985).

[18] The term "environment" means (*A*) the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson-Stevens Fishery Conservation and Management Act [16 U.S.C. §§ 1801 et seq.], and (*B*) any other surface water, groundwater, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States. 42 U.S.C. § 9601(8). EPA has interpreted "into the environment" to apply to releases that remain on plant or installation grounds such as spills from tanks or valves onto concrete pads or into lined ditches open to the outside air, releases from pipes into open lagoons or ponds, or any other discharges that are not wholly contained within buildings or structures. 50 Fed. Reg. 13456 (April 4, 1985).

[19] 42 U.S.C. § 9601(22)(A). *See also United States v Saporito*, 2011 U.S. Dist. LEXIS 66456 (N.D.Ill. June 22, 2011).

[20] *Notice of Proposed Rulemaking: Notification Requirements; Reportable Quantity Adjustments*, 48 Fed. Reg. 23552, 23555 (May 25, 1983) (NPRM).

[21] *Id.* at 23555. EPA said in the preamble to the NRPM that "The legislative history of the Act indicates that the "workplace exposure" exclusion was apparently intended to limit the potential scope of third-party actions for personal injuries under the Act and cited to S. Rep. No. 96-848, 96th Cong., 2d. Sess. 94 (1980).

[22] 48 Fed. Reg. 23555 (May 25, 1983).

[23] 50 Fed. Reg. 13456, 13462 (April 4, 1985).

[24] *Id.* EPA included the following quote from the legislative history to support this statement "For example, if a release occurring solely within a workplace created a hazard of damage to human life or to the environment, it is contemplated that the Fund would have the authority to respond with all of its authorities except for compensating workers whose employers are liable for their injuries under worker's compensation law." *Id*., (citing to S. Rep. No. 96-848, 96th Cong., 2d Sess. 94 (1980)).

[25] 48 Fed. Reg. at 13463. *See also Cyker v. Four Seasons Hotels Ltd*., 1991 U.S. Dist. LEXIS 1310 (D. Mass. Jan. 3, 1991) (no release into the environment when chemicals from an indoor pool migrated into adjoining apartment building). *See also "Response Actions at Sites With Contamination Inside Buildings"*, Memorandum from Henry L. Longest, II, OSWER Directive 9360.3-12 (Aug. 12, 1993).

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yard may be tracked into a building on the feet of the residents or workers, or may migrate into the building through an open window or basement walls. In this situation, a release into the environment is occurring and has caused a building to become contaminated with the hazardous substance, pollutant, or contaminant.

(3) Another example EPA provided was when radium wastes that have been disposed in subsoil that may cause indoor hazards from migration and accumulation of radon gas in nearby homes can result in CERCLA liability.[26]

(4) Thus, the presence within a building of hazardous substances such as vapors that have migrated into a building from a "*release into the environment*" (i.e., from a release outside of the building) can result in CERCLA liability.[27]

(5) Another exclusion to the definition of release that may be relevant to commercial real estate transaction is the exclusion for the normal application of fertilizer contained section 101(22)(D). While CERCLA does not define the phrase "normal application of fertilizer," the legislative history stated that phrase was meant to apply to the act of putting fertilizer on crops or cropland, and did not mean any dumping, spilling, or emitting, whether accidental or intentional, in any other place or of significantly greater concentrations or amounts than are beneficial to crops.[28] The exception may not apply to spillage or improper storage of fertilizer.[29]

X1.1.1.3 Section 40 CFR 312.1(c) provides that the objective of the investigation is to identify conditions indicative of *releases* or threatened *releases*. While the rule refers to CERCLA section 101(22) that includes the exclusions to the definition of *release*, the rule does not specifically discuss if those excluded releases have to be identified to comply with the AAI rule.

X1.1.2 *Hazardous Substance*—The second element that must be satisfied is that there must be a release of a "*hazardous substance*." Section 101(14)[30] provides that the term "*hazardous substance*" includes *hazardous substances* designated under section 311 of the Clean Water Act (CWA)[31] or section 102 of CERCLA[32] any toxic pollutant listed under section 307(a) of the CWA,[33] any waste that has been listed as a RCRA hazardous waste or possesses a RCRA hazardous waste characteristic,[34] any substance that is identified as a hazardous pollutant under section 112 of the Clean Air Act (CAA),[35] any imminently hazardous chemical that EPA has taken action pursuant to section 7 of the Toxic Substances Control Act (TSCA).[36]

X1.1.2.1 *Petroleum Exclusion:*

(1) The definition of a CERCLA *hazardous substance* specifically excludes *petroleum products* and crude oil.[37] EPA has determined that the "petroleum exclusion" applies to petroleum products such as gasoline and other fuels containing lead, benzene or other *hazardous substances* that are normally added during the refining process.[38]

(2) If waste oil becomes contaminated during use from new *hazardous substances* that are added to oil during use or because the level of the *hazardous substances* that are normally found in the oil is increased beyond the concentrations normally found in petroleum, the EPA has said the petroleum exclusion should not apply.[39] Courts have generally upheld EPA's view that the "petroleum exclusion" does not apply to petroleum that has been contaminated through use. Thus, waste oil has been held to fall outside the "petroleum exclusion."[40] Courts have been less certain on whether sludges found at the bottom of a petroleum storage tank that become contaminated with rust from the steel tank fall within the petroleum exclusion.[41] Likewise, the petroleum exclusion was held not applicable where petroleum had commingled with *hazardous substances* in the subsurface beneath a refinery.[42]

X1.1.2.2 Notwithstanding the existence of the petroleum exclusion, *petroleum products* are included within the scope of this practice and the Legal Appendix for several reasons. First, *petroleum products* have historically been widely used at commercial properties. Second, other federal and state laws may impose liability for releases or spills of *petroleum products*. For example, *petroleum products* may become *hazardous wastes* such as when petroleum has spilled and cannot be reclaimed from soil. In addition, petroleum products released from *underground storage tanks* may be subject to corrective action under RCRA Subtitle I[43] or comparable state laws. Spills to surface waters could also result in cleanup liability

[26] *Id.*

[27] *See "Response Actions at Sites With Contamination Inside Buildings"*, Memorandum from Henry L. Longest, II, OSWER Directive 9360.3-12 (Aug. 12, 1993).

[28] S. Rep. No. 96-848, at 46 (1980).

[29] *City of Waco v. Schouten*, 385 F. Supp. 2d 595 (W.D. Tex. 2005)(use and storage of phosphorus in cow manure was beyond normal application of fertilizer).

[30] 42 U.S.C. § 9601(14)(A)-(F).

[31] 33 U.S.C. § 1321(b)(2)(A).

[32] 42 U.S.C. § 9602. EPA has promulgated a list of CERCLA Hazardous Substances at 40 C.F.R. § 302.

[33] 33 U.S.C. § 1317(a).

[34] EPA has identified over 400 substances as listed hazardous wastes (see 40 C.F.R. § 261.11). EPA has also identified four hazardous waste characteristics for determining if a non-listed solid waste should be regulated as a hazardous waste (*See* 40 C.F.R. § 260.21-.24).

[35] 42 U.S.C. § 7412.

[36] 15 U.S.C. § 2606(f).

[37] 42 U.S.C. § 9601(14) provides that the term hazardous substances "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)."

[38] 50 Fed. Reg. 13 460 (April 4, 1985); "*Scope of the CERCLA Petroleum Exclusion*," Memorandum from Francis Blake, General Counsel, Environmental Protection Agency, to J. Winston Porter, Assistant Administrator for Solid Waste and Emergency Response (July 31, 1987); *Wilshire Westwood Associates v. Atlantic Richfield Corp*., 881 F.2d 801 (9th Cir. 1989).

[39] 50 Fed. Reg. 13460 (April 4, 1985); "*Scope of the CERCLA Petroleum Exclusion*," Memorandum from Francis Blake, General Counsel, Environmental Protection Agency, to J. Winston Porter, Assistant Administrator for Solid Waste and Emergency Response (July 31, 1987).

[40] *United States v. Alcan Aluminum*, 964 F.2d 252 (3d. Cir. 1992); *United States v. Alcan Aluminum Corp*., 755 F. Supp. 531 (N.D.N.Y. 1991); *City of New York v. Exxon Corp*., 766 F. Supp. 177 (S.D.N.Y. 1991).

[41] *Compare United States v. Western Processing Co*., 761 F. Supp. 713 (W.D. Wa. 1991) *with Cose v. Getty Oil Co*., 4 F.3d 700 (9th Cir. 1993) (reversing and remanding summary judgment in favor of appellee oil company).

[42] *Tosco Corp. v. Koch Industries, Inc*. 216 F.3d. 886 (10th Cir. 2000).

[43] 42 U.S.C. §§ 6991 et seq.

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pursuant to the Oil Pollution Act of 1990[44] and the CWA.[45] Finally, persons seeking to qualify for federal, state or local brownfield funding may be required to investigate potential petroleum releases as part of implementing this practice.

X1.1.3 *Facility*—The third element of CERCLA liability is that the release must occur on or from a facility.[46] The term "facility" is meant to encompass the area of contamination so that a facility may extend beyond property boundaries such as when a groundwater plume has migrated offsite. EPA has said it has broad discretion to treat non-contiguous sites as one CERCLA facility.[47]

X1.1.4 *Response Costs*—Another element necessary to establish CERCLA liability is that response costs must be incurred as a result of a release or threatened release of a hazardous substance. There are two different types of response actions for which costs may be recovered: Removal actions[48] (typically short-term or temporary actions) and remedial actions[49] (typically long-term or permanent cleanups).

X1.1.4.1 To recover response costs, a plaintiff must demonstrate that its response costs were incurred consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).[50] However, the burden of establishing NCP consistency differs depending if the plaintiff is the federal government or a private party. A private party or local government seeking to recover response costs has the burden of proving its response costs were consistent with the NCP.[51] 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.[52] Some cases have held that cleanup costs incurred pursuant to a consent decree will be presumed to be in compliance with the NCP.[53]

X1.1.4.2 The federal government may recover response costs that are "not inconsistent" with the NCP.[54] Courts have interpreted the "not inconsistent" language to mean that the government has a rebuttable presumption that its response costs are consistent with the NCP. Thus, defendants have to introduce evidence to overcome this presumption of NCP consistency.[55] Some courts have held that the defendants must not simply prove variance from the NCP but that there were demonstrable excess costs.[56] Other courts have rejected defendant claims that a remedy was inconsistent with the NCP because it was not cost effective on the grounds that this factor is only relevant in choosing a remedy and not a criterion for challenging the implementation of the remedy.[57] While state agencies also enjoy the presumption of consistency, municipalities are not entitled to the presumption because they are not considered part of state government.[58] Another limitation on cost recovery by private plaintiffs is that they may recover only "necessary" response costs.[59]

X1.1.4.3 *No Cost Recovery for Certain Types of Releases*—Sections 104(a)(3) and 107 identify certain categories of *releases* for which cost recovery is prohibited. While the cost prohibition of sections 107(i) and (j) broadly apply to all persons including the federal government, states and Tribes, the limitation of section 104(a)(3) is expressly directed at the federal government.[60] However, courts have generally interpreted this provision not only to limit the federal government's ability to recover response costs for such releases under section 107 but also to apply to private cost recovery or contribution actions.[61] The section 104(a)(3) limitations on response actions by the federal government do not apply to any *release* or threatened *release* that EPA determines constitutes a public health or environmental emergency and no other person with

[44] 33 U.S.C. §§ 1321 et seq. Indeed, an "all appropriate inquiries" requirement was added to OPA in 2004 as part of a new OPA innocent landowner defense and the United States Coast Guard issued an OPA AAI rule in 2008 that is substantially similar to the CERCLA AAI rule. See 73 Fed. Reg. 2146 (Jan. 14, 2008).

[45] 33 U.S.C. §§ 1321 et seq.

[46] 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."

[47] 55 Fed. Reg. 8689–91 (Mar. 8, 1990).

[48] 42 U.S.C. § 9601(23).

[49] 42 U.S.C. § 9601(24).

[50] 42 U.S.C § 9607(a)(4)(B). 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.

[51] *Amland Properties Corp. v. Aluminum Co. of America*, 711 F. Supp. 784, 794 (D.N.J. 1989); *Artesian Water Co. v. New Castle Cty*., 659 F. Supp. 1269, 1291 (D. Del. 1987); *United States v. Northeastern Pharmaceutical & 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).

[52] The NCP requirements for a private party response-action are set forth at 40 C.F.R. § 300.700.

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

[54] 42 U.S.C. § 9607(a)(4)(A). *See Dedham Water Co. v. Cumberland Farms Dairy, Inc*., 889 F.2d 1146 (1st Cir. 1989).

[55] *United States v. Gurley Refining Co*., 788 F. Supp. 1473 (E.D. Ak. 1992); *United States v. American Cyanamid*, 786 F. Supp. 152 (D.R.I. 1992); *Ambrogi v. Gould*, 750 F. Supp. 1233 (M.D. Pa. 1990); *Northeastern Pharmaceutical & Chemical Co*., 579 F. Supp. 823 (W.D. Mo. 1984).

[56] *United States v. American Cyanamid*, 786 F. Supp. 152 (D.R.I. 1992).

[57] *Id.*

[58] *Town of Bedford v. Raytheon Co*., 755 F. Supp. 469 (D. Mass. 1991); *Philadelphia v. Stephan Chemical Co*., 713 F. Supp. 1484 (E.D. Pa. 1989).

[59] 42 U.S.C. § 9607(a)(4)(B).

[60] 42 U.S.C. § 9604(a)(3).

[61] *3550 Stevens Creek Assocs. v. Barclays Bank*, 915 F.2d 1355 (9th Cir. 1990)(affirming district court ruling that it was unlikely that Congress would have intended to preclude the President from taking a specific action, while allowing private parties to respond by that precise action); *First United Methodist Church v. United States Gypsum Co*., 882 F.2d 862 (4th Cir. 1989)(§ 9604(a)(3)(B) represents much more than a procedural limitation on the President's authority; instead, it is a substantive limitation of the breadth of CERCLA itself); *Retirement Community Developers, Inc. v. Merine*, 713 F. Supp. 153 (D. Minn.1989)(legislative history supports view that § 9604(a)(3) was intended to be a limit on the substantive scope of CERCLA and not solely a limit on the President's authority under the statute). *But see Prudential Ins. Co. of America, v. United States Gypsum*, 711 F. Supp. 1244 (D.N.J. 1989) (holding that the plaintiffs did not state a CERCLA claim because the sale of asbestos building materials was not a "disposal" of a hazardous substance as defined by CERCLA but suggesting, *in dicta*, that it believed that the limits of § 9604(a)(3) did not apply to private asbestos removal actions).

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the authority and capability to respond to the emergency will do so in a timely manner.[62]

(1) Naturally-Occurring Substances Exclusion—This exclusion applies to *releases* from a substance that is in an unaltered form or altered by natural processes and where the *releases* occur from a location where the substance is naturally found.[63] Thus, the migration of radon gas into a building would not normally be considered a CERCLA *release*.[64] However, when the source material for the radon gas is radioactive waste material that has been disposed or spilled, the presence of radon gas in a structure or property can be a *release* of a *hazardous substance* for which cost recovery could be available.[65]

(2) Building Materials Exclusion—This exclusion applies to releases from products that are part of a building that result in exposure within that structure.[66] This exclusion has been invoked frequently to challenge claims for abatement of asbestos-containing building materials (ACM)[67] but can also apply to lead-based paint (LBP).[68] To fall within this exclusion, the release must be from a product that is part of the structure AND result in exposure within the structure.[69]

(a) For example, some building owners who have incurred ACM abatement costs have tried to circumvent the structural materials issue by arguing that the seller arranged for the disposal of hazardous substances by selling a building with ACM. For example, in *Sycamore Industrial Park Associates v. Ericsson, Inc*.[70] the plaintiff purchased an industrial park with an old heating system that was incorporated into the building. Plaintiff sued defendant under CERCLA, RCRA and common law, and requested an injunction ordering the defendant to remove the ACM or pay plaintiff for its abatement costs. In its CERCLA claim, plaintiff tried to distinguish the long line of CERCLA caselaw holding that sellers of buildings with ACM in the building structures could not be liable for arranging for disposal of a hazardous substance. Plaintiff argued that since the ACM in the building was associated with an abandoned and obsolete heating system, it was no longer a useful product. Ruling for the defendant on its motion to dismiss, the court said that since installing ACM in a building was not disposal under CERCLA, then simply leaving the same material where it was originally installed could not qualify as disposal. Moreover, the court noted that the plaintiff did not allege that asbestos fibers were being released into the environment. If the defendant had dismantled the equipment with ACM or detached and abandoned the ACM, the court said it would not hesitate to impose liability on the seller. Since no such facts were alleged in the complaint, the court granted the defendant's motion to dismiss.

(b) In *California v. Blech*,[71] a fire caused asbestos dust to be released in office space leased by the California Department of General Services (DGS). When the building owner/defendant declined to abate the dust, DGS performed a cleanup and sought cost recovery. DGS argued that the fire-damaged ACM was no longer part of the building structure and had become asbestos waste. However, the court ruled that because the source of the asbestos dust was ACM that had been part of the building structure, the asbestos abatement costs were not recoverable under CERCLA.

(c) In *CP Holdings, Inc. v. Goldberg-Zoino & Associates, Inc*.[72] the purchaser of a building with ACM was allowed to recover its ACM disposal costs under CERCLA after the purchaser demolished the building because the asbestos release was not confined to the interior of the building. Courts have allowed plaintiffs to recover response costs for soil contaminated with asbestos that was released from buried asbestos-contaminated materials.[73]

(d) While the building materials exclusion of CERCLA § 104(a)(3) has been applied to LBP, EPA has used its CERCLA authority to conduct response actions for soils contaminated by a release of lead-contaminated paint chips from the exterior of homes that pose a lead hazard and to prevent recontamination of soils that have been remediated.[74]

(3) Exclusion for release into public or private drinking water supplies due to deterioration of the system through ordinary use[75]—Lead in drinking water (LIW) can be evaluated in terms of this exclusion. The statutory language seems clear that LIW would not fall within the CERCLA's AAI responsibilities. Indeed, there is no reported case law involving LIW and CERCLA.

(4) Application of Pesticides—Section 107(i)[76] provides that no person (including the United States and state governments) may recover response costs resulting from the application of pesticides registered pursuant to Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The purpose of CERCLA's pesticide exemption is "to prevent the typical pesticide user from incurring CERCLA liability when he has done nothing more than to have purchased and applied a

[62] 42 U.S.C. § 9604(a)(4). *See also "CERCLA Removal Actions at Methane Release Sites"*; Memorandum from Henry L. Longest, II to Basil G. Constantelos, OSWER Directive 9360.0-8 (Jan. 23, 1986).

[63] 42 U.S.C. § 9604(a)(3)(A).

[64] EPA has designated radionuclides as a CERCLA hazardous substance. Radon and its daughter products are considered radionuclides, and qualify as CERCLA hazardous substances. See 40 C.F.R. § 302.4.

[65] *Amoco Oil Co. v. Borden, Inc*., 889 F.2d 664 (5th Cir. 1990).

[66] 42 U.S.C.§ 9604(a)(3)(B).

[67] *3550 Stevens Creek Assoc. v. Barclays Bank*, 915 F.2d 1355 (9th Cir. 1990), *cert. denied*, 500 U.S. 917 (1991); *Dayton Independent School Dist. v. United States Mineral Products*, 906 F.2d 1059 (5th Cir. 1990); First United Methodist Church v. United States Gypsum Co., 882 F.2d 862 (4th Cir. 1989); *Black v. Carey Canada, Inc*., 791 F. Supp. 1120 (S.D. Miss. 1990); *Retirement Community Developers v. Merine*, 713 F. Supp. 153 (D. Md. 1989).

[68] *California v. Blech*, 976 F.2d 525, 527 (9th Cir. 1992); *First United Methodist Church v. United States Gypsum Co*., 882 F.2d 862, 868 (4th Cir. 1989); *ABD Assocs. v. American Tobacco Co*., 1995 U.S. Dist. LEXIS 11094 (M.D.N.C. June 26, 1995).

[69] *ABD Assocs. v. American Tobacco Co*., 1995 U.S. Dist. LEXIS 11094 (the legislative history of § 9604(a)(3) shows no intention by Congress to distinguish between asbestos and other products such as lead-based paint).

[70] 2007 U.S. Dist. LEXIS 23881 (N.D. Ill. Mar. 30, 2007).

[71] *California v. Blech*, 760 F. Supp. 832 (C.D. Cal. 1991), *aff'd* , 976 F.2d 525 (9th Cir. 1992).

[72] 769 F. Supp. 432 (D.N.H. 1991).

[73] *Hidden Lakes Development, LP v. Allina Health System and Park Construction Co*., 2004 U.S. Dist. LEXIS 19360 (D. Minn. Sept. 27, 2004); *Richmond American Homes of Colorado, Inc., v. United States*, 75 Fed. Cl. 376 (2007).

[74] *See generally "Superfund Lead-Contaminated Residential Sites Handbook"*, OSWER 9285.7-50 (August 2003); *See also* OSWER Directive *"Clarification to the 1994 Revised Interim Soil Lead (Pb) Guidance for CERCLA Sites and RCRA Corrective Action Facilities"*, OSWER Directive 9200.4-27P (August 1998).

[75] 42 U.S.C. § 9604 (a)(3)(C).

[76] 42 U.S.C. § 9607(i).

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pesticide in the customary manner."[77] FIFRA registration is not a complete defense to a CERCLA claim, though, and a defendant will have the burden of establishing its entitlement to the exemption.[78] To qualify for this cost recovery prohibition, the pesticide must have been applied in accordance with the labeling requirements established for that pesticide product at the place where the pesticide product was to be applied. Courts have held that the pesticide exemption should be construed narrowly and the exemption has been held not to apply to pesticide disposal, storage, spills, transport.[79] The misapplication of pesticides that causes contamination on adjacent properties has been held not to fall within the pesticide exemption.[80] The pesticide exemption also contains a "savings clause" that provides that the cost recovery prohibition does not alter or modify any obligations or liability under any other federal or state law for damages, injury or loss resulting from a release of hazardous substances, or for the costs of removal or remedial actions of such hazardous substances.

(5) Federally Permitted Releases—Likewise, section 107(j)[81] prohibits cost recovery by any persons (including the United States and state governments) for response costs or damages resulting from federally-permitted releases.[82] There is also a "savings clause" that provides that this section does not alter or modify any obligations or liability under any other federal or state law for damages, injury or loss resulting from a release of hazardous substances, or for the costs of removal or remedial actions of such hazardous substances.

X1.1.5 *Responsible Party*—The final element of CERCLA liability is that the plaintiff must establish that defendant falls within at least one of the four categories of potentially responsible parties (PRP) identified in section 107(a). The categories of PRPs include current owners and operators of a facility;[83] past owners or operators of a facility at the time of disposal;[84] any person who arranges for disposal, treatment or transport of *hazardous substances* ("*arrangers*" or "*generators*");[85] and any person who accepts or accepted any *hazardous substances* for transport to a disposal or treatment facility selected by such person ("transporter").[86] Because this practice is focused on commercial real estate transactions, the discussion in this Legal Appendix focuses on the owner and operator PRP categories.

X1.1.5.1 *CERCLA Owner:*[87]

(1) Courts have broadly construed the term and some courts have ruled that persons holding equitable title,[88] easement holders[89] and holders of mineral estates[90] could be liable as CERCLA owners. A purchaser of tax liens who has obtained tax deeds has been found to be a CERCLA owner[91] as well as an owner of equipment that is an important component of the production process at a facility.[92] Other courts have ruled that mere possessory interests without some incidents of ownership cannot support CERCLA owner liability.[93] Some courts appear to be reluctant to extend ownership liability to persons who simply serve as conduits and hold title for only a very short period of time to facilitate a multi-step transaction.[94]

(2) Current owners may be liable for any contamination existing on the site even if the current owner did not place the *hazardous substances* on the site or cause the release.[95] One federal appeals court held that current ownership is measured at the time of cleanup and not necessarily when a cost recovery lawsuit is filed.[96] Passive landlords or sublessors who do not participate in the management of the property have been held to be liable for cleanup costs.[97]

[77] *Jordan v. Southern Wood Piedmont Co*., 805 F. Supp. 1575, 1581-82 (S.D. Ga. 1992).

[78] *Cameron v. Navarre Farmers Union Coop. Ass'n*, 76 F. Supp. 2d 1178 (D. Kan. 1999); *Beers v.Williams Pipe Line Co*., 1994 U.S. Dist. LEXIS 12303 (D. Kan. Aug. 23, 1994).

[79] *See Redwing Carriers, Inc. v. Saraland Apartments*, 94 F.3d 1489, 1511 (11th Cir. 1996) (affirming the district court's finding that the defendant could not be held liable for the alleged disposal of FIFRA-registered pesticides because plaintiff failed to produce any evidence refuting the defendant's proof that the pesticides were properly applied.); *South Fla. Water Management Dist. v. Montalvo*, 84 F.3d 402 (11th Cir. 1996) (exemption inapplicable to "spills while loading planes and the drainage of contaminated rinse water following spraying runs."); *In re Sundance Corp*., 149 B.R. 641, 663 (Bankr. E.D. Wash. 1993) (allowing excess Dip to drain off the stakes was release and not application of pesticides); *Jordan v. Southern Wood Piedmont Co*., 805 F. Supp. 1575 (S.D. Ga. 1992) (exemption did not apply to wood treatment facility but defendant not liable on other grounds); *United States v. Hardage*, 1989 U.S. Dist. LEXIS 17877 (W.D. Okla. 1989) (rejecting a stock yard company's argument that exemption afforded a defense to liability for the disposal of FIFRA registered dipping vat pesticide waste).

[80] *United States v. Tropical Fruit*, S.E., 96 F. Supp. 2d 71 (D.P.R. 2000).

[81] 42 U.S.C. § 9607(j).

[82] Federally-Permitted Releases are defined in 42 U.S.C. § 9601(10). Some of the categories of releases that may be relevant to commercial real estate transactions include discharges in compliance with NPDES and pre-treatment permits issued under the Clean Water Act; releases in compliance with a legally enforceable final permit issued pursuant to RCRA where the permit specifically identifies the hazardous substances and establishes treatment practice for that discharge; emissions of air pollutants pursuant to permits issued under the CAA; injection of fluids authorized under the federal underground injection control programs or approved state programs pursuant to the Safe Drinking Water Act, and any release of source, special nuclear, or byproduct material in compliance with a legally enforceable license, permit, regulation, or order issued pursuant to the Atomic Energy Act of 1954.

[83] 42 U.S.C. § 9607(a)(1).

[84] 42 U.S.C. § 9607(a)(2).

[85] 42 U.S.C. § 9607(a)(3).

[86] 42 U.S.C. § 9607(a)(4).

[87] 42 U.S.C. § 9601(20).

[88] *K.C. 1986 Ltd. Pshp. v. Reade Mfg*., 33 F. Supp.2d 820 (W.D. Mo. 1998); *United States v. Wedzeb Enters., Inc*., 809 F. Supp. 646, 652 (S.D. Ind. 1992); United States v. Union Corp., 259 F. Supp.2d 356, 395 (E.D. Pa. 2003).

[89] *United States v. Union Gas Co*., 1992 U.S. Dist. LEXIS 14834 (E.D. Pa. Sept. 30, 1992). *But see Long Beach Unified Sch. Dist. v. Dorothy B. Godwin Cal. Living Trust*, 32 F.3d 1364, 1369 (9th Cir. 1994) and *Grand Trunk Western Railroad Co. v. Acme Belt Recoating, Inc*., 859 F. Supp. 1125 (W.D. Mich. 1994).

[90] *City of Grass Valley v. Newmont Mining Corp*., 2007 U.S. Dist. LEXIS 97340 (E.D. Cal. Dec. 3, 2007) (holding that ownership of the mineral estate was sufficient to impose liability as an owner under CERCLA).

[91] *United States v. Capital Tax Corp*., 2007 U.S. Dist. LEXIS 1184 (N.D. Ill. Jan. 4, 2007).

[92] *United States v. Saporito*, 684 F. Supp. 2d 1043 (N.D. Ill. 2010); *Elf Atochem North American, Inc. v. United States*, 868 F. Supp. 707, 709 (E.D. Pa. 1994).

[93] *City of L.A. v. San Pedro Boat Works*, 635 F.3d 440 (9th Cir. 2011); *Long Beach Unified Sch. Dist. v. Dorothy B. Godwin Cal. Living Trust*, 32 F.3d 1364, 1368 (9th Cir. 1994).

[94] *Ameripride Servs. v. Valley Indus. Serv*., 2007 U.S. Dist. LEXIS 18806 (E.D. Cal. Jul. 7, 2007); *Robertshaw Controls v. Watts Regulator*, 807 F. Supp. 144 (D. Me. 1992); In *re Diamond Reo Trucks, Inc. v. Lansing*, 115 B.R. 559 (Bankrcy. W.D. Mich. 1990).

[95] *Nurad, Inc. v. Hooper & Sons Co*., 966 F.2d 837 (4th Cir. 1992), *cert. denied*, 506 U.S. 940 (1992); *United States v. Monsanto*, 858 F.2d 160 (4th Cir. 1989).

[96] *Cal. Dep't of Toxic Substances Control v. Hearthside Residential Corp*., 613 F.3d 910 (9th Cir. 2010).

[97] *United States v. A & N Cleaners & Launderers, Inc*., 788 F. Supp. 1317 (S.D.N.Y. 1992).

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(3) In contrast to the scope of liability for a current owner, a person may only be liable as a "former owner" if the person held title "at the time of disposal." Some courts have held that even the mere migration of previously-deposited or released *hazardous substances* constitutes "disposal" so that a former owner that simply held title while contaminants migrated (passive disposal) could be liable as a CERCLA past owner.[98] However, the majority of jurisdictions now appear to require that a party must be engaged in active conduct to be liable as a former owner "*at the time of disposal*."[99] In many jurisdictions, development activities such as grading and soil relocation may be the kind of active conduct that can be considered "disposal" for purposes of CERCLA liability.[100]

X1.1.5.2 *CERCLA Operator Liability:*[101]

(1) A person may be liable as a CERCLA operator when they exercise control over a facility. To be considered a CERCLA operator, the United States Supreme Court held in *United States v. Bestfoods* that a person must "manage, direct, or conduct operations specifically related to pollution, that is, operations having to do with the leakage or disposal of hazardous waste, or decisions about compliance with environmental regulations."[102] Following *Bestfoods*, parent corporations and individual shareholders may be directly liable as CERCLA operators for subsidiary facilities only if they exercise actual control over the operations at the facility that caused the contamination.[103] A parent corporation may be held derivatively or indirectly liable for the environmental liabilities of its subsidiary only on a traditional corporate veil piercing analysis.[104] Municipalities have been found liable as operators of sewer systems that allowed contaminants to escape into the environment.[105]

(2) Some courts have held that a person may be liable as a current CERCLA operator where the person did not exercise control over historic operations that caused the contamination but dispersed or moved around contaminated soil during grading and excavation activities.[106] A managing agent of a shopping center that had been contaminated by releases from a dry cleaner may also be potentially liable as a CERCLA operator.[107]

(3) Like a past CERCLA owner, a past operator must have exercised control over the site "at the time of disposal" to be liable as a CERCLA operator. Many courts have held that disposal is not limited to the original release but can encompass subsequent dispersal or movement of hazardous substances. Thus, CERCLA operator liability has been imposed on persons as a result of grading or excavation activities that moved contaminated soil.[108]

X1.1.5.3 *Arrangers/Generators and Transporters*—CERCLA arrangers/generators and transporters are not usually found liable for releases at property that they do not own or operate. Therefore, this practice is typically not impacted by CERCLA arranger/generator and transporter liability.

X1.1.6 *Exclusions from Definition of Owner or Operator*—There are several important statutory exemptions from the definition of owner or operator. A party that does not qualify for one of the statutory exemptions may still be able to assert one of the LLPs.

X1.1.6.1 *Secured Creditor Exemption*—The "secured creditor" exemption exempts from the definition of "*owner* or *operator*" persons holding an "indicia of ownership" primarily

[98] *Nurad, Inc. v. Hooper & Sons Co*., 966 F.2d 837 (4th Cir.), *cert. denied*, 506 U.S. 940 (1992).

[99] *Carson Harbor Vill., Ltd. v. Unocal Corp*., 270 F.3d 863 (9th Cir. 2001); *United States v. 150 Acres of Land*, 204 F.3d 698, 706 (6th Cir. 2000); *ABB Indus. Sys., Inc. v. Prime Tech., Inc*., 120 F.3d 351 (2d Cir. 1997); *United States v. CDMG Realty Co*., 96 F.3d 706 (3d Cir. 1996).

[100] *Bonnieview Homeowners v. Woodmont Builders*, 2009 U.S. Dist. LEXIS 86737 (D.N.J. Sept. 22, 2009); *United States v. Honeywell Intl., Inc*., 542 F. Supp.2d 1188 (E.D. Cal. 2008).

[101] 42 U.S.C. § 9601(20).

[102] *United States v. Bestfoods*, 524 U.S. 51 (1998).

[103] *Atlanta Gas Light Co. v. UGI Utilities, Inc*., 463 F.3d 1201 (11th Cir, 2006). *See also Consolidated Edison of New York, Inc. v. UGI Utilities*, 310 F. Supp.2d 592 (S.D.N.Y.), *aff'd in part*, 423 F.3d 90 (2d Cir. 2005); *cert. denied* 551 U.S. 1130 (2007); *Yankee Gas Services Company v. UGI Utilities*, 616 F. Supp.2d 228 (D. Conn. 2009), aff'd, 428 Fed. Appx. 18. *But see United States v. Newmont USA Ltd*., 2008 U.S. Dist. LEXIS 82922 (E.D. Wa. Oct. 11, 2008).

[104] 524 U.S. at 63-64.

[105] *Westfarm Assocs. Ltd. Partnership v. Washington Suburban Sanitary Comm'n*, 66 F.3d 669 (4th Cir. 1995); *City of Bangor v. Citizens Communications Co*., 2004 U.S. Dist. LEXIS 3845 (D. Me. Mar. 11, 2004); *United States v. Union Corp*., 277 F. Supp.2d 478 (E.D. Pa. 2003). *But see Lincoln Properties, Ltd. v. Higgins*, 823 F. Supp. 1528 (E.D. Cal. 1992).

[106] *Trinity Amer. Corp. v. EPA*, 150 F.3d 389 (4th Cir. 1998); *PCS Nitrogen, Inc. v. Ashley II of Charleston LLC*, 714 F.3d 161, 177 (4th Cir. 2013), *cert. denied*, 571 U.S. ___ (Nov. 4, 2013); *United States v. Honeywell Int'l, Inc*., 542 F. Supp.2d 1188 (E.D. Cal. 2008).

[107] *Scarlett & Associates, Inc. v Briarcliff Center Partners, LLC*, 2009 U.S. Dist. LEXIS 90483 (N.D. Ga. 2009). There, the managing agent did not maintain an office or have personnel at the site, nor did it have keys to any leased space or have the power to evict tenants. The managing agent said its principal responsibilities were to attempt to rent space to tenants that were approved by the owner, collect rent, maintain the common areas of the shopping center, pay bills in a timely manner, and send any excess revenues to the owner. The owner pointed to language in the management services agreement that the managing agent was to obtain all necessary government approvals and perform such acts necessary to ensure that owner was in compliance with all laws. The court noted that the managing agent sent the dry cleaner a certified letter advising the dry cleaner of certain environmental reporting requirements, requested copies of the documentation that the dry cleaner was required to provide to the EPA or an explanation as to why the dry cleaner was exempt from providing such documentation. The court said that this correspondence combined with the other evidence of record indicating that the managing agent generally was responsible for managing and maintaining the shopping center and performing all acts necessary to effect compliance with all laws, rules, ordinances, statutes, and regulations of any governmental authority applicable to the operation of the shopping center was sufficient to create a genuine issue as to whether the managing agent managed the operations of the dry cleaner specifically related to pollution and it therefore met the definition of a former "operator."

[108] *Tanglewood Homeowners v. Charles-Thomas, Inc*., 849 F.2d 1568 (5th Cir. 1988); *Redwing Carriers, Inc. v. Saraland Apartments*, 94 F.3d 1489 (11th Cir. 1996); *Kaiser Aluminum & Chem. Corp. v. Catellus Dev. Corp*., 976 F.2d 1338 (9th Cir. 1992); *Bonnieview Homeowners Ass'n, LLC v. Woodmont Builders, L.L.C*., 655 F. Supp.2d 473 (D.N.J. 2009).

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to protect a security interest in a vessel or facility so long as the person did not participate in the management of the facility.[109] The CERCLA secured creditor exemption can insulate a secured creditor from liability during the administration of a loan, including workouts, so long as the lender's actions during the life of a loan do not constitute exercising managerial control over the operations of its borrower.[110] The secured creditor exemption contains some key definitions.

X1.1.6.2 *Security Interest*—This term includes a right under a mortgage, deeds of trust, assignment, judgment lien, pledge, security agreement, factoring agreements, or lease and any other right accruing to a person to secure the repayment of money, performance of a duty, or any other obligations by a non-affiliated person.[111]

X1.1.6.3 *Lender Permissible Actions:*

(1) A lender holding indicia of ownership primarily to protect a security interest in a facility or vessel will not be liable as a CERCLA owner or operator during the term of a loan if it does not participate in the management of that facility. The term "participate in management" means actually participating in the management or operational affairs of a vessel or facility, and does not include merely having the capacity to influence or the unexercised right to control vessel or facility operations. Thus, the mere presence of clauses in a financing agreement giving a lender the right to take certain actions, such as responding to violations of law or releases of hazardous substances, will not expose the lender to liability.[112]

(2) The secured creditor exemption includes a list of nine permissible activities commonly taken by lenders that are considered consistent with the exemption and therefore do not constituent "participation in management." A lender may take the following nine actions and not be deemed to have participated in management:

(a) holding, releasing, or abandoning a security interest, including environmental compliance covenants, warranties, or other environmental conditions in a security agreement or extension of credit;[113]

(b) monitoring or enforcing any terms or conditions of a security agreement or extension of credit;

(c) monitoring or undertaking any inspections of the collateral;

(d) requiring the borrower to take response actions to address releases of hazardous substances;

(e) providing financial or other advice or counseling to mitigate, prevent, or cure default or diminution of the value of the collateral;

(f) restructuring, renegotiating, or otherwise agreeing to alter terms and conditions of a security agreement or extension of credit;

(g) exercising forbearance of any rights;

(h) exercising any remedies that may be available under applicable law for breaches of security agreements or extensions of credit; and

(i) conducting a response action under CERCLA in accordance with the National Contingency Plan or under the direction of an on-scene coordinator.[114]

(3) A lender may be considered to be participating in management of a facility if it does the following while the borrower is in possession of the property encumbered by the security interest:

(a) exercises decision-making control over the borrower's environmental compliance, such that the holder (i.e. lender) has undertaken responsibility for the borrower's hazardous substance handling or disposal practices;

(b) exercises control at a level comparable to that of a manager of the facility or vessel so that the lender has assumed or manifested responsibility for the overall management of the day-to-day decision making at the facility with respect to environmental compliance or overall or substantially all of the operational aspects or functions of the facility or vessel.[115]

X1.1.6.4 *Workouts and Foreclosure*—The secured creditor exemption also provides limited protection to lenders during workouts and foreclosures. A lender will not be considered a CERCLA owner or operator if it did not participate in the management of a facility prior to foreclosure, forecloses on the facility or vessel, and then follows certain requirements. After foreclosure, the lender may maintain business activities, wind up operations, undertake a response action in accordance with the NCP or under the direction of an on-scene coordinator, or otherwise take any other actions to preserve, protect, or prepare the vessel or facility prior to sale or disposition *provided* the lender tries to sell, release or otherwise divest itself of the

[109] 42 U.S.C. § 9601(20)(E)(i). In 1992, EPA sought to further clarify the scope of the secured creditor exemption when it issued its "Lender Liability under CERCLA" as an amendment to the NCP ("Lender Liability Rule"). 57 Fed. Reg. 18344 (April 29, 1992). However, the Lender Liability Rule was subsequently invalidated. *Kelley v. EPA*, 15 F.3d 1100 (D.C. Cir. 1994), *reh'g denied*, 25 F.3d 1088 (D.C. Cir. 1994). In response, EPA announced it would use the Lender Liability Rule as a guidance document in exercising its enforcement discretion. See "*Policy on CERCLA Enforcement Against Lenders and Government Entities that Acquire Property Involuntarily*" (Sept. 22, 1995). Congress subsequently enacted the Asset Conservation, Lender Liability, and Deposit Insurance Protection Act ("1996 Lender Liability Amendments") which substantially amended the secured creditor exemptions of CERCLA and RCRA. Omnibus Consolidated Appropriations Act of 1997, Pub. L. No 104-208 §§ 2501-2505, 110 Stat. 3009 (Sept. 30, 1996). The 1996 Lender Liability Amendments added new defined terms and identified the kinds of actions lenders could take without being considered to be participating in the management of a facility, as well as the steps that lenders had to follow to foreclose on property and still be considered simply protecting their security interest.

[110] *Monarch Tile, Inc. v. City of Florence*, 212 F.3d 1219, 1222 (11th Cir. 2000); *United States v. Marvin Pesses*, 1998 U.S. Dist. LEXIS 7902 (W.D. Pa. May 6, 1998).

[111] 42 U.S.C. § 9601(20)(G)(vi).

[112] 57 Fed. Reg. at 18357 (Apr. 29, 1992).

[113] An extension of credit includes a lease finance transaction where the lessor does not initially select the leased vessel or facility, during the term of the lease does not control the daily operation or maintenance of the vessel or facility, or the transaction conforms with regulations issued by a federal banking agency, an appropriate state bank supervisor, or with regulations promulgated by the National Credit Union Administration Board. 42 U.S.C. § 9601(20)(G)(i).

[114] 42 U.S.C. § 9601(20)(F)(iv).

[115] 42 U.S.C. § 9601(20)(F)(ii).

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facility or vessel at the earliest practicable, commercially reasonable time, and on commercially reasonable terms after taking into account market conditions and legal or regulatory requirements.[116]

X1.1.7 *Trustees*—The secured creditor exemption also includes liability protections for persons and financial institutions acting in a fiduciary capacity.[117]

X1.1.7.1 *Definition of Fiduciary:*

(1) The liability protection applies to anyone holding title, having control, or otherwise having an interest in a facility or vessel pursuant to the exercise of its responsibilities as a fiduciary. Covered persons include trustees, receivers, executors, administrators, custodians, guardians of estates or a guardian *ad litem*, conservators, committees of estates of incapacitated persons, personal representatives, trustees under a various forms of indebtedness where the trustee is not the lender (indenture agreement, trust agreement, lease, or similar financing agreement for debt securities, certificates of participation in debt securities, or other) or a representative that EPA determines is acting in one of the foregoing capacities.[118]

(2) The term does not include a person acting as a fiduciary for an estate organized for the primary purpose of, engaged in, or actively carrying on a trade or business for profit, or a person who acquires ownership or control of a vessel or facility with the objective of avoiding liability. In addition, it does not apply to the assets of the estate or trust, or to a non-employee agent or independent contractor of the fiduciary.

(3) A trustee is not a "fiduciary" for the purpose of the safe harbor provision where they are the trustee of a trust that engages in a business for profit, or is organized to engage in a business for profit, unless the reason for the trust was the facilitation of an estate plan due to the incapacity of the estate owner.[119] Also excluded are fiduciaries of trusts that would be considered fraudulent in that they were created specifically and intentionally to avoid liability.[120]

X1.1.7.2 *Fiduciary Permissible Actions*—A fiduciary will also not forfeit its immunity from liability by taking the following actions:

(1) Terminating the fiduciary relationship;

(2) Including covenants or other conditions requiring compliance with environ mental laws in the fiduciary agreement;

(3) Monitoring or conducting inspections of a facility or vessel;

(4) Providing financial advice or other advice to other parties in the fiduciary relationship, including the settlor or beneficiary;

(5) Restructuring or renegotiating the terms of the fiduciary relationship;

(6) Administering a vessel or facility that was contaminated prior to the commencement of the fiduciary relationship; or

(7) Declining to take any of the foregoing actions.

X1.1.7.3 *Limitation of Liability:*

(1) A fiduciary will only be liable for releases of *hazardous substances* from a facility or vessel held in a fiduciary capacity up to the value of the assets held in the trust or estate so long as the release was not caused by the *negligence* of the fiduciary. In addition, a fiduciary will not be exposed to personal liability by undertaking or directing another person to take response actions to address releases of *hazardous substances*.

(2) Importantly, the limitation on the liability of a fiduciary will not apply if the fiduciary negligently caused or contributed to the release or threatened release of a *hazardous substance*. An example of the negligence exception is *Canadyne-Georgia Corp. v. NationsBank, N.A.*[121] where a former site owner was allowed to proceed with a contribution action against a bank that served as trustee for a trust that held a general partnership interest in a limited partnership owning the site.[122]

X1.2 *Defenses to CERCLA Liability*—Assuming all the elements of liability exist (and no specific liability exclusions apply), a party may still avoid CERCLA liability by qualifying

[116] The CERCLA Lender Liability Rule had required lenders to take actions consistent with the NCP, such as removing abandoned drums at a facility they have foreclosed on, in order to preserve their immunity. Abandonment of drums or equipment would not be consistent with the requirements of the NCP and could cause a lender to lose its immunity even where it has complied with all of the aspects of the CERCLA Lender Liability Rule. However, the Lender Liability Amendments did not expressly address this issue of post-foreclosure NCP compliance.

The Lender Liability rule contained a "bright-line" test requiring a lender to publish certain notices of sale and retain brokers to sell the property. If the lender complied with these requirements, there would be a presumption that the lender had complied with the rule which a plaintiff would have to rebut to proceed against a secured creditor under CERCLA. Unfortunately, the 1996 Lender Liability Amendments did not incorporate the "bright-line" test. As a result, the CERCLA secured creditor exemption provides little guidance to lenders on the specific steps that they may take and still preserve their safe harbor. Accordingly, it is imperative that holders of security interests carefully review site conditions before foreclosing.

Note that EPA promulgated a final rule in 1995 that clarified the regulatory obligations of lending institutions and other persons who hold a security interest in a petroleum underground storage tank (UST) subject to the RCRA Subtitle I UST program or in real estate containing a petroleum underground storage tank, or that acquired title or deed to property with petroleum USTs subject to the RCRA Subtitle I UST program. See "*Underground Storage Tanks—Lender Liability; Final Rule*," 60 Fed. Reg. 46691 (Sept. 7, 1995) ("RCRA Lender Liability Rule"). The RCRA Lender Liability Rule contains a "bright-line" test for persons holding security interests that foreclose on property containing USTs subject to the RCRA Subtitle I program. *See* 40 C.F.R. § 280.210(c)(1)(ii). In the RCRA Lender Liability Rule, EPA stated that it believed the *Kelly* decision did not apply to the RCRA Subtitle I UST program. 60 Fed. Reg. at 46695 n.3. Thus, the RCRA "bright-line" test for foreclosing lenders remains in effect.

[117] 42 U.S.C. § 9607(n).

[118] Generally powers of a trustee are greater and broader than those of an executor or conservator. Actions of a trustee require court approval in fewer instances. The trustee obtains written title by the very trust instrument itself. CERCLA owner liability can extend to conservators and executors so long as they hold adequate indicia of ownership over and above bare legal title. Bare legal title is not enough to impose CERCLA owner liability on a fiduciary. Other factors must be considered in determining this issue. As a result, one court held that conservators and executors must not only hold bare legal title, but must possess other indicia of ownership. *Castlerock Estates v. Estate of Markham*, 871 F. Supp. 360 (N.D. Cal. 1994).

[119] 42 U.S.C. § 9607(n)(5)(A)(ii)(I).

[120] 42 U.S.C. § 9607(n)(5)(A)(ii)(II). Trustees of an Illinois land trust are not "owners" under CERCLA, even though they hold legal title. *United States v. Petersen Sand and Gravel, Inc*., 806 F. Supp. 1346, 1359 (N.D. Ill. 1992).

[121] 183 F.3d 1269 (11th Cir. 1999).

[122] It is unclear if a fiduciary who fails to respond to a release of *hazardous substances* can still take advantage of the fiduciary safe harbor. Thus, a fiduciary with knowledge of a release may want to consider authorizing response actions to address any such release or threatened release since such actions will not expose the fiduciary to liability, and the failure to take such action might amount to negligence that could expose the fiduciary to personal liability.

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for one of the so-called affirmative defenses.[123] These listed affirmative defenses are exclusive of other common law defenses that a defendant might be able to assert.[124]

X1.2.1 *Third Party Defense*—The most commonly asserted defense is that the release is attributable to the acts or omissions of a third party.[125] To successfully assert this defense, a party must establish the following four elements:

X1.2.1.1 The release of the *hazardous substance* was caused solely by a third party,

X1.2.1.2 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 with the defendant;

X1.2.1.3 The defendant exercised due care with respect to the *hazardous substances* (Due Care Element),[126] and

X1.2.1.4 The defendant took precautions against foreseeable acts or omissions of the third party (Precaution Element).[127]

X1.2.1.5 The Third Party Defense does not require that the landowner perform pre-acquisition all appropriate inquiries.[128] Of course, if the defendant has a direct or indirect contractual relationship with the person solely responsible for the *release*, it would have to comply with the all appropriate inquiries rule to assert the innocent landowner defense (see below).

X1.2.2 *Innocent Landowner Defense (ILO)*—The second element of the third party defense prohibits the defendant from having a direct or indirect "contractual relationship" with the person solely responsible for the release. A "contractual relationship" encompasses "land contracts, deeds or other instruments transferring title or possession."[129]

(1) In the early days of CERCLA, a number of courts broadly construed the meaning of this phrase so that it encompassed nearly every contractual arrangement transferring title or possession of land such as a purchase agreement or lease.[130] For example, a deed was held to serve as an indirect contractual relationship that could prevent a property owner from asserting the third party defense.[131] As a result, it was difficult for purchasers or landowners to assert this defense in jurisdictions adopting this view since a landowner could only effectively invoke the defense if the release was a result of acts of trespassers, or adjacent landowners, and then only if the landowner exercised due care.[132]

(2) Because of this harsh impact on owners who did not cause the contamination, Congress enacted the ILO defense in 1986 to exclude from the phrase "in connection with a

[123] Section 9607(b) provides that a party shall not be liable if it can establish by a preponderance of the evidence [meaning more probable than not] that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused by (1) an act of God; (2) an act of war; (3) the "third party defense"(discussed below). 42 U.S.C. § 9607(b). The Contiguous Property Owner (CPO) liability protection of 42 U.S.C. § 9607(q) and the Bona Fide Prospective Purchaser (BFPP) liability protection of 42 U.S.C. § 9607(r) are not contained within the affirmative defenses of 107(b) so they are discussed separately.

[124] *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 Mar. 31, 1997).

[125] 42 U.S.C. § 9607(b)(3).

[126] CERCLA does not indicate what types of actions would constitute the exercise of "due care" that would satisfy the third party defense. The legislative history indicates that a person must demonstrate that their actions were consistent with those that a "reasonable and prudent person would have taken in light of all relevant facts and circumstances." H.R. Rep. No. 253, 99th Cong., 2d Sess. 187 (1986). The due care requirement has been interpreted to include "those steps necessary to protect the public from a health or environmental threat." *State of New York v. Lashins Arcade*, 91 F.3d 353 (2d Cir. 1996). Because a person's actions will be evaluated based on the "relevant facts and circumstances," the due care analysis is a fact-intensive inquiry and will be evaluated on a case-by-case basis. *Foster v. United States*, 922 F. Supp. 642 (D.D.C. 1996). In one case, the owner of a shopping center was able to demonstrate that it exercised due care because it took steps such as maintaining water filters, sampling drinking water, instructing tenants to avoid discharging into the septic system, inserting institutional and land use controls into leases and conducting periodic inspections. *Lashins*, 91 F.3d 353. At the other extreme are the cases that hold that a person who does not take any affirmative measures will not be able to satisfy its due care obligations. *See United States v. DiBiase*, 45 F.3d 541 (1st Cir. 1995); *Kerr-McGee Chem. Corp. v. Lefton Iron & Metal Co*., 14 F.3d 321 (7th Cir. 1994).

[127] *United States v. A & N Cleaners & Launderers, Inc*., 854 F. Supp. 229, 239 (S.D.N.Y. 1994). Like the *Due Care Element*, the *Precaution Element* will be evaluated on a case-by-case basis. In one case, a municipal sewer authority was found to have failed to take adequate precautions when it knew that a dry cleaner discharged PCE into the sewer system and that there were cracks in its sewer pipes, had the power to abate foreseeable release of PCE and failed to exercise that power. *Westfarm Associates Ltd. Pshp. v. Washington Suburban Sanitary Comm'n*, 66 F.3d. 669 (4th Cir. 1995) (despite this knowledge, the county did not repair its pipes or prohibit the discharge of PCE into its system).

[128] *Town of New Windsor v. Tesa Tuck, Inc*., 935 F. Supp. 310 (S.D.N.Y. 1996) (landowner established the Third Party Defense despite having not taken steps to discover the contamination at its property from the encroachment of a neighboring landfill).Of course, it might be difficult to satisfy the *Due Care and Precaution Elements* of the third party defense in the absence of any due diligence. Indeed, some courts have held in the context of what constitutes due care that the failure to inquire about past environmental practices may constitute a lack of due care on the grounds that Congress intended CERCLA to provide incentives for private parties to investigate potential sources of contamination and initiate remediation efforts. *United States v. A & N Cleaners & Launderers*, 842 F. Supp. 1543 (failure to inquire about past use of floor drain, not communicating with local environmental authorities or inquiring about environmental compliance of commercial tenants). Other courts have held that CERCLA "does not sanction willful or negligent blindness." *Westfarm Associates Ltd. Pshp. v. Washington Suburban Sanitary Comm'n*, 66 F.3d. 669 (4th Cir. 1995); *United States v. Monsanto*, 858 F.2d. 160; *United States v. Shore Realty*, 759 F.2d 1032.

[129] 42 U.S.C. § 9601(35)(A).

[130] *See State of New York v. Shore Realty Corp*., 759 F.2d 1032 (2d Cir. 1985); *United States v. Pacific Hide & Fur Depot, Inc*., 716 F. Supp. 1341 (D. Idaho 1989); *United States v. Northernaire Plating Co*., 670 F. Supp. 742 (W.D. Mich. 1987); *United States v South Carolina Recycling and Disposal, Inc*., 653 F. Supp. 984 (D.S.C. 1984).

[131] *United States v. Occidental Chemical Corp*., 965 F. Supp. 408 (W.D.N.Y. 1997).

[132] An exception to this trend was *State of New York v. Lashins Arcade*, 91 F.3d 353 (2d Cir. 1996) where the Second Circuit allowed the current owner/purchaser of a shopping center to invoke the third-party defense even though it knew of contamination because the current owner had no contractual relationship with a former dry cleaner tenant who had discharged hazardous substances into the ground 15 years prior to the current owner's acquisition. In addition, the property owner took proactive steps to minimize exposure to the contamination. Compare Lashins conduct to the purchaser/owner in *Idylwoods Associates v. Mader Capital Inc*., 956 F. Supp. 410 (W.D.N.Y. 1997).

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contractual relationship" purchasers who conducted an appropriate inquiry into the past use and ownership of the property, and did not know or have reason to know of any releases as a result of that investigation.[133]

(3) Following the enactment of the ILO defense, some courts began holding that the mere existence of a contractual relationship was not sufficient to defeat the third party defense and began looking into the purpose of the contractual relationship to see if it related to the hazardous substances that had impacted the property or if the contract allowed the landowner to assert some level of control over the third party's activities at the site.[134]

X1.2.2.1 *Pre-Acquisition Obligations of ILO*—The ILO defense is actually a component of the third party defense. It provides that a purchaser will not be considered to have a "contractual relationship" if 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 was disposed of on, in, or at the facility.[135] To establish that the defendant "did not know and had no reason to know of" the *hazardous substance* with respect to the property, the defendant must show that it undertook "all appropriate inquiries" into the past ownership and uses of the property in accordance with generally accepted good commercial and customary standards and practices.[136,137]

X1.2.2.2 *Post-Acquisition Obligations of the ILO*—Because the ILO defense is part of the Third Party Defense, a defendant would still have to comply with the Due Care and Precautionary Elements of the Third Party Defense after learning of the release of the hazardous substance.[138]

(1) In addition, following the 2002 CERCLA Amendments, a person seeking to assert the ILO defense must after acquiring the property:

(a) cooperate, assist, and provide access to persons that are authorized to conduct response actions or natural resource restoration at the property;

(b) comply with any land use restrictions established or relied on in connection with the response action at a vessel or facility; and

(c) must not impede the effectiveness or integrity of any institutional control employed at the vessel or facility in connection with a response action.[139]

(2) Finally, the defendant must take reasonable steps to:

(a) stop any continuing release;

(b) prevent any threatened future release; and

(c) prevent or limit any human, environmental, or natural resources exposure to any previously released *hazardous substance*."[140]

X1.2.3 *Beneficiaries*—Persons who acquire title by inheritance or bequest will not be considered to be in a "contractual relationship" and will be able to assert the Third Party Defense if they comply with the Due Care and Precaution Elements of the Third Party Defense and the same post-acquisition obligations as those required by the ILO defense.[141]

X1.2.4 *State and Local Governments*—CERCLA contains two exemptions for state or local governmental units that acquire ownership or control involuntarily by virtue of their function as sovereigns. The first exemption is from the definition of owner or operator and applies to involuntary acquisitions or control of property through the bankruptcy, tax delinquency, abandonment, or other circumstances in which the government involuntarily acquires title by virtue of its function as sovereign. However, this exclusion does not apply

[133] 42 U.S.C. § 9601(35)(A).

[134] *State of New York v. Lashins Arcade*, 91 F.3d 353 (2d Cir. 1996); *Westwood Pharmaceuticals, Inc. v. National Fuel Gas Distribution*, 964 F.2d 85 (2d Cir. 1992) (requiring some relationship between the contractual relationship and the disposal or release). *See also, CERCLA Enforcement Discretion Guidance Regarding the Affiliation Language of CERCLA's Bona Fide Prospective Purchaser and Contiguous Property Owner Liability Protections* Memorandum from Elliot Gilberg, Director of Office of Site Remediation Enforcement, Environmental Protection Agency to Regional Counsel of EPA (Sept. 21, 2011).

[135] 42 U.S.C. § 9601(35)(A)(i).

[136] 42 U.S.C.§ 9601(35)(B)(i)(I). The 2002 CERCLA Amendments required EPA to promulgate a regulation establishing the requirements for conducting "all appropriate inquiries" ("AAI"). 42 U.S.C. § 9601(35)(B)(ii). The 2002 CERCLA Amendments also provided that property owners who acquired commercial property before May 31, 1997 would have to establish that they complied with the statutory criteria for the ILO defense that had been in effect prior to the 2002 CERCLA Amendments. These criteria were: any specialized knowledge or experience on the part of the defendant; the relationship of the purchase price to the value of the property, if the property was not contaminated; commonly known or reasonably ascertainable information about the property; the obviousness of the presence or likely presence of contamination at the property; and the ability of the defendant to detect the contamination by appropriate inspection ("1986 AAI"). 42 U.S.C. § 9601(35)(B)(iv)(I). Persons who acquired commercial property after May 31, 1997 would have to demonstrate compliance with the interim federal AAI standard until EPA promulgated its AAI Rule. 42 U.S.C. § 9601(35)(B)(iv)(II). While a draft AAI Rule was under development, EPA clarified that persons who purchased or occupied property on or after May 31, 1997 would have to demonstrate compliance with the "*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*" ASTM E1527-00 or the earlier 1997 version (ASTM E1527-97). 68 Fed. Reg. 24888 (May 9, 2003). EPA promulgated its AAI Rule on November 1, 2005. "*Standards and Practices for All Appropriate Inquiries*," 70 Fed. Reg. 66069 (Nov. 1, 2005).

Beginning November 1, 2006, a party seeking to establish the ILO defense must show that it has complied with the requirements of EPA's AAI Rule. 40 C.F.R. § 312. EPA has also announced that environmental site assessments consistent with ASTM E1527-05 and E2247-08 would be considered to be in compliance with the final AAI Rule. *See* 40 C.F.R. § 312.11. EPA has proposed the same determination with respect to E1527-13. 78 Fed. Reg. 49714 (Aug. 15, 2013).

[137] This practice is limited to commercial real estate transactions. However, CERCLA does provide all appropriate inquiries requirements for 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 all appropriate inquiries requirements. 42 U.S.C. § 9601(35)(B)(v).

[138] 42 U.S.C. § 9601(35)(A).

[139] 42 U.S.C. § 9601(35)(A).

[140] 42 U.S.C. § 9601(35)(B)(i)(II).

[141] 42 U.S.C. § 9601(35)(A)(iii).

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if the government entity contributed or caused the release of hazardous substances.[142]

X1.2.4.1 The second state or local government liability exemption is contained within the exclusion for "contractual relationships" for the third party defense. This exemption contains slightly different language than the "owner or operator" exemption as it applies to a "government entity which acquired a facility by escheat, or through any other involuntary transfer or acquisition, or through the exercise of eminent domain authority by purchase or condemnation."[143] A government unit seeking to rely on this exemption would have to comply with the *Due Care and Precautionary Elements* of the Third Party Defense to maintain their liability protection.

X1.3 *Landowner Liability Protections*—The 2002 CERCLA Amendments added two new landowner liability protections (LLPs) to CERCLA liability.

X1.3.1 *Bona Fide Prospective Purchaser (BFPP)*[144]—The BFPP is a significant LLP because it allows a purchaser to acquire property with knowledge that it is contaminated. The BFPP liability protection applies to purchasers (and their tenants) that acquire ownership of a facility after January 11, 2002.[145] Unlike the ILO defense, a party that qualifies as a BFPP is by definition not a responsible party.[146]

X1.3.1.1 *Pre-Acquisition Requirements*—To qualify as a BFPP, a person must satisfy the following pre-acquisition criteria prior to acquiring title: (i) all disposal of hazardous substances at the facility occurred before the person acquired the facility;[147] (ii) the person conducted "all appropriate inquiries"[148] and (iii) the person is not a PRP or affiliated with any other PRP for the property through any direct or indirect familial relationship, any contractual, corporate or financial relationship,[149] or as a result of a reorganization of a business entity that was a PRP.[150]

X1.3.1.2 *Post-Acquisition Obligations*—A BFPP must also comply with the following continuing obligations after taking title to the property:

(1) provide all legally required notices with respect to the discovery or release of any hazardous substances at the facility;[151]

(2) exercise appropriate care with respect to hazardous substances by taking reasonable steps to stop any continuing release; prevent any threatened future releases; and prevent or limit human, environmental, or natural resource exposure to any previously released hazardous substance;[152]

(3) provide full cooperation, assistance, and access to persons who are authorized to conduct response actions or natural resource restoration (including the cooperation and access necessary for the installation, integrity, and maintenance of any complete or partial response actions or natural resource restoration;[153]

(4) comply with any land use restrictions established or relied on in connection with the response action, and not impede the effectiveness or integrity of any institutional control employed at the vessel or facility in connection with a response action;[154] and

(5) comply with any request for information or administrative subpoena issued under CERCLA.[155]

ASTM has issued a guide to assist users in satisfying post-acquisition continuing obligations.[156]

X1.3.2 *The Contiguous Property Owner (CPO) Liability Protection*[157]—This LLP excludes from the definition of a

[142] 42 U.S.C. § 9601(20)(D). Courts have not consistently interpreted the reference to taking title to a facility by the exercise of eminent domain. Some courts have held that the exemption applies to municipalities that assert their eminent domain authority but reach an agreement to purchase the property without having to resort to judicial proceedings. *City of Emeryville v. Elements Pigments, Inc*., 2001 U.S. Dist. LEXIS 4712 (N.D. Ca. Mar. 7, 2001). Other courts have ruled that a local government will not be entitled to the liability protection unless the land is purchased pursuant to a judicial proceeding. *See City of Toledo v. Beazer Materials and Services, Inc*., 923 F. Supp. 1013 (N.D. Ohio. 1996). Some have also examined if the purchase was voluntary. *See United States v. Occidental Chem. Corp*., 965 F. Supp. 408 (N.D.N.Y. 1997) (City of Niagara Falls was held to have voluntarily acquired title to Love Canal area.); *City of Petoskey v. Oxy USA, Inc*., 1996 U.S. Dist. LEXIS 22640 (W.D. Mich. Feb. 6, 1996) (city that purchased site for use as a municipal park as part of a waterfront redevelopment project was performing a governmental function but purchase was not involuntary transfer); *Transportation Leasing Co. v. California*, 861 F. Supp. 931 (C.D. Cal. 1993) (exclusion did not apply to state government that voluntarily acquired land by eminent domain to build a freeway). *In re Sundance Corp*., 149 B.R. 641 (E.D. Wash.1993), a court-appointed receiver was held to fall within the protection afforded by this section under derivative judicial immunity theory as an officer of court performing judicial functions.

[143] 42 U.S.C. § 9601(35)(A)(ii).

[144] 42 U.S.C. § 9601(40).

[145] The BFPP LLP could result in the owner becoming subject to a windfall lien for unrecovered response costs against an increase in value of the property due to cleanup. 42 U.S.C. § 9607(r).

[146] 42 U.S.C. § 9607(r)(1).

[147] 42 U.S.C. § 9601(40)(A).

[148] 42 U.S.C. § 9601(40)(B).

[149] 42 U.S.C.§ 9601(40(H)(i)(II) narrows the potential scope of the phrase "contractual, corporate or financial relationship." It excludes any such relationship that is created by an instrument by which title to a facility is conveyed or financed, or by a contract for the sale of goods or services.

[150] 42 U.S.C. § 9601(40)(H). Note that the ILO defense does not include the "no affiliation" language. Also note that in *Ashley II of Charleston LLC v. PCS Nitrogen, Inc.*, 791 F. Supp 2d 431 (D.S.C. 2011), *aff'd on other grounds*, 714 F.3d 161 (4th Cir. 2013), *cert. denied*, 571 U.S. ___ (Nov. 4, 2013), a federal district ruled that a plaintiff had an inappropriate affiliation when it indemnified the seller of contaminated property and then sought to discourage EPA from bringing an enforcement action against the seller/indemnitee.

[151] 42 U.S.C. § 9601(40)(C).

[152] 42 U.S.C. § 9601(40)(D).

[153] 42 U.S.C. § 9601(40)(E).

[154] 42 U.S.C. § 9601(40)(F).

[155] 42 U.S.C. § 9601(40)(G).

[156] ASTM E2790-11.

[157] 42 U.S.C. § 9607(q).

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CERCLA owner or operator, a landowner whose property has been impacted solely by a release from a source located at real property that is not owned or operated by the person and that is contiguous to or otherwise similarly situated to the impacted property.[158]

X1.3.2.1 *No Knowledge of Contamination*—Unlike a BFPP, a CPO must not know or have reason to know following performance of all appropriate inquires that their property was or could be contaminated by the adjacent or contiguous real property.[159]

X1.3.2.2 *Pre-Acquisition Requirements*—To satisfy this LLP, the property owner must show that (i) it did not cause, contribute, or consent to the release; (ii) the person is not a PRP or affiliated with any other PRP;[160] and (iii) the person conducted all appropriate inquiries.[161]

X1.3.2.3 *Post-Acquisition Obligations*—A CPO must comply with the so-called "Continuing Obligations" after taking title to maintain the CPO LLP. These Continuing Obligations are:

(1) taking reasonable steps to stop any continuing release; prevent any threatened future release; and prevent or limit human, environmental, or natural resource exposure to any *hazardous substance* released on or from *property* owned by that person;[162]

(2) provide full cooperation, assistance, and access to persons that are authorized to conduct response actions or natural resource restoration at the 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 facility);[163]

(3) comply with any land use restrictions established or relied on in connection with the response action at the facility;[164]

(4) not impede the effectiveness or integrity of any institutional control employed in connection with a response action;[165]

(5) comply with any request for information or administrative subpoena issued by EPA;[166] and

(6) provide all legally required notices with respect to the discovery or release of any *hazardous substances* at the facility.[167]

X1.4 *EPA "Common Elements" Guidance*:

X1.4.1 In 2003, EPA issued interim guidance ("Common Elements Guidance") interpreting the obligations that parties must satisfy to qualify for the CERCLA LLPs.[168] The guidance identifies two initial "threshold criteria" that a party must satisfy at the time it takes title to or possession of the property.[169] The guidance then discussed five "Continuing Obligations" that landowners or building occupants must

[158] EPA has issued guidance explaining its views on the CPO. *See Interim Enforcement Discretion Guidance Regarding Contiguous Property Owners*, Memorandum from the USEPA Office of Enforcement and Compliance Assurance (Jan. 2004). In addition, EPA issued policies that preceded the CPO but may still reflect how the agency will exercise its enforcement discretion since the CPO was based on these policies. *See "Final Policy Towards Owners of Property Containing Contaminated Aquifers"*, Memorandum from Bruce Diamond, Director of Office of Site Remediation Enforcement Environmental Protection Agency (May 24, 1995); and *Policy Towards Owners of Residential Property at Superfund Sites*, Memorandum from U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response to Regional Administrators (July 3, 1991).

[159] 42 U.S.C. § 9607(q)(1)(A)(viii)(II). A person that does not qualify for the CPO because it knew or should have known that its property was impacted by an off-site source may still qualify for the BFPP LLP. 42 U.S.C. § 9607(q)(1)(C).

[160] 42 U.S.C. § 9607(q)(1)(A)(ii)(I)-(II). The improper affiliation includes 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 the result of a reorganization of a business entity that was potentially liable. Note that in *Ashley II of Charleston v PCS Nitrogen, Inc*., 791 F. Supp. 2d 431 (D.S.C. 2011), *aff'd on other grounds*, 714 F.3d 161 (4th Cir. 2013), *cert. denied*, 571 U.S. ___ (Nov. 4, 2013), a federal district court ruled that a plaintiff had an inappropriate affiliation when it indemnified the seller of contaminated property and then sought to discourage EPA from bring an enforcement action against the seller/indemnitee.

[161] 42 U.S.C. § 9607(q)(1)(A)(viii)(I).

[162] 42 U.S.C. § 9607(q)(1)(A)(iii).

[163] 42 U.S.C. § 9607(q)(1)(A)(iv).

[164] 42 U.S.C. § 9607(q)(1)(A)(v)(I).

[165] 42 U.S.C. § 9607(q)(1)(A)(v)(II).

[166] 42 U.S.C. § 9607(q)(1)(A)(vi).

[167] 42 U.S.C. § 9607(q)(1)(A)(vii).

[168] "*Interim Guidance Regarding Criteria Landowners Must Meet In Order to Qualify for the Bona Fide Prospective Purchaser, Contiguous Property Owner or Innocent Landowner Limitations on CERCLA Liability*" ("Common Elements Guidance"), Memorandum from Susan E. Bromm, Director of Site Remediation Enforcement, Environmental Protection Agency (March 6, 2003). Note that this document like other informal documents issued by EPA without formal rulemaking is not a regulation and does not have the force of law. Thus, it does not impose legal duties or obligations on landowners. Instead, it is EPA's interpretation of some of the Continuing Obligations and a court can choose to adopt or ignore EPA's interpretation.

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continue to satisfy following acquisition or possession to maintain a defense to liability.[170,171]

X1.4.2 In its Common Elements Guidance, EPA indicated that the "due care" case law of the CERCLA Third Party Defense provides a reference point for evaluating the "reasonable steps" requirement. The guidance goes on to state that when courts have examined the due care requirement in the context of the pre-existing innocent landowner defense, they have generally concluded that a landowner should take some positive or affirmative step(s) when confronted with hazardous substances on its property. Based on the similarity in concepts, it would appear that the kinds of actions that owners and operators of properties must take to satisfy the "reasonable steps" obligations of the ILO, BFPP and CPO liability protections will probably be similar to those required under the "due care" obligation of the Third Party Defense.

X1.5 *All Appropriate Inquiries*:

X1.5.1 As noted above, a prerequisite for each of the LLPs is that the owner conduct "all appropriate inquiries" into the previous ownership and uses of the target property "in accordance with generally accepted good commercial and customary standards and practices" as established by EPA before acquiring title to property. The purpose of the pre-acquisition AAI is to determine if there has been a release of hazardous substances of on, in, or at the property.[172]

X1.5.2 Prior to the 2002 CERCLA Amendments, persons seeking to qualify for the ILO had to demonstrate compliance with the five statutory criteria added to CERCLA in 1986 ("1986 AAI"). In the 2002 CERCLA Amendments, Congress

[169] The first threshold criterion is that the landowner conducts "all appropriate inquiries." The second threshold criterion is that a party must not be potentially liable or affiliated with a potentially responsible party, or any other person who is potentially liable for response costs. The Common Elements Guidance acknowledged that the 2002 CERCLA Amendments did not define the phrase "affiliated with" and that the term "affiliation" could be broadly interpreted, EPA suggested that Congress intended to prevent a party from contracting away its liability through a transaction with a family member or related corporate entity. In *Ashley II of Charleston v PCS Nitrogen, Inc*., 791 F. Supp. 2d 431 (D.S.C. 2011), *aff'd on other grounds*, 714 F.3d 161 (4th Cir. 2013), *cert. denied*, 571 U.S. ___ (Nov. 4, 2013), a federal district court ruled that a plaintiff had an inappropriate affiliation when it indemnified the seller of contaminated property and then sought to discourage EPA from bringing an enforcement action against the seller/indemnitee.

It is unclear if a tenant who takes possession of property after the January 11, 2002 effective date of the 2002 CERCLA Amendments can qualify for the BFPP defense if the owner of the property is a PRP who held title prior to that date. In 2012, EPA issued guidance on the applicability of the BFPP protection to tenants who lease contaminated or formerly contaminated properties, and how EPA intends to exercise its enforcement discretion to treat certain tenants as BFPPs under CERCLA. See "*Revised Enforcement Guidance Regarding the Treatment of Tenants Under the CERCLA Bona Fide Prospective Purchaser Provision*" Memorandum from Cynthia Giles and Mathy Stanislaus to Regional Administrators (Dec. 5, 2012) (available at: http://www.epa.gov/enforcement/cleanup/documents/policies/superfund/tenants-bfpp-2012.pdf).

[170] The Common Elements Guidance only addresses five of the continuing obligations that a landowner must satisfy. The first Continuing Obligation addressed by the Common Elements Guidance was complying with land use restrictions and institutional controls ("Land Use Restrictions and Institutional Controls"). EPA, Common Elements Guidance at 6-8. Note that the Common Elements Guidance uses the statutory language "Land Use Restrictions and Institutional Controls" in whole or in part. ASTM uses the phrase "Activity and Use Limitations" or "AULs." The EPA language is used in the summary below.

The Common Elements Guidance indicated that the landowners seeking to qualify for the CERCLA liability protection must comply with Land Use Restrictions and Institutional Controls relied on in connection with the response action even if the Land Use Restrictions and Institutional Controls were not in place at the time the person purchased the property or have not been properly implemented. According to the Common Elements Guidance, a "land use restriction" may be considered "relied on" when the "restriction" is identified as a component of the remedy. EPA noted that an "institutional control" may not serve the purpose of implementing a "land use restriction" if it was not implemented, the party responsible for enforcement of the "institutional controls" neglects to take sufficient measures to bring those persons into compliance or a court finds the controls to be unenforceable.

For example, a remedy might rely on an ordinance that prevents groundwater from being used as drinking water but the local government may fail to enact the ordinance, change the ordinance to allow a use prohibited by the remedy (e.g., drinking water use), or fail to enforce the ordinance. In such circumstances, the guidance indicates that a landowner or person using the property will still be required to comply with the groundwater use restriction to maintain its liability protection. If the owner/operator fails to comply with a "land use restriction" relied on in connection with a response action, the EPA indicated that it might use its CERCLA authority to order the owner to remedy the violation or may remedy the violation itself and seek cost recovery from the owner/operator.

The guidance suggested that a party could be deemed to be "impeding the effectiveness or integrity of an institutional control" without actually physically disturbing the land. Examples cited by EPA included removing a notice that was recorded in the land records, failing to provide a required notice of the existence of institutional controls to a future purchaser of the property, and applying for a zoning change or variance when the current designated use of the property was intended to act as an institutional control. However, EPA acknowledged that some Land Use Restrictions and Institutional Controls may not need to remain in place in perpetuity, and that an owner may seek to change any "restrictions or controls" provided it follows procedures required by the applicable regulatory agency.

[171] The second Continuing Obligation addressed by the guidance was the "appropriate care" requirement. The guidance document states that a reasonable steps determination will be a site-specific, fact-based inquiry that will have to take into account the different elements of the landowner liability protections. The guidance also indicated the obligations may differ for landowners depending on the defense they are relying on because of the differences among the three statutory provisions. For example, while each defense requires the owner/operator to conduct an "appropriate inquiries," only a BFPP may purchase with knowledge. Thus, the reasonable steps required of a BFPP may differ from those of the other protected landowner categories who did not have knowledge prior to purchase. Thus, a BFPP arguably has greater responsibility than an ILO because the BFPP knows about the contamination. The "due care" caselaw seems to suggest that while a protected party discovering contamination may not be required to undertake a full environmental investigation, doing nothing in the face of a known or suspected environmental hazard would likely be insufficient. It would appear, then, that there may be some circumstances where the reasonable steps required of a party seeking to maintain one of the LLPs may be akin to those of a PRP at least where the only remaining response action is implementation and maintenance of institutional or engineering controls.

For the complying with requests requirement of the Continuing Obligation, the guidance indicates that EPA expects timely, accurate, and complete responses from all recipients of section 104(e) information requests. As an exercise of its enforcement discretion, EPA may consider a person who has made an inconsequential error in responding (e.g., the person sent the response to the wrong EPA address and missed the response deadline by a day) a BFPP as long as the landowner also meets the other conditions of the applicable landowner liability protection.

For the Continuing Obligation to provide all the legally required notices involving the discovery or release of any hazardous substances at the facility, the agency indicated that "legally required notices" might include those required under federal, state, and local laws. Thus, a landowner would not only have to make individual federal notifications for each response program having jurisdiction over the release but also comply with all individual state and local reporting requirements. The BFPP will have the burden of ascertaining what notices are legally required in a given instance and of complying with those notice requirements. However, to try to ease the reporting burden obligation, the guidance indicated that regional offices may allow a BFPP to provide all legally required notices within a certain number of days of purchasing the property. The self-certifications may be in the form of a letter signed by the landowner as long as the letter is sufficient to satisfy EPA that applicable notice requirements have been met.

Readers may also consult ASTM E2790-11 "*Standard Guide for Identifying and Complying with Continuing Obligations*."

[172] 42 U.S.C. § 9601(35)(A)(i).

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added to the statutory criteria. The ten criteria are listed below with "1986" placed in parenthesis next to the original 1986 statutory criteria:

X1.5.2.1 the results of an inquiry by an *environmental professional*;

X1.5.2.2 *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;

X1.5.2.3 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;

X1.5.2.4 searches for recorded environmental cleanup liens against the facility that are filed under Federal, State, or local law;

X1.5.2.5 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;

X1.5.2.6 visual inspections of the facility and of *adjoining properties* (1986);

X1.5.2.7 specialized knowledge or experience on the part of the defendant (1986);

X1.5.2.8 the relationship of the purchase price to the value of the *property*, if the *property* was not contaminated (1986);

X1.5.2.9 commonly known or *reasonably ascertainable* information about the *property* (1986); and

X1.5.2.10 the degree of obviousness of the presence or likely presence of contamination at the *property*, and the ability to detect contamination by appropriate investigation (1986).[173]

X1.5.3 To further clarify the scope of "*all appropriate inquiries*," Congress instructed EPA to promulgate regulatory standards and practices for carrying out all appropriate inquiries.[174] The 2002 CERCLA Amendments also provided that property owners who acquired commercial property before May 31, 1997 would have to establish that they complied with the 1986 AAI.[175]

X1.5.4 The purpose of E1527 is to set forth a practice that constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice as defined at 42 U.S.C. § 9601(35)(B).[176] The goal of E1527 is to identify "*the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property*."[177] E1527 labels the presence or likely presence of a hazardous substance (or *petroleum products*) as a "*Recognized Environmental Condition*" ("REC").[178] In other words, the *environmental professional*'s determination pursuant to an AAI procedure that a *hazardous substance* (or petroleum) from a release is or is likely to be present at the property in a non-de minimis condition results in the identification of a REC under E1527. Although many of the specific steps set forth in AAI are prescriptive,[179] the rule clearly requires the exercise of professional judgment by the *Environmental Professional* who conducts the inquiry as guided by the objectives and performance standards of the AAI rule.[180]

X1.6 *Case Law Interpretation of "All Appropriate Inquiries" in Commercial Real Estate Transactions*:

X1.6.1 The vast body of case law interpreting the parameters of "*all appropriate inquiries*" pre-date the 2002 CERCLA Amendments.[181] EPA indicated in its Common Elements

[173] 42 U.S.C. § 9601(35)(B)(iii).

[174] 42 U.S.C.§ 9601(35)(B)(ii). In the preamble to its AAI rule, USEPA said that AAI was "legally distinct" from the more general concepts or processes of "environmental site assessment" and "environmental due diligence." 70 Fed. Reg. 66069, 66072 (Nov. 1, 2005).

[175] 42 U.S.C. § 9601(35)(B)(iv)(I). Persons who acquired commercial property after May 31, 1997 and who sought LLPs were required to have complied with the interim federal AAI standard until EPA promulgated its AAI Rule. See footnote 122, *infra*.

[176] E1527-13, Section 1.1.

[177] E1527-13, Section 1.1.1. Note that E1527-13 includes petroleum and is not limited to CERCLA hazardous substances. See Section 1.1.2 of E1527-13 that explains that E1527-13 includes petroleum products because they are a concern in assessing real estate, but not because of any applicability of CERCLA to petroleum products.

[178] E1527-13, Section 1.1.1. Because CERCLA does not contain any exclusion for minor spills, the REC definition is not necessarily congruent with the definition of a CERCLA release. For example, there could be a spill or discharge of *hazardous substance* that would satisfy the CERCLA liability element of a release but would not qualify as a REC if the contamination does not exceed applicable cleanup levels. Under such a circumstance, the contamination could be considered a "*de minimis* condition" since it would not likely result in an enforcement action if brought to the attention of regulators.

Likewise, the REC definition also refers to conditions indicating the existence of a "material threat of a release." Again, CERCLA liability does not have a "materiality" requirement to satisfy the release element for CERCLA. Of course, a release that does not result in contamination that exceeds applicable cleanup standards will not likely result in significant response costs though some investigation might be required to make that determination.

Under a strict reading of CERCLA, the absence of a REC might not necessarily mean that the owner or operator of the property under evaluation would be immune from CERCLA liability albeit not likely to be significant. However, EPA determined that this practice is the equivalent of AAI. Thus, a landowner who conducts an investigation consistent with this practice that does not identify any "RECs" and otherwise complies with the other requirements of AAI might be able to satisfy the ILO or CPO notwithstanding the lack of congruence between the definition of a CERCLA release and a REC.

[179] For example, see § 312.21 (an inquiry by an environmental professional), § 312.22 (collection of certain required information), and § 312.25 (searches for recorded environmental cleanup liens).

[180] 40 C.F.R. § 312.20(e) and (f). EPA discussed the importance of the objectives and performance standards in the Preamble to the AAI Final Rule, 70 Fed. Reg. 66070, 66101 (Nov. 1, 2005): "After collecting and considering all the information required to comply with the rule's objectives and performance standards, all the information should be considered in total to determine whether or not there are indications of releases or threatened releases of hazardous substances on, at, in, or to the property."

[181] As of mid-2012, only one case has directly addressed AAI. Unfortunately, the court opinion in *Ashley II of Charleston v PCS Nitrogen, Inc*., 791 F. Supp. 2d 431 (D.S.C. 2011), *aff'd on other grounds*, 714 F.3d 161 (4th Cir. 2013), *cert. denied*, 571 U.S. ___ (Nov. 4, 2013), did not provide a detailed analysis. In this case, the plaintiff performed a phase 1 that was certified to have met the AAI. The defendant claimed there were some inconsistencies between phase I reports commissioned by Ashley and ASTM E1527. The court simply held that any such inconsistencies "lacked significance" without explaining the alleged inconsistencies between the phase 1 reports and E1527. What was important, the court continued, was that Ashley acted reasonably; it hired an expert to conduct an AAI and relied on that expert to perform its job properly. As a result, the court ruled that Ashley had properly conducted AAI. *Id*. at 500-01.

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Guidance that this older due care case law will inform what constitutes "appropriate care" or "reasonable steps."[182] The older case law involving the Third Party Defense and LLPs is fact-intensive and is influenced by the particular circumstance of the case.

X1.6.2 The courts have said that deciding what constitutes an appropriate inquiry presents a mixed question of law and fact[183] that is to be guided by the statutory language, legislative history and common sense.[184] The duty to make inquiry is judged as of the time of acquisition. Defendants shall be held to a higher standard as public awareness of the hazards associated with releases of *hazardous substances* has grown, as reflected by CERCLA and other federal and state statutes. For pre-2002 acquisitions, good commercial and customary practice has been viewed through a prism of what a reasonable inquiry must have included 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.[185]

X1.6.3 AAI represents the minimum level of inquiry necessary to support the *LLPs*. However, it is important to understand that additional inquiry ultimately may be necessary or desirable for legal as well as business reasons depending upon the outcome of this inquiry and the particular risk tolerances of a user. For example, such additional inquiry may assist the user in determining whether he would have continuing obligations in the event he acquires the property and may also assist the user in defining the scope of future steps to be taken to satisfy the obligation to take reasonable steps. In addition, a user may be concerned about Business Environmental Risks that do not fall within the definition of a REC. If an investigation performed to the requirements of this practice identifies the presence of RECs, the user may desire to conduct additional subsurface investigation (commonly referred to as a "Phase II" environmental investigation).

X1.6.4 The burden of proof for establishing an LLP or Third Party Defense lies with the person seeking to qualify for the liability protection.[186] The person seeking to assert a defense to CERCLA liability 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.

X1.6.5 Finally, it should be noted that as a result of the 2002 CERCLA Amendments and the promulgation of AAI, Practice E1528 (Transaction Screen) does not meet the threshold for "*all appropriate inquiries*."

[182] EPA, Common Elements Guidance at 11.

[183] *Advance Technology Corp. v. Eliskim, Inc*. 87 F. Supp.2d 780, 785 (N.D. Ohio 2000).

[184] *See 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 (E.D.N.Y. Jan. 12,1990) (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).

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

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

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X2. DEFINITION OF ENVIRONMENTAL PROFESSIONAL AND RELEVANT EXPERIENCE THERETO, PURSUANT TO 40 CFR §312.10

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.

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X3. USER QUESTIONNAIRE

INTRODUCTION

In order to qualify for one of the *Landowner Liability Protections (LLPs)*[187] offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"),[188] the *user* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The *user* should provide the following information to the *environmental professional*. Failure to conduct these inquiries could result in a determination that "*all appropriate inquiries*" is not complete.

(1.) Environmental liens that are filed or recorded against the *property* (40 CFR 312.25).
Did a search of *recorded land title records* (or judicial records where appropriate, see Note 1 below) identify any environmental liens filed or recorded against the *property* under federal, tribal, state or local law?

NOTE 1—In certain jurisdictions, federal, tribal, state, or local statutes, or regulations specify that environmental liens and AULs be filed in judicial records rather than in land title records. In such cases judicial records must be searched for environmental liens and AULs.

(2.) Activity and use limitations that are in place on the *property* or that have been filed or recorded against the *property* (40 CFR 312.26(a)(1)(v) and vi)).
Did a search of *recorded land title records* (or judicial records where appropriate, see Note 1 above) identify any AULs, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the *property* and/or have been filed or recorded against the *property* 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).
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,
(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 or likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).
Based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of releases at the *property*?

[187] *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.
[188] P.L. 107-118.

X3.1 In addition, certain information should be collected, if available, and provided to the *environmental professional* conducting the *Phase I Environmental Site Assessment*. 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 being performed,

(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),

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(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 or whether any considerations beyond the requirements of Practice E1527 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

X4.1 *Summary*—This section provides a summary of the *Phase I Environmental Site Assessment* process and may include findings, opinions and conclusions.

X4.2 *Introduction*—This section identifies the *property* (location and legal description) and the purpose of the *Phase I Environmental Site Assessment*. This section also provides a place to discuss contractual details (including scope of work) as well as limiting conditions, deviations, exceptions, significant assumptions, and special terms and conditions.

X4.3 *User Provided Information*—This section presents information under Section 6. User's Responsibilities and may include information from the User Questionnaire (see Appendix X3), if completed.

X4.4 *Records Review*—This section presents a review of physical setting sources, standard and additional environmental records sources, and historical use information on the *property* and surrounding area as detailed in Section 8, Records Review.

X4.5 *Site Reconnaissance*—This section includes *site reconnaissance* observations as discussed in Section 9, Site Reconnaissance, including general site setting, interior and exterior observations, and uses and conditions of the *property* and *adjoining properties*.

X4.6 *Interviews*—This section provides a summary of interviews conducted as detailed in Section 10, Interviews with Past and Present Owners and Occupants, and Section 11, Interviews with State and Local Government Officials.

X4.7 *Evaluation*—This section documents the findings, opinions and conclusions of the *Phase I Environmental Site Assessment* as stated in Section 12. This section also includes additional investigations, data gaps, deletions. This section is also where *environmental professionals* as described in 3.2.32 and Appendix X2 provide their statement, references and signature(s).

X4.8 *Non-Scope Services*— This section provides a place for recommendations (see 12.15) and summarizes additional services discussed in Section 13, which are not a part of this practice.

X4.9 *Appendices*—This section contains supporting documentation and the qualifications of the *environmental professional* and other personnel who may have conducted the site reconnaissance and interviews.

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X5. SUMMARY OF COMMON NON-SCOPE ISSUES (COMMON NON-SCOPE CONSIDERATIONS)

INTRODUCTION

(Note that the EPA was not a party to the development of Appendix X5 and the information and conclusions provided in the appendix do not in any way reflect the opinions, guidance, or approval of EPA. Users of this appendix are cautioned that statutes, regulations, guidance, case law, and/or other authorities analyzed and/or referenced in the appendix may have changed since the publication of this appendix. Thus, before relying on any of the analyses, conclusions and/or guidance provided by this appendix, users should ensure that those analyses, conclusions and/or guidance are current and correct at the time use is made of this appendix. In addition, this appendix is provided for background information purposes only and does not alter, amend, or change the meaning of E1527. If any inconsistency between this appendix and E1527 arises, E1527 applies, not this appendix or any interpretation based on this appendix.

The objective of Practice E1527 is to help users qualify for one of the CERCLA Landowner Liability Protections (LLPs). Users should be aware that there are other federal, state, and local environmental laws and regulations that can impose liabilities and obligations on owners and operators of real property that are outside the scope of this practice. This appendix explains by illustration that this practice does not address all possible environmental liabilities that a user may need to consider in the context of a commercial real estate transaction. Therefore, users may desire to expand the scope of prepurchase due diligence to assess other business environmental risks that exist beyond CERCLA liability associated with the target property.

Subsection 3.2.11 defines a Business Environmental Risk (BER) as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, and is not an issue required to be investigated under this practice. A BER may include one or more of the non-scope issues contained in subsection 13.1.5 (Non-Scope Considerations). Evaluation of non-scope items, including those addressed in this appendix is not required nor relevant for compliance with the AAI Rule or E1527. Inclusion of any non-scope item in a Phase I report is entirely within the discretion of the user based on its own risk tolerance, the particular requirements of a specific transaction and the factors discussed in 3.2.11. As a result, this appendix should not be construed as requiring the inclusion of any non-scope issues in a Phase I report.

The items in this appendix are some of the more common non-scope items that may be encountered in commercial real estate transactions. Those non-scope items discussed in this appendix should not be construed as being more important than any non-scope items that are not addressed by this appendix. Furthermore, it is noteworthy that in some circumstances, a non-scope consideration in an old Phase I analysis may present a REC for a subsequent Phase I analysis based on the rise of potential CERCLA liability. For example, asbestos-containing building materials within an existing structure are excluded from CERCLA. However, following the demolition of the building, asbestos containing materials buried in soil may no longer fall within the exclusion from the definition of a CERCLA release. To more fully understand the circumstances under which a particular non-scope consideration could result in potential CERCLA liability, readers should consult the Legal Appendix (Appendix X1).

This appendix discusses nine of the non-scope considerations listed in 13.1.5 in more detail:

X5.1 *Asbestos-Containing Building Materials*—Asbestos is a naturally occurring mineral fiber that was once widely used in building materials and products for its thermal insulating properties and fire resistance. EPA defines asbestos-containing material (ACM) as material that contains more than 1 % asbestos. Building products containing ACM are often referred to as asbestos containing building materials (ACBM). Undisturbed ACBM generally does not pose a health risk. However, ACBM may pose an increased risk if damaged, disturbed in certain manners, or if it deteriorates so that asbestos fibers can be released into building air.

X5.1.1 Asbestos has been specifically designated as a hazardous substance pursuant to CERCLA section 102 (42 U.S.C. § 9602) but ACBM abatement costs generally are not recoverable under CERCLA. For more information, please consult

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the Legal Appendix (Appendix X1). There are other federal and state environmental statutes that impose obligations with respect to ACM. Although CERCLA does not provide a remedy for asbestos abatement, property owners may still be subject to liability for exposure to asbestos fibers under other federal or state environmental statutes and common laws. For example, under the Clean Air Act (CAA), EPA adopted a National Emission Standard for Hazardous Air Pollutants (NESHAP) for asbestos that regulates or restricts certain uses of asbestos and imposes certain work practices for demolition and renovation projects that disturb certain thresholds of regulated ACM (See 40 CFR Part 61 for more information). Local rules may be more stringent than the federal asbestos NESHAP.

X5.1.2 Many building materials such as structural steel fireproofing, acoustic finishes, ceiling texture, ceiling tile, suspended ceiling panels, textured and elastomeric paints, window putty, flexible duct connectors, rubbery pipe insulation tape, building wiring insulation, pipe, boiler, and vessel insulation, interior plaster, and duct insulation commonly contained asbestos until the late 1970s. Other types of ACM were commonly used until the middle to late 1980s such as drywall joint, compound, exterior stucco, sheet vinyl flooring, vinyl flooring products, flooring and other mastics (adhesives), roof tiles and coatings, asbestos-cement products and flues. Under the Toxic Substance Control Act (TSCA), EPA banned the use of asbestos in many products in 1993. However, several categories of building products were not subject to the ban. Thus, existing and even new buildings may lawfully contain ACBM. The following types of building materials may still contain asbestos.

X5.1.2.1 Vinyl-asbestos tile,

X5.1.2.2 Roofing felt,

X5.1.2.3 Roofing coatings,

X5.1.2.4 Plastic roof cement,

X5.1.2.5 Caulking putties,

X5.1.2.6 Construction mastics,

X5.1.2.7 Textured coatings,

X5.1.2.8 Asbestos-cement items (shingles, corrugated sheets, flat sheets, pipes, flues),

X5.1.2.9 Pipeline wrap, and

X5.1.2.10 Millboard.

X5.1.3 EPA recommends that owners and managers of office buildings, shopping centers, apartment buildings, hospitals, and similar facilities that may contain ACM implement an Asbestos Operations and Maintenance (O&M) program to minimize risk posed by ACBM. EPA suggests that ACBM O&M plans should include work practices so that ACM is maintained in good condition, to ensure proper cleanup of asbestos fibers previously released, prevent further releases of asbestos fibers, and monitor the condition of ACBM. OSHA also regulates worker exposure to asbestos. [For more information on ACM Assessment and Abatement, readers may refer to Guide E2308 and Practice E2356.]

X5.1.4 Some areas of the country have naturally-occurring asbestos (NOA). Although NOA is not commonly an issue for real estate transactions, some jurisdictions with NOA have adopted local ordinance or regulations that require construction activities that would disturb NOA to observe certain work practices to minimize release of fibers.

X5.2 *Radon*—Radon is a radioactive gas that is produced from the natural decay of uranium, radium, and thorium in soil, rock, and groundwater beneath homes and buildings. As uranium naturally breaks down, it releases radon gas which is a colorless, odorless, radioactive gas. Radon gas enters homes through dirt floors, cracks in concrete walls and floors, floor drains, and sumps. When radon becomes trapped in buildings and concentrations accumulate and increase indoors, exposure to radon can become a concern. Sometimes radon enters the home through well water.

X5.2.1 CERCLA generally prohibits recovery for radon mitigation costs where the presence of radon gas in a building is a result from naturally-occurring materials. For more information, readers should consult the Legal Appendix (Appendix X1).

X5.2.2 EPA has divided the country into three radon zones based on the potential for indoor radon levels. Counties in Radon Zone 1 have a predicted average indoor radon screening level greater than the 4.0 pico curies per liter (pCi/L), Radon Zone 2 counties have a predicted average indoor radon screening level between 2 and 4 pCi/L, and Radon Zone 3 counties have a predicted average indoor radon screening level less than 2 pCi/L. EPA recommends homeowners take steps to reduce radon levels when homes have radon levels of 4 pCi/L or more. For new construction in Radon Zone 1 areas, EPA also recommends use of radon-resistant construction design. Because there is no known safe level of exposure to radon, EPA also recommends radon mitigation measures for homes with radon levels above 2 pCi/L (See http://www.epa.gov/radon/aboutus.html).

X5.2.3 Because the danger posed by radon rises when radon gas accumulates in an interior space, "energy efficient" structures with reduced airflow can contribute to radon problems. If the geographic area typically experiences high radon levels and workers regularly occupy the building's substructures, radon testing may be warranted. However, actual radon exposures can be affected by diverse factors such as building construction, HVAC systems, and occupancy patterns. [For more information about radon assessment, readers may refer to Practices D7297, E2121, and E1465.]

X5.2.4 Costs to investigate and mitigate radon may be material in certain transactions. In addition, failing to account for these risks or inadequately responding to such risks may give rise to possible exposure to personal injury law suits and/or judgments.

X5.3 *Lead-Based Paint (LBP)*—Lead is a soft, bluish metallic element that has been used in a wide variety of products. According to EPA, paint manufacturers frequently used lead as a primary ingredient in many oil-based interior and exterior house paints through the 1940s and gradually decreased its use in the 1950s and 1960s as latex paints became more widespread. The federal Department of Housing and Urban Development (HUD) estimated that 75 % of the houses built in the

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United States before 1978 contain some lead-based paint. Lead from paint, chips, and dust can pose health hazards if not properly managed. The Consumer Product Safety Commission (CPSC) prohibited use of lead in paint for residential use in 1978 in concentrations greater than 0.06 percent lead by weight. It should be noted that the use of LBP in commercial and industrial buildings has not been prohibited.

X5.3.1 Because CERCLA authorizes EPA to address releases of hazardous substances into the environment, the agency has limited authority to use the federal Superfund program to address exposure from interior LBP. In limited circumstances, EPA may use its CERCLA authority to conduct response actions for soils contaminated by a release of lead-contaminated paint from building exteriors that pose a lead hazard and to prevent recontamination of soils that have been remediated. In general, EPA has determined that lead contamination in soils at or exceeding 400 ppm in play areas and 1200 ppm in other residential areas where children below 7 are present may pose serious health risks that can justify time-critical removal actions. CERCLA generally does not provide cost recovery for LBP abatement. However, response costs for remediation of lead in soil may be recoverable even where the source of the presence of lead may be from damaged exterior LBP. Please refer to the Legal Appendix (Appendix X1) for more information.

X5.3.2 LBP debris from renovation or demolition projects can be regulated as a RCRA hazardous waste. EPA has also adopted certain work practices for renovation, repair and painting projects that will disturb certain thresholds of LBP. OSHA also regulates worker exposure to lead.

X5.4 *Lead-in-Drinking-Water (LIW)*—The major source of LIW is leaching of lead from household plumbing materials or water service lines used to bring water from the main to the home. Lead can leach into drinking water through contact with the plumbing, solder, fixtures and faucets (brass), and fittings. The amount of lead in drinking water will be influenced by the type and amount of minerals in the water, how long the water stays in the pipes, the amount of wear in the pipes, the water's acidity and its temperature.

X5.4.1 Since 1986, the Safe Drinking Water Act (SDWA) has required that only "lead free" pipe, solder, or flux can be used in plumbing in residential or non-residential facilities providing water for human consumption. The SDWA also required businesses selling plumbing supplies to sell solder or flux that is "lead free" after August 6, 1996. Moreover, after that date the SDWA prohibited any person from introducing into commerce any solder or flux containing lead unless a label was attached to the solder or flux stating that it is illegal to use the solder or flux to install or repair plumbing providing water for human consumption. However, "lead free" does not mean "no lead." Products such as solders and flux may be considered "lead free" if they contain less than 0.2 % lead. Similarly, pipes and pipe fittings will be considered "lead free" if they contain less than 8 % lead. Thus, lead may still be introduced in new homes with brass or chrome-plated brass faucets and fixtures.

X5.4.2 The SDWA requires EPA to establish enforceable maximum contaminant levels (MCLs) for a variety of contaminants in drinking water. Because lead contamination of drinking water often results from corrosion of the plumbing materials belonging to water system customers, EPA established a treatment technique rather than an MCL for lead. A treatment technique is an enforceable procedure or level of technological performance which water systems must follow to ensure control of a contaminant. The treatment technique regulation for lead (referred to as the Lead and Copper rule) requires water systems to control the corrosivity of the water. The regulation also requires systems to collect tap samples from sites served by the system that are more likely to have plumbing materials containing lead. If more than 10 % of tap water samples exceed the lead action level of 15 parts per billion, then water systems are required to take additional actions.

X5.5 *Wetlands*:

X5.5.1 Wetlands provide a number of economically and environmentally important functions such as flood control, water quality protection, groundwater recharge, spawning areas for commercially important fish, and wildlife habitat. Wetlands are evaluated using three indicators: hydrology, hydrophytic vegetation, and hydric soils. Section 404 of the Clean Water Act requires a permit before dredged or fill material may be discharged into regulated wetlands (know as Jurisdictional Wetlands). The Army Corps of Engineers has primary responsibility for making wetlands jurisdictional determinations and issuing wetlands permits. A number of activities are authorized through the use of nationwide permits.

X5.5.2 The presence of wetlands may impede or eliminate the potential for planned activities at a target property, including proposed construction or expansion. In addition, it is possible that the existence of wetlands will increase the costs associated with any planned development. Furthermore, in some instances, structures may have been constructed on illegally filled wetlands. While owners are rarely required to demolish completed buildings on illegally filled wetlands, they could become subject to civil or criminal fines, and also be required to perform mitigation projects or make payments to a conservation bank to offset the loss of the wetlands.

X5.6 *Regulatory Compliance (Includes Health and Safety)*—Properties used for industrial, commercial and even residential purposes are frequently subject to a panoply of environmental laws and regulations that relate to many aspects of operations conducted at the property. In the context of a property transaction, noncompliance with environmental laws and regulations may create a material risk of financial loss for both building operators and owners of the properties.

X5.6.1 *Common Sources of Federal Compliance Obligations*—Many federal regulations apply to industrial, commercial and residential properties. Owners or operators of facilities that generate, store, treat or dispose of hazardous wastes may be subject to regulation under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et. seq. For example, properties with petroleum storage tanks, dry cleaners that use chlorinated solvents and photo developing

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operations may be required to comply with RCRA. Facilities that manufacture and use many hazardous or toxic substances may be subject to the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2601 et. seq. Manufacturing operations that emit air pollutants and commercial or residential properties that burn fossil fuels may be required to obtain permits and install emissions control equipment under the Clean Air Act (CAA), 42 U.S.C. § 7401, et. seq. Facilities that discharge pollutants into waters of the United States and public sewer systems may be required to comply with the Clean Water Act (CWA), 33 U.S.C. §1251, et. seq. Many commercial properties will also be required to comply with stormwater permitting requirements under the CWA. Facilities that store or use certain volumes of hazardous chemicals and extremely hazardous substances, which can include warehouses and distribution centers, may be required to comply with the reporting requirements of the Emergency Planning and Community Right-To-Know Act (EPCRA), 42 U.S.C. 11001, et. seq. In addition, the Occupational Safety & Health Administration (OSHA) has promulgated regulations pursuant to the Occupational Safety and Health Act, 29 U.S.C. § 651, et. seq. that establish operating standards and work practices for employees in certain industrial and commercial facilities.

X5.6.2 *Common Sources of State and Local Compliance Obligations*—Many state agencies have been delegated authority to implement state versions of these federal laws in lieu of EPA. For example, state agencies may be designated to issue permits and bring enforcement actions under the CAA, CWA, or RCRA. Even where a state agency has been delegated authority to implement the federal environmental programs, EPA often retains the ability to veto a permit or take enforcement action where EPA disagrees with a state agency's enforcement decision or where the state has declined enforcement. In some cases, state regulations may be broader in scope or stricter than the federal rules. In addition, state laws also implement state-specific regulatory regimes. For example, several states retain permitting and enforcement authority for flood control or construction in floodways. Furthermore, local government bodies can impose an entirely distinct set of operating restrictions or compliance obligations as well, for example in building code requirements, green building mandates, zoning requirements, and local licensing requirements.

X5.6.3 *Potential Effects of Noncompliance*—Depending on the circumstances, noncompliance with various regulatory requirements could result in material costs to owners and operators of industrial, commercial or residential properties, including fines or other monetary penalties, injunctions or other equitable relief that slows or eliminates productivity, and could result in increased transaction costs associated with defending claims of noncompliance. Furthermore, even in the absence of administrative or legal enforcement proceedings, the costs to bring facilities into compliance with applicable regulatory requirements could be material in some circumstances.

X5.7 *Endangered Species Act*—Under the Endangered Species Act (ESA), the government protects endangered and threatened plants and animals (listed species) and their habitats. The presence of listed species can restrict use of property to ensure that the proposed activities do not adversely affect endangered or threatened species as well as their critical habitats.

X5.8 *Indoor Air Quality*—(excluding impacts to indoor air from releases of hazardous substances into the environment)—There are many sources of indoor air pollution. These include combustion sources such as oil, gas, kerosene, coal, wood, tobacco products, asbestos-containing materials, wet or damp carpet, formaldehyde, certain pressed wood products, cleaning and maintenance chemicals, and pesticides. EPA estimates that indoor levels of air pollutants can be two to five times higher, and occasionally 100 times higher, than outdoor levels. In general, EPA does not regulate indoor air quality except to the extent that indoor air impacts are caused by releases of hazardous substances into subsurface soil or groundwater (vapor intrusion). For more information, please refer to the Legal Appendix (Appendix X1). [For more information about assessing indoor air quality, refer to Practice D7297.]

X5.9 *Mold*—Molds are organisms that belong to the Fungi Kingdom. Molds are present virtually everywhere in the outdoor and indoor environments. Molds lack chlorophyll and must survive by digesting organic materials for food such as some types of building materials. To grow, molds require a food source and moisture. Molds can produce toxic substances called mycotoxins that may result in human health effects. Some compounds produced by molds are volatile and are released directly into the air. These are known as microbial volatile organic compounds (mVOCs). In addition, spores may contain allergens that can remain allergenic for years even if the mold is dead.

X5.9.1 Currently, there are no federal regulations or standards for airborne mold contaminants. However, EPA and some states or local jurisdictions have issued publications discussing mold issues. In addition, under the OSHA General Duty Clause (29 U.S.C. 654), an employer has an obligation to protect workers from serious and recognized workplace hazards even where there is no standard. Thus, it is possible that the OSHA general duty clause may impose a duty on employers to disclose hazards relating to mold to employees although the disagreement on the degree of hazard, if any, makes this uncertain. Significant mold contamination may fall under the general disclosure requirements for real estate transactions in various jurisdictions. For more information on investigating and assessing mold, readers may refer to Guide E2418.

X5.9.2 Mold in a building(s) on a property could result in a variety of business risks such as litigation for exposures by tenants and occupants, abatement costs, loss of tenants, adverse publicity and loss in property value.

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